

Sydney 2050

**Citizens' Jury
Concepts Report**



Sydney 2050

**What concepts should
be implemented in
Sydney by 2050?**



04	A Letter to the Future...
06	Executive Summary and Introduction
07	Participatory Governance
02	First Peoples of Australia – Leadership and Representation
11	Innovative and Future Ready
13	Housing For All
15	Regenerative Ecosystem
17	Moving Efficiently and Sustainably
19	Embed Creative Arts in Everyday Life
21	24-hour City
23	Appendix



A letter to the future...

Dear Sydney-siders in 2050,

In August 2019, a group of fifty Sydney-siders came together over three months faced with a huge task: to imagine Sydney in thirty years' time.

We invested our time and personal energy towards creating a vision for the people of the future. Our discussions have been deeply influenced by what was happening around us - Sydney is ringed by bushfires, highlighting the global climate change crisis. Droughts across the state have meant tighter water restrictions. We are witnessing our neighbourhoods change as a result of the increasing cost of real-estate in Sydney, and we are spending countless hours in congested traffic.

Those of us who were living in Sydney thirty years ago know that Sydney has changed dramatically in that time, and we are certain it will continue to change in the next thirty to come. In working with the City of Sydney, we have been given the opportunity and responsibility to come up with a vision for the future of the city, and bridge the past with the future.

In looking forward, we also have to look back. It is important that we acknowledge the connection that the Eora nation have had for thousands of years to the land that Sydney is built on. It is important that we acknowledge the negative impact of colonisation on the landscape and its traditional custodians. We have much to learn from our First Nations people about nurturing and respecting the land.

Our hope for Sydney in 2050 is that it is a sustainable, inclusive, diverse city that is welcoming and embraces people from all walks of life. A city where people want to live.

Citizens' Jury, 2019



Executive Summary & Introduction

The jury was randomly selected from residents, workers and citizens in the City of Sydney and surrounding councils. The jury met for six full Saturdays, reviewing public over 2,500 submissions for ideas for the future of the city. On the first Saturday we the jury set the goal to identify the concepts to realise the community's vision for 2050, mindful of the challenges it faced.

The process commenced by sifting through thousands of ideas submitted by the public, followed by hours of discussion about "what will Sydney look like in 2050?". We spoke with subject-matter experts from architecture, town-planning, sustainability, housing, and more. We also consulted with holders of Indigenous wisdom and knowledge. The process was not always smooth-sailing, however through the dynamic facilitation we were provided, we were able to create a document which was presented to the City of Sydney.

Through continuous group discussions, all ideas were progressively distilled down into eight overarching concepts:

- 01 **Participatory governance:** a new model of governance that genuinely engages citizens in decision making on all levels, which is responsive and adaptable.
- 02 **First peoples of Australia (leadership and representation):** the traditional custodians of the land being able to play a central role on how to shape the city, through active participation in governance that is embedded and respectful.
- 03 **Innovative and future ready:** a city that is always ready for the future.

04 **Housing for all:** a city providing a wide range of accessible and affordable housing options, being inclusive, promoting social and community cohesion.

05 **Regenerative ecosystem:** a leader in reversing climate change and restoring the natural environment by giving back more than what the city takes.

06 **Moving efficiently and sustainability:** a city with efficient, people-focussed transport that is car-free, green and enjoyable.

07 **Embed creative arts in everyday life:** a future where creative arts are alive, interwoven and celebrated in everyday life, accessible for all at different times.

08 **24 hour city:** a vibrant, lively, culturally diverse city, that is open 24 hours.

Through these eight concepts we want to ensure that the culture of the city we live in evolves and adapts for the future. As the City of Sydney is already developed, we need to ensure that no space will go to waste. We want all spaces in the city to be flexible for a multitude of purposes throughout the day and the night. The City has a responsibility to play an active role in providing and encouraging health for our people. We care for the livelihood of our citizens, and want greater priority to be added to health and wellbeing.

For these ideas to come to life, we need action taken now so that our vision for the city will be achieved by 2050. The vision that we have outlined in this report will take a combined and sustained effort from the City, citizens, and businesses.

01

Participatory governance



Participatory governance

01

WHAT:

We want a new model of governance that genuinely engage citizens in decision making on all levels, and is responsive and adaptable.

WHY:

There are currently concentrated power structures making decisions for citizens, rather than citizens holding the power.

We want a city influenced by diverse views, needs, and wants. We want to rectify imbalances and inequities.

HOW:

- » Participatory budgeting
- » Citizens' panels of sizeable scale for true representation
- » Innovative online voting system
- » Data to be used by council to generate economic benefit, and help communities

02

First Peoples of Australia — Leadership and Representation



First Peoples of Australia – Leadership and Representation

02

Although we as a Jury are a diverse range of people there were no Aboriginal and Torres Strait Islander people amongst us. However, we did receive some input.

WHAT:

We want the traditional custodians of the land to help shape the city, through active participation in governance that is embedded, respectful.

We want Sydney to be a place where Aboriginal and Torres Strait Islander voices influence the identity, design, and functioning of Sydney (Eora).

WHY:

We recognise that our history has displaced the First Peoples of Australia, and that current systems don't adequately allow First Nations perspectives, values, and priorities.

Aboriginal and Torres Strait Islander communities possess wisdom and knowledge that must be valued in shaping how we care for our country and our communities – in governance, planning, education and health. This has the capacity to enhance social and emotional wellbeing for all.

We must recognise the cultural authority of the First Peoples of Australia. We want a society that shares the respect for, and connection to this land that Aboriginal and Torres Strait Islander people have had for 60,000 years.

HOW:

We need to promote First Nations' self-determination and empowerment so that ideas are not imposed on people and we don't repeat the mistakes of the past.

In line with the principles of reconciliation, we want to place responsibility on non-Indigenous people to adapt their systems and practices to value and promote Aboriginal and Torres Strait Islander issues and encourage discourse and community reflection.

We need a process of truth telling and recognition that deals with the impacts of invasion and colonisation.

03

Innovative and future ready



Innovative and future ready

03

WHAT:

We want the City of Sydney to become a city that is always ready for the future.

WHY:

Our current built environment in the city of Sydney stifles the attraction of new innovators and creators - the current rules of our city's development and administration are rigid and risk becoming outdated. In the past, Sydney has not been prepared for major technological changes. Priming Sydney to continue to evolve enables us to be ready for new technologies and changes we haven't anticipated.

HOW:

The City of Sydney should ensure a focus on buildings and spaces with adaptive uses. The City should take charge to make space for innovation instead of allowing for developer's narrow interests to dominate the development of Sydney. Information the City of Sydney collects should be richer, deeper and freely available to allow the critical assessment needed to know if they're doing the right thing.

The city should not just support the creation of new ideas but also provide the environment to incubate those new ideas into new industries. This must include affordable training, as it is essential in preparing people for technological challenges to come. There must also be a fund that is readily accessible to local innovators so that we do not lose our brilliant ideas. This could be initiated and promoted by the City and draw upon the wider international investment community.

04

Housing for all



Housing for all

04

WHAT:

We the jury envision a Sydney that can be called home throughout any stage of life. We want to ensure diversity in the city by providing a wide range of accessible and affordable housing options. We want Sydney to be inclusive and to promote social and community cohesion.

WHY:

Sydney is currently an unaffordable city to many and is at risk of losing the diversity of its people and neighbourhoods in its villages. Sydney does not provide a safety net nor adequate supply of accessible housing for people at risk of homelessness. People who provide essential services in Sydney are being pushed out of the city.

HOW:

- » Planning incentives for developers to include affordable housing in new developments.
- » Stimulate supply of collaborative/cooperative living projects and the number of affordable single/family residences.
- » Advocate for the introduction of financial penalties, taxation and incentives to curb the amount of unused space in the city.
- » Encourage community cohesion through the development of mixed affordable housing for diverse demographics, including emergency accommodation, disability, student, youth, artists etc.

05

Regenerative ecosystem



Regenerative ecosystem

05

WHAT:

We the jury, envision the city as a leader in reversing climate change, and restoring the natural environment by giving back more than it takes. Creating a city where every space is maximised for the greater community good.

WHY:

To combat the climate emergency, we need to be regenerative and beyond sustainable. The City has finite access to natural and financial resources, the built environment and space. Air pollution, water pollution and water scarcity must be addressed for a healthy city.

We want the buildings of our city to be made of materials which support the environment, not degrade it. We want the people to transform their waste into materials to feed back into the economy.

We want no space in the city to go to waste. We must renew empty spaces and unused buildings to support lively and vibrant communities.

HOW:

Key recommendations, for more detail refer to the infographic and appendix:

- » Expansive greening: trees and plants enveloping the city: street, buildings, rooftops, small spaces
- » Regenerative agriculture and urban farms
- » Ocean regeneration
- » 100% renewable energy including multiple micro-grids
- » Circular economy: zero waste, share, repair, reuse, recycle
- » An educated environmentally conscious society
- » Sustainable building construction standards with integrated recycling and waste management
- » Policy to incentivise and support regenerative practices
- » Green transport

06

Moving efficiently and sustainably



Moving efficiently and sustainably

06

WHAT:

We want a city designed for people and not vehicles, active 24/7, where there is space to walk, bike, stroll, jog, chat, rest, relax and enjoy life.

WHY:

We have a city that is congested with too many vehicles. Not only making our transport inefficient, but also creating air and noise pollution. Sydney-siders and visitors are increasingly sedentary and we face an obesity epidemic. We want walking and biking to be easy and enjoyable and the first choice, leading to better social cohesion and mental health.

HOW:

» **Car-free, green spaces:**

We want a car-free city that allows for vibrant green open spaces for the people, where no space goes to waste (fewer cars will improve emergency vehicle response times, critical in a densely populated city). People can get around our city in 30-minutes.

» **Connected green corridors:**

We want green spaces that are connected by green corridors that enable and encourage people to move efficiently and enjoyably by active transport. We have traffic light signalling that favours pedestrians, cycling and public transport, over vehicles.

» **Active transport - walking and bikes:**

We want to be a city designed to facilitate safe and active lifestyles 24 hours a day. Suitable for all ages and mobility levels - from the infants to the incapacitated. Whether by walking or

cycling, we have a positive culture through early education, and safe, secure and efficient infrastructure (in-journey and end-of-journey) that truly encourages car-free alternatives.

» **Accessible public transport:**

We want a 24-hour public transport system that is accessible to all users (reliable, safe, clean and low to no expense), connected to other modes of transport and sustainably powered; maximising space (overground and underground), so that no space goes to waste.

» **Electric vehicles for freight and people moving:**

We want sustainable electric vehicles available where active transport is not feasible or not favourable.

07

Embed creative arts in everyday life



Embed creative arts in everyday life

07

WHAT:

We want a future where creative arts are alive, interwoven and celebrated in everyday life. We want creative arts to be more accessible for all people in order to invigorate and strengthen our cultural identity.

We want Sydney to be a city that is lively, culturally diverse, an entertainment and recreational hub. We as the citizens jury define arts as creative productions; they come in the form of live music, live theatre, visual arts, literature and entertainment.

WHY:

We don't feel that art and culture are valued enough in our community. Making art accessible fosters an understanding of art as a professional highly skilled and valued practice. Art stimulates and gives form to empathy and understanding: it is a necessary part of a democratic community that recognises human rights. A cultural identity for Sydney must be established that values creativity, diversity and inclusion.

HOW:

- » City of Sydney to foster creative expression through community cultural development.
- » City of Sydney needs to support professional and emerging artists by providing long term, low cost studio spaces so we can maintain the creative industry in the City of Sydney.
- » We need artist led creative industry consultations with the City and commercial interests, with a focus on a creative community.
- » We want creatives to live, practice and be exhibited publicly in the city.
- » Artists creating art in Sydney for Sydney.

08

24-hour city



24-hour city

08

WHAT:

We want a vibrant, lively, culturally diverse city that is open 24 hours a day. We want a city that has a soul and an identity that people can enjoy at all times. We want Sydney to have a normalised night-time economy that includes live music, theatre, art, shopping, health services, food, and education.

WHY:

Sydney has lost its night time identity, and global standing, as well as jobs and opportunities. People are becoming more sedentary and isolated, leading to social disharmony. We need to increase the liveability of the city by creating a true 24-hour city. The rigid 9-5 city is missing the economic benefits of the night-time economy.

HOW:

- » Have a 24-hour public transport system, including metro, train, light rail, and buses.
- » Dedicated night mayor.
- » Law reform around trading hours and licensing of night time venues.
- » Cap on empty shops, before action by the City of Sydney and private businesses if that cap is exceeded.
- » Increased safety measures to increase night time participation.
- » Introduce late night precincts to more easily manage night time economy.

Sydney 2050



Appendix



Appendix

Housing for all

Affordable and holistic housing for the community that celebrates and fosters diversity.

What: We want to ensure diversity in the city by providing a wide range of accessible and affordable housing options. We want a future Sydney that is inclusive, celebrates diversity and promotes community cohesion. A future where you can call a place home at any stage of your life. The City's housing stock should be suitable and affordable for all ages and account for the changes to different segments of the population, including significant increases. Find ways to ensure that essential workers can live and work in the city at affordable rates. This could be delivered through subsidies or incentives created by all levels of government. Those who work in a city should have the opportunity to live in that same city, and enjoy the benefits of short commutes and greater accessibility on foot or cycling; access to a vibrant arts community.

We should encourage a society that develops and fosters cohesion, meeting everyone wherever they are on their journey without judgement. We should encourage a sense of neighbourhood. We do not want to further marginalize people by putting them in silos.

It is a priority for the city to continually work with developers to ensure new and refurbished buildings are utilized for a range of housing models. There should also be communal areas within higher density housing to encourage and foster community. The city should work to encourage rent to buy schemes to retain citizens within the city.

Ensuring there is a range of housing solution for those with a short term need - those in precarious family circumstances including but not limited to people affected by domestic violence and/or homelessness. The range of housing solution could incentivise underutilized spare bedrooms to be shared with visitors, students and/or seasonal workers.

Why: Flexible housing accommodates flexible residents. The most dynamic cities are populated by a dynamic citizenry, that adapts and develops as they move through the stages of their lives. The city needs to provide a diverse range of accommodation types to support its current citizens through their personal changes, and to attract others who provide essential services to the city,

including artists and entertainers. A dynamic city also welcomes newcomers, whether as short term visitors, temporary workers, students or as global citizens. The accommodation options for all need to be safe, non-discriminatory, private and purpose-built to meet the occupant's needs.

How: Implementation of this concept might include:

- Collaborative/ cooperative living projects, with communal facilities to lower costs
- Offer wrap around support services in emergency accommodation to increase connectedness with community, and support the recovery of those in distress or under stress
- Increase the number of single occupant residences, and affordable family residences (diversify from standard 2 bedroom stock)
- For every increase in higher density accommodation, offset with local public space, community access hub
- Address taxation issues favouring particular sections of the population related to housing. Such as equal taxation treatment of owner-occupied properties and investor properties, remove negative gearing for investor properties,
- Introduce financial penalties for owners of properties that are left unoccupied for extended periods (e.g. over a year)
- Encourage mixed housing types, rather than homogenous blocks for a specific target market. Ensure common areas support diverse residents to interact with one another (through community projects, shared responsibilities, incidental pedestrian traffic)
- Planning incentives for developers to include affordable housing in new developments
- Introduction of a bedroom tax, to reduce the underutilisation of large properties
- Introduce 'build to rent' schemes
- Diversity in housing tenants and owners will adjust the peak demand on services - parking, EV charging, pools etc.

Example: Multiple generations will have a range of options for living together - such as preschoolers with elderly who aren't related. (Example 'multigeneration houses' in Germany: <https://www.theguardian.com/world/2014/may/02/germany-multigeneration-house-solve-problems-britain>).

Regenerative ecosystem

A Regenerative environment - is beyond sustainable - and aims to reverse climate change, and restore the harmony and balance between the natural world and human habitation - a village for all citizens for all time.

Regenerative practices sequester (takes out) the excessive Co2 from the air and oceans, stores and it back into the Trees, Soils and Ocean Plants. As a consequence it provides better health and well-being outcomes:

- cleaner air and water
- drought resistant and nutritious food crops

- affordable access to energy and materials
- social equality and cohesion
- reverses climate change
- increases biodiversity

Most regenerative solutions are available and known today, and if it went mainstream would mean an incredible transformation for society. The solutions tend to be local, shared, distributed, and low-tech and thus tends to empower ordinary citizens and revitalise communities, rather the industrial behemoths and corporate conglomerates.



What does a regenerative city look like? The blue-print has already been designed, from which we can draw inspiration from. This is the Smart Forest City designed by [Stefano Boeri Architetti](#).

The citizens want each village in Sydney to be regenerative and self-sufficient, like this. That is:

- expansive greening: trees and plants enveloping the city: street, buildings, rooftops, small spaces
- regenerative agriculture and urban farms
- ocean regeneration
- 100% renewable energy including multiple micro-grids
- circular economy: zero waste, share, repair, reuse, recycle
- an educated environmentally conscious society
- sustainable building construction standards with integrated recycling and waste management
- policy to incentivise and support regenerative practices
- green transport

See key references [2040 film](#) and [solutions, circular economy, cradle to cradle, project drawdown](#).

Why be Regenerative?

We are destroying our home planet and there is no other planet we can survive on. We are the last generation that might be able to significantly reverse climate change on Earth.

Greenhouse Gas Emissions:

Since the beginning of the industrial revolution till now, humans have emitted in the order of 0.5 to 1 trillion tonnes (1000 billion tonnes) of Co2 into the atmosphere, some absorbed by trees, but most staying in the atmosphere (warming the planet) or being absorbed into the oceans (causing acidification and destroying ocean life). NASA has a graph that indicates from the dawn of modern humans, Co2 was averaging about 250 parts per million (ppm). However since the industrial revolution there has been a relentless rise of Co2. In particular, in the last 60 years - Co2 in the atmosphere is now > 400 ppm, and the trend is a frightening 'vertical climb'.

<https://climate.nasa.gov/vital-signs/carbon-dioxide/>

https://climate.nasa.gov/climate_resources/24/graphic-the-relentless-rise-of-carbon-dioxide/

There is consensus among independent research scientists in the world that global warming is primarily due to human activities that increase greenhouse gas emissions. See [IPCC report](#)

Leading causes for emissions: [industrial agriculture, fossil fuels](#) (energy, transport, factories), [fast fashion](#).

Climate Crisis:

Excessive greenhouse gasses emitted by humans, causes ocean acidification and a warmer planet - increasing

sea level rise and the frequency and intensity of extreme weather events: droughts, flash foods, flooding, hurricanes, tornadoes, blizzards etc - due to higher rates of evaporation and precipitation - See [NASA](#)

Impact on Humans:

There are sobering statistics related to the climate crisis: air pollution, water pollution, rising sea levels, extreme weather and water scarcity - signs we are destroying the planet and our lives.

- 93% of the world's children are breathing toxic air, which impacts their health and development - [World Health Organisation](#)
- Last 5 years was the hottest ever recorded, with no sign of stopping - [NOAA, NASA](#)
- Increased mortality by heat strokes and extreme weather events, and the spread of infectious diseases - [Australia Medical Association](#)
- Great Barrier Reef downgraded to very poor due to coral bleaching - [WWF](#)
- Current trends: 1 tonne of plastic every 3 tonne of fish in oceans by 2025 - [ABC](#)
- Micro-plastics detrimental to human health, found as far as the Arctic and Alps - [Guardian](#)
- Nano-plastics causes brain damage in fish - [TED](#)
- 100+ plastics materials are found in baby turtles, causing starvation - [CNN](#)
- Water scarcity leads to sanitation issues, food insecurity, biodiversity loss - [Climate Council](#)

Cities world-wide declare state-wide emergencies due to climate crisis. In 2019 alone:

- [11,000](#) scientists warn of climate crisis and untold suffering
- [85% of Venice](#) is flooded with highest tides in 50 years
- Record-breaking [Heat waves in Europe](#), French city reaches [45.9 degrees](#)
- [Catastrophic bushfires](#) in Sydney and [California](#) with mass evacuations
- New York was hit with both [severe floods, heat waves](#)
- [Arctic blast](#) froze much of the US with severe cold and blizzards

Time Constraint:

UN (IPCC) gave approximately a 10 year [window](#) to address the climate crisis before it becomes it will be much harder to reverse and it accelerates later due to:

- Arctic ice loss
- Permafrost thaws

The polar ice sheets stabilise our climate by reflecting the sun's energy (heat) back into space. But ice sheets are [disappearing faster](#) than scientists predicted, and Earth will absorb even more heat, exacerbating the climate crisis. [Arctic ice loss](#) has tripled since the 1980s and vanishing at the fastest rate in recorded history.

As the permafrost thaws, massive [reserves of methane and co2](#) (estimated 1.5 trillion tonnes) will be released into the atmosphere. It is predicted to be a leading cause of global greenhouse gas emissions by 2050, even more than fossil fuels used for the world's transport.

How:

1. Green Trees

The citizens want the city to be covered in expansive greenery so it can be regenerative:

- Trees, Forests, Plants, Gardens
- Urban Farms and Farm walls
- Vertical gardens
- Free public access to interconnected Rooftop Gardens
- Tree-lined streets - green corridors linked to public parks

Trees and forests are a natural carbon sink, and provide a vital contribution for reversing climate change, as they

- Sequester Co2 (inhale Co2)
- Provide Clean Air (exhale O2)

They improve our climate resilience:

- Shade - for young and elderly at risk of heat strokes
- Flood mitigation - roots soak in water, limit storm water runoff

And also;

- Increase biodiversity - homes for birds and animals
- Calming for humans - being close to nature improves mental health.

[Studies confirm](#) that planting trees is one of the best climate solutions. Planting 500 billion trees, could remove 25% of the carbon in the atmosphere. Australia was flagged for its sufficient space to be able to make a significant contribution, through reforestation (re-growing forests) and conservation (recognising indigenous claims).

Greening Cities:

Many cities have decided that greening the city is vital for its climate resilience.

[Germany](#) - is spending 800 million euro over four years on trees, [France](#) is building hectares of urban farms, Ethiopia planted [350 million trees](#) and plants in 12 hours, [Melbourne](#) has been going grey-to-green since 1985, [Netherlands](#) plant greenery on bus shelters, increasing biodiversity in the urban landscape, and homes for bees - each leaf counts in Co2 drawdown.

[Milan](#) has an awarding winning design in [vertical gardens](#) - every level of the building is covered in plants. Perhaps a fun competition could be created for residents, to see who has the greenest building (including plants on balconies) in each Sydney village. London has introduced [City Trees](#), a pioneering technology that cultivates moss to absorb air pollutants. Something to consider in conjunction with

greening the city.

Preventing Heat Strokes - Tree lined Streets:

In 2019 European cities experienced record breaking heat waves [40-45.9 degrees celsius](#) - and the trend is towards even higher temperatures. In contrast to the government health site that warns heat strokes occur when the body temperature reaches [> 37](#) degrees celsius.

[Shade from trees](#) provide can reduce surface temperatures by [11-25 degrees](#) celsius, when compared to peak temperatures of exposed areas to the sun. It is a moral obligation to green the city. Trees literally save lives, and we believe no citizen - young to elderly - should be [hospitalised](#) because we did not provide sufficient shade. The citizen jury thus believes:

- street parking should be removed
- streets should be lined with trees with [thick wide canopies](#) to provide ample shade for pedestrians and cyclists, young and elderly
- green roofs on every building possible
- city tree canopy should be at 40-50% at least

As we have considered experts opinions that confirm car ownership is declining; driverless electric shared vehicles are coming; the best practice for liveability includes a [car-free](#) town centres, [active transport](#) (bike, walk) and electric public transport; cars are parked assets and [unused 95%](#) and wasting precious space that could be devoted to people and social equality.

2. Food

- Regenerative Agriculture (Plant Diversity, Rotational Grazing)
- Urban Farms, Community Gardens and Farm Walls
- Eat Less Meat or Convincing Meat Substitutes
- Plant Based Diet, Beans for Protein
- Zero Waste Cafe and Restaurants, On-site Composting
- Zero Waste Supermarkets, Farmers Markets
- Restore Grasslands

Regenerative Agriculture:

Regenerative Agriculture - involves plant diversity and (rotational) grazing animals - helps farmlands thrive and restores ecosystems. It improves

- soil nutrients (e.g. more carbon, organic matter)
- water holding capacity of soil (e.g. 166,000 litres per hectare on every rainfall event)

And thus provides

- healthier crops with higher in nutritional content
- climate resilience in times of increasing intensity and duration of droughts

See [2040, Regeneration Agriculture, Sustainable, WWF](#).

Regenerative agriculture delivers a diversified local food system, dramatically decreasing the scale of land, water, energy used. Plant diversity - achieved by growing multi-species, strengthens the network of roots to support its built-in irrigation system, improving water retention.

Grazing animals - rotational grazing - allows the soil, plant, crops to regenerate. The soil quality improves due to nutrients from animal manure, and the trampled plants reduce soil temperature variation to optimise microbial activity. This leads to drought-resistant crops - food security, with higher nutritional content, improving animal health and human health - [TED lecture](#).

This is in contrast to [industrial agriculture](#) which is very destructive to the environment, and results in poor soil quality due to monocropping - soy and corn - increasing storm water running, polluted rivers (fertilizers) and ocean dead zones, overuse of antibiotics, extensive land clearing, and intense water use. Excessive sugar from soy, corn causes sickness, obesity, diabetes.

The UN confirms that [80% of the world's food](#) is produced from family farming. The citizens believe we should empower local farmers through initiatives like [Carbon 8](#) (e.g. assist the transition to regenerative agriculture) and enable local farmers to more easily deliver direct to cafes and restaurants to build social cohesion between rural and urban communities.

Note future trends include agroforestry - where multiple foods (paw paw, bananas, coffee, avocados and vegetables) are grown on small parcels of land, Fair Trade, and [gene research](#) to select drought-resilient crops.

Urban Farms and Farm Walls:

The citizens would like free and public access to Urban Farms and Community Gardens created on rooftops, and new spaces via conversion of unused spaces (old track lines, car parks, etc)

It is regenerative as it cuts down a significant amount of fossil fuel consumption necessary to transport, package, and sell food - and it supports communities as food is grown locally.

Urban Farms and Community gardens have multiple [benefits](#):

- Reduce carbon emissions - reduce distant transport of foods, greenery inhales Co2
- Public Health - fresh, nutritious foods prevent heart disease, obesity, diabetes
- Social cohesion - citizens can exercise and garden together
- Food security - social equality as nutritional food is more affordable (discounted or free)
- Education - citizens re-connect with local farmers and sustainable food systems
- Green Space - aesthetics, reduces runoff, restful spaces,

counters heat island effect

- Innovation - creativity to maximise quality, quantity with minimal waste, space, energy
- Job creation - revitalises local community, herb gardens to large community spaces
- Increase biodiversity - attracting native plants, pollinators, and variety of small animals

Examples: [France](#) is opening the world's largest urban farm on Paris rooftop (14000 square metres) and the [Growing Experience](#) produce 3-4 times as much produce as traditional farming methods and uses significantly less water. The benefits and examples of Vertical Gardens and Farm Walls are also available [here](#).

Eat less Meat or Convincing Meat Substitutes:

For a regenerative society, we need to reduce our consumption of meat, especially beef.

[Animal industrial agriculture](#) is very [destructive](#) environmentally, and a leading cause of climate change. Trees and forests are cleared (emitting Co2 emissions, less trees absorb Co2), to plant corn and soy to feed cattle. But monocropping destroys the soil quality, reducing water retention and nutrient quality. In addition there is nitrous oxide emissions ([300x more potent than Co2](#)) from fertilisers, farm runoff causing ocean dead zones (water pollution), overuse of antibiotics causing health issues, and methane emissions ([10x - 25x more potent than Co2](#)) from cow belching. Animal agriculture is also water intensive - if these destructive practices were reduced, more fresh water would be available to citizens.

80-90% of the [deforestation](#) that occurs in the Amazon forest is to meet the world's demand for beef e.g. clearing the forest to grow crops to feed the cows. And humans cannot sustainably feed a population of 7 billion people on 70 billion cows.

In terms of future watch and growing trends for regenerative practices:

- convincing [meat substitutes](#) (e.g. plant based meat) are becoming available
- astronauts have consumed [lab grown meat](#), potential revolutionary technology
- [CSIRO reports](#) including seaweed in the animal diet can minimise methane emissionsregenerative practices:

Plant Slant:

Being vegan is more beneficial and regenerative to the environment. If one has to eat meat they should choose chicken over beef to minimise greenhouse gas emissions e.g. cows are large bovine animals.

Moving towards a plant based diet is healthier for people and economically more affordable, especially if subsidies to the industrial agriculture corporations were reduced or removed to reveal the true cost of animal agriculture.

Plant based diet improves health and longevity, as it is rich in nutrients. The [Blue Zone](#) research has discovered

centenarians who are healthy and still independent, often eat fruits, vegetables, nuts and seeds, beans for protein and either no meat or occasional meat on special occasions.

[The Blue Zones](#) projects are transforming american communities to healthy ones. We should be doing the same by making the healthy choice, the easy choice. e.g. is it easier to choose a healthy fruit on checkout or an unhealthy snack.

Zero Waste Cafe and Restaurants, On-Site Composting:

Zero Waste cafes and restaurants are a growing trend. Some elements include on-site compost bin, dine-ins welcomes (reusable glass ceramic plates and cutlery, reusable steel or silicone straw), reusable containers and mugs for take-aways, recyclable or compostable packaging).

[Noma](#), worlds number one restaurant has adopted Australia designed "[Closed-loop Zero-waste system](#)" that was also used in Silo cafe, Melbourne - famous for needing no wheelie bins, as it consumed, used or recycled everything used in the cafe. In one year, 45 tonnes of organic waste was fed into the Closed Loop machine creating 4.5 tonnes of organic compost, enough to fertilise about three to four hectares of soil. This is a summary infographic on [food wastage](#).

Zero Waste Supermarkets and Groceries, Farmer's Markets:

The growing trend is for zero waste groceries and zero waste supermarkets in cities. Plastic free grocery stores have opened in [Berlin](#) - products are sold loose and in bulk, and put in big gravity storage containers. Customers bring their own reusable containers. It reduces waste substantially, as there is no single use packaging and less food is thrown out. In [Finland](#) they also have supermarket happy hour to prevent food waste.

We recommend creating more space in the villages for farmers markets so citizens can support and develop a relationship with local farmers. Industrialisation has resulted in consumers being disconnected from nature and with the people who produce their food - causing customers to refer to brand messaging on packaging (e.g. often misleading due to [greenwashing](#)) rather than informed by and build real relationships with the farmers. In a regenerative society, we should be able to restore our humanity - our friendships and relationships - and build social cohesion with our local family farming community again.

[Denmark](#) has stores like [WeFood](#) that sell surplus foods which are still edible and safe to consume, but have the incorrect labels, damaged packaging or overdue best before dates. This prevents food waste, and the proceeds goes to charitable projects. Europe grocery stores also hold [happy hours](#) to reduce food waste as well.

Reference: [Sustainable, Zero Waste shopping, Example, Infographic](#).

Restoring Grasslands:

The citizens believe that we should look into the proposal to free cattle from industrial feedlots and used them for planned rotational grazing to restore barren lands to grasslands for regenerative agriculture to provide food security for the populace.

In this [TED lecture](#) - Allan Savory, informs that grasslands can be restored for productive regenerative agriculture by using planned rotational grazing. [Earth has lost 1/3 of arable](#) (suitable to grow crops) in 40 years via desertification

- grasslands have gone dry due to climate crisis, higher rates of evaporation
- soil quality is destroyed by industrial farming leaving the land barren
- regions of the world are experiencing a longer and intense droughts

When soil is damaged and bare (e.g. plowed or turned over and exposed to air), carbon is released back into the atmosphere.

In [planned rotational grazing](#) however when a grazing animals are bunched and moving, the trampled vegetation and manure covers the soil and stabilises the soil microclimate (reduce variation in soil temperature) and enhance soil organic matter. This leads to increased nutrient and water retention that assists plants and vegetation to grow. The movement is important to avoid overgrazing. Do check with experts for the latest research and best practices for restoring soil quality, to improve food security.

3. Water

- Marine Permaculture - Coastal Seaweed, Kelp Farms to restore Corals and Ocean Life
- Climate Resilience for Sea Level rise

Ocean Regeneration

Experts have confirmed large-scale Marine Permaculture is vital to regenerate the oceans by reversing ocean acidification. See [Ocean Regeneration, TED lecture, Project Drawdown](#).

Seaweed and Kelp are one of the most efficient methods to remove Co2 from the air and oceans and reduce the acidification of the oceans. As a result they restore coral reefs (habitat for 1/4 of marine fishes), ocean life, and local fisheries.

As ocean life returns around the seaweed and kelp farms, it also rise to opportunities for local tourist destinations and marine research and education centres.

Seaweed and Kelp are incredible and are:

- [Fastest](#) growing tree on the planet (half a metre per day, up to 50 metres long)

- Drawdowns thousands of tonnes of carbon per square kilometre per year
- Nutrient-dense and Healthy (EPA, DHA, antioxidants, phytonutrients, omega, fibre)
- Reduce methane emissions from cow belching, used for animal feed - CSIRO
- Can be used as fertiliser and alternative to land based crops
- Can be used for biofuel and packaging (e.g. can replace plastic packaging)

There are over 100,000,000 square km of ocean deserts along the coast that is amenable to [marine permaculture](#) that can help restore life in the subtropical oceans, fish habitats and fisheries. Marine permaculture has the potential to provide 200kg per year / per person for 10 billion people. An entire industry around kelp and seaweed farming can be created and bolster our economy with job creation. Reversing ocean acidification is urgent as the Great Barrier Reef has been downgraded to very poor outlook - [WWF](#). 90% of the heat global warming goes into the ocean, leading to warming and acidic waters, insufficient overturning circulation, reduced nutrient levels, and loss of ocean life. Many fish species are in danger of collapse due to ocean acidification as well as over fishing. Civilisation is in peril if the climate disruption depletes the soils and oceans - food sources, thus ocean regeneration is urgently required.

Sea Level Rise

The sea levels are rising due to a warming planet. The citizens recommend that the city prepare for the inevitable sea level rises, and for scenarios where land based ice sheets are subject to irreversible melting.

Greenland's ice cap is melting, and that water is draining into the ocean, contributing to sea level rise - in July 2019, it's estimated more than [30 billion tonnes of ice melted in three days](#) and Australian scientists have been able to use NASA satellites to accurately weigh how much ice is melting.

4. Energy

- 100% Renewable Energy powering Micro-grids
- Invest in Solar Farms, onshore/offshore Wind Farms,
- Consider Green Hydrogen

1 hour of the sun's energy that reaches the Earth is enough to power the world's needs for a whole year. There should be no need to burn fossil fuels and cause air pollution and the climate crisis. The citizens want 100% renewable energy to power the city. This could include a mix of solar and wind, and even wave energy and hydrogen in the future. Solar panels seem to be a practical option

We also want distributed [Micro-grids \(powered by Solar panels\)](#) for each village in Sydney, so that each village is self-sufficient in energy. Micro-grids are important because:

- Households can earn extra income by sharing the excess energy they generate (and store in batteries) with their neighbours. This revitalises a community, as additional income is typically spent locally.
- It provides climate resilience. If the main grid goes down due to extreme weather events, or there is flooding in the streets, households still have power
- It is more efficient and reliable than one main grid. More energy is lost along the transmission lines, the further the distance travelled

Examples:

[UK renewables](#) generate more energy than fossil fuels, due to their investment in solar and wind, proven technology

[Green Hydrogen](#) is a future [option](#) to watch, where its production is powered by renewable energy, solar and wind, with no emissions. Germany already has [hydrogen](#) fueled trains. Refer to experts to consider.

5. Circular Economy (Product Lifecycle)

- Everyday Products made from Recyclables, sold in Reusable Containers
- Environmentally Friendly Packaging (e.g. Seaweed). Ban single-use plastics
- Micro Recycling Facilities in each Village
- Garment and Textile box collections, Smart E-bins
- Technology Subscriptions
- Repair and Refurbish Centres
- Reuse Centres, Stop and Swap Events
- Cradle-to-Cradle design, Carbon Capture

The [Ellen MacArthur Foundation](#) collaborates with governments and businesses to establish a Circular Economy which are restorative and regenerative by design. Introductory videos can be found [here](#) and [here](#).

The [circular economy](#) is similar to [cradle to cradle](#), and models production and consumption where the life cycle of a product is extended, and the materials of products are recycled again and again to create new products, minimising waste and pollution in the air, land, and oceans.

The design philosophy involves:

- Reduce (via sharing and leasing, minimising resources)
- Reuse
- Repair and Refurbish
- Recycle

Micro-recycling Facilities

The citizens want a future where all products are made from recycled materials processed in micro-recycling facilities - such as those invented by UNSW SMaRT - and are delivered in environmentally friendly packaging that does not harm the environment. As regenerative solutions tend to be local, shared and distributed, we foresee the potential to roll-out a substantial number of micro-recycling facilities across the villages in Sydney.

Future products can be sold in reusable containers and designed to be taken apart at the end of life, and businesses - small and large, and various industries - can substantially reduce manufacturing costs - as they can source materials from local [micro-recycling facilities](#) (e.g. minimise transport, mining operations) and keep reusable containers in circulation.

Financial incentives - subsidies, rewards and discounts - can be used to encourage recycling in the circular economy, as well as prices or penalties for the amount of waste collected or putting in items in the incorrect recycling bin / chute.

This [TED](#) lecture suggests to accelerate the transition to a circular economy we need to ensure the price of recycled materials (e.g. plastic) is cheaper than the cost of producing it new - incentives and economic benefits for businesses.

Packaging

[Seaweed](#) is an option for replacing plastic for packaging, as it is abundant and biodegradable. Over [300 million](#) tonnes of plastic is produced annually thus seaweed has potentially to significantly transform the city into a regenerative economy, as it can sequester carbon from the oceans to restore ocean life, while also being used for packaging. Other environmentally friendly options for packaging may become available over time - refer to experts for advice.

Single use plastics must be banned - see [Ocean Cleanup](#). The Great Pacific [garbage patch](#) is 3x the size of France, contains 1.8 trillion pieces of plastic, with a mass of 80,000 tonnes. Plastics breakdown into [micro-plastics](#) and [nano-plastics](#) over time and pollute the soil, waterways, oceans and air, and negatively impact animal and human health when consumed.

Clothing and Textile

The [fashion industry](#) is a key contributor to global greenhouse emissions. Citizens should be able to conveniently walk to Garment and Textile collection boxes, whose contents are transported to the local micro-recycling centres. Clothing, carpet, and furniture companies can then re-use the recycled materials thus reducing cost to turn a profit.

Recycle Bins, Smart E-bins

Recycling of products - from everyday items, e-waste and toxic - needs to be simpler and easier for everyone. If

we precisely segregate unwanted items at the point of collection, the recycling process is much more efficient and cheaper, and more raw materials can be retrieved and reused in the micro-recycling facilities. For example, the recycling chutes can be above ground where educators teach the citizens on how to use the coloured recycle bins properly, and below ground can be the micro-recycling facility.

As an interesting innovation, the smart waste [e-bin](#) automatically sorts wastes using artificial intelligence, and is claimed to increase recycling rates. Refer to experts to consider if environmental and economic benefits are sound.

Technology

Due to its complexity and use of precious minerals, technology products can be made available (shared) to consumers and businesses on a subscription basis. They can also be created in a modular design, so consumers buy only the component accessories they need to use.

Repair and Refurbish, Reuse Centres

[Green Furniture Hub](#) is a sustainable solution where surplus office furniture, is redistributed and reused. This minimises landfill, extends the products life, and offers significant cost savings for consumers and business. There is potential to use a similar model, to redistribute other various product categories from other industries as well. The ultimate goal is for zero waste in land-fill, and redistribution centres and repair and refurbish centres play a key role to extend the life of a product, just by giving it to people who wish to use it, and repairing items before using a new item. There is a growing trend for Stop and Swap events. Potentially if it goes mainstream, it could be worth considering permanent locations or more regular events for exchanging items.

Cradle to Cradle Design, Carbon Capture

The following are just examples only - and not prescriptive solutions - where waste is a (nutrient) input into another process that creates value - thus eliminating landfill. We are just trying to convey the importance of the design philosophy of zero waste, cradle to cradle design, closed-loop design, rather than recommend specific technology or workflow. In [Sweden](#), recycling mostly everything is the social norm. Solar energy and wind energy is far more sustainable than incinerating waste to produce energy, due to carbon emissions. However it is an example of how a waste stream can be an input to other industry process: council collects residents food waste, extracts methane to power local vehicles, and gives leftover organic matter to farmers as natural fertilisers for their soils.

In [Iceland](#) and [Switzerland](#), innovative machines, capture CO₂ that can be turned into carbon rocks, building and infrastructure materials or be used to power a greenhouse for growing plants. [Climeworks](#) have opened their third carbon capture plant. It should be noted that trees, forests, seaweed, and wetlands are far more efficient and affordable, and a natural way to sequester

excess Co2 from the air and water.

[Michael Pawlyn](#) highlights biomimicry architecture where society can be transformed with closed loop design, and drawing energy from the sun. He cites an example, [Amsterdam de Kas](#) which is a restaurant in a productive greenhouse, with anaerobic digester for the local biodegradable waste; this is turned into heat for the greenhouse and electricity to feed the grid. The fish farm are fed with vegetable waste from kitchen and worms from the compost, and supply fish back to the restaurant. In another example, cardboard waste is collected from restaurants, shredded for horse bedding in equestrian centres, then soiled and put into worm and composting systems, then fed to fishes that produced caviar was sold back to restaurants

6. Education

- Public digital display of Visual Environmental Dashboards
- Public digital display of Sustainability and Social Well-being Leaderboards
- Empowering Girls and Women through Quality Education and Good Work Opportunities

Visual environmental dashboards that reflect natural resource use should be displayed everywhere across the city - from large digital display (billboard size at train stations, town centre, shopping malls) to smaller LED screens in buildings and classrooms. It revitalises social cohesion as citizens have a shared goal, and discuss natural resource use and climate crisis in everyday conversations and are engaged in participating in regenerative solutions - regardless of race, education, socio-economic levels.

[Oberlin, Ohio](#) already do this exceptionally well. There public environment dashboards display energy mix (renewable and nonrenewable), net Co2 emissions, water flows, water quality, air quality, flows of waste and recyclable materials, and traffic conditions.

Public displays of Sustainability and Social Well-being Leaderboards are also welcome as it promotes awareness of health and well-being, and friendly competition between cities. A focus on social well-being and social equality indicators promotes conservation of natural resources and better health outcomes. In contrast to GDP indicators that promote exploitation of natural resources causing environmental degradation and climate crisis. Scotland, Iceland, New Zealand, Costa Rica are leaders in the [Well-being Economic Alliance](#), and focus on well-being indicators such as access to green space, housing, happiness, health. In a regenerative society, empowering women with quality education and good work opportunities and providing financial and social support for full-time mums is crucial. Through these initiatives, women are empowered to be who they want to be, and as a collective it slows down population growth

and stress on natural resources. Full-time mums also work the equivalent of multiple jobs, yet their contributions to society in nurturing the next generation - in a stable, supportive and stimulating environment - can be better recognised and appreciated; culturally and financially.

7. Green Burials

Most citizens want to know that when they die that their bodies regenerate the environment (positive contribution) and they can stay connected to their loved ones.

Green Burials is where death becomes life. Through recomposition, our body becomes the soil that nurtures the trees that provide clean air for the living.

In a sense the trees can be the living monuments of our ancestors and the living can be bonded to their loved ones. Citizens will feel a moral responsibility to care for the trees as it represents their ancestors and loved ones (grandparents, parents, uncles, aunties, friends etc), and not just a tree.

A growing number of people don't want decadent monument and nor do we have much space available. It would be helpful for citizens to have the option to choose regenerative communal Green Burials (if they wish to) - where nature and mourning meet - while maintaining existing cemeteries for religious and cultural reasons and moral obligations.

8. Policy

These policies have been enacted around the world to accelerate the transition to a more regenerative environment and sustainable economy.

- Policy Based on Science Fact, Evidence, Independent Experts
- Social well-being and Environmental Indicators (prioritised over GDP)
- Pollution Tax (Carbon Price) that subsidises Regenerative Practices
- Universal Basic Income (Trickle-up Economy)
- Zero or reduced subsidies for Fossil Fuel and Factory Farming
- Corporations Banned from False Advertising and Limit on Campaign Financing
- Extend Ban on Lobbyists from working in Government
- Delist Companies from Stock Exchange not meeting Environmental Criteria

There is overwhelming scientific evidence and consensus that human activities have increased greenhouse gases that has caused the climate crisis - as seen from [UN Paris Climate Agreement](#), [11,000 scientists](#), [NASA](#), [Medical Associations](#), [Cities worldwide](#) declaring [climate emergencies](#), and millions of citizens that joined the [Global Climate Strike](#) - yet, certain government [officials are ignoring](#) are ignoring overwhelming

scientific evidence and expert recommendations and this exacerbates the climate crisis. Current policies are [outdated](#) and new policies need to be passed to accelerate the transition to regenerative practices and reverse climate change.

Scotland, Iceland, New Zealand, Costa Rica are leaders in the [Well-being Economic Alliance](#), and focus on well-being indicators such as access to green space, housing, happiness, health. This decreases the exploitation of natural resources for profit and reduced environmental degradation, that if GDP was the primary indicator for the economy.

Corporations producing excessive carbon emissions should be penalised with taxes, and the money raised are diverted to regenerative and sustainable practices (e.g. regenerative agriculture, ocean regeneration, marine permaculture, electric public transportation etc) that can reverse climate change. In today's world, the polluting companies are not punished for the pollution they create. Around the world, cities are putting a price on [carbon emissions](#). Business should be subject to emission calculations and citizens should be informed which business have the most emissions and is the most environmentally destructive (or environmentally friendly).

Zero / Reduced subsidies companies that pollute (oil, coal, etc) so consumers see the true cost of the products, and be transparent on the subsidies fossil fuels and industrial agriculture receive, compared to renewable energy sectors and regenerative industries (e.g. marine permaculture, regenerative agriculture) that play vital roles for reversing climate change. Guardian reports that [20 firms](#) produce 1/3 of all carbon emissions, a similar assessment should be made of polluting companies operating in Australia.

[Fossil fuels](#) and factory farming industry profit trillions of dollars and fund political campaigns to influence policy, [false advertising and scare campaigns](#) to [sway](#) public opinion (doubt), often through front groups - blocking adoption of regenerative practices and a transition to an equitable society. Swedish newspapers have now [declined advertisements](#) from fossil fuel firms.

The [revolving door](#) is weakening our democracy - [where lobbyists and government officials](#) switch positions, a problem largely unaccounted for and unpoliced. The end results is elected officials more motivated in maximising profit for corporate entities and widening the [wealth gap](#), than representing the citizens that they supposedly serve. The voice of the ordinary citizens and experts are left unheard in parliament, leading to fewer policies that support social equality and wealth equality, and environmental restoration. The [best practice is for longer cooling-off periods](#) - both the United States and Canada have adopted a 5 year ban on administration officials working in lobbying roles. Enforcement of the policy is just as important.

The citizens deserve a more inclusive, open, and responsive government. We believe that corporations

that donate large sums to political campaigns have a corrupting influence on the politicians. We want to [limit the corporate influences](#) (e.g. campaign contributions) and sway on politicians and policy decision makers (e.g. whom may feel obliged to their contributors). Citizens are not interested in partisan politics and petty bickerings, and are more keen on sensible decisions with respect to the best solutions supported by scientific evidence and verified by an independent expert panel (e.g. not financed by corporations).

We want to elevate the voices and influence of ordinary citizens and subject matter experts when key policy decisions are made that significantly impact on the population - including policies stimulate job creation in regenerative practices, that aim to reverse climate change. Citizen-led participatory governance is advised to complement representative governance to allow an audit-check on elected officials. The financial sector can also play a role in saving the planet. UK politicians are preparing policies that [de-list firms](#) from the stock exchange that fail to meet environmental criteria and fail to address the climate crisis.

The [wealth gap](#) is widening and the pace of change is accelerating from A.I., automation and hopefully a speedy transition of jobs from polluting industries to regenerative industries, as we decarbonise the economy. Ordinary workers and families will be impacted, and we recommend that the government look at policies and initiatives that can aid families during workplace transitions to take the stress off families - whether it's [universal basic income \(UBI\)](#), transition assistance programs like [Transition Hub](#), or programs that provide economic security for impacted workers.

9. Building Standards

We want the city to reuse and refurbish existing infrastructure creatively before constructing new buildings to minimise emissions. Any new constructions should ensure emissions are offset by restoring nature to absorb more than the emissions emitted during construction. This includes planting trees - such as reforestation, street trees, vertical gardens, public rooftop gardens and urban farms. Any new constructions should use environmentally friendly options (such as Carbon negative cement and [Green cement](#)), and be built to last. Utilising [recycled materials](#) (cement, glass, tyres etc), reusing furniture and components to outfit buildings (e.g. [Green Furniture Hub](#)) and designing buildings to be easily deconstructed is encouraged to reduce waste.

All buildings old and new should be audited to ensure they are energy efficient to the highest standard. Consideration include improved insulation standards (to minimise energy usage for heating/cooling), smart meters to reduce vampire energy usage, battery storage to offset peak demand, using solar powered sensor LED lights for private and public spaces. Talk to experts for best practice.

Best practices for recycling and waste management should be applied to buildings. This includes grey water recycling (potentially converting car parks to reservoirs) and dual water supplies for potable and reusable waste water. As with all other sections, continually check-in with experts for best practices. Even though technology can change over time, the guiding principle is that we choose the environmentally friendly and regenerative options that benefit ordinary citizens and encourage social equality, as well as restore nature and biodiversity.

The benefits include:

- cleaner air and water
- drought resistant and nutritious food crops
- affordable access to energy and materials
- social equality and cohesion
- reverses climate change
- increases biodiversity

Materials and waste

- Zero waste going into landfill and ocean, environmentally friendly packaging
- On site composting and micro-recycling
- All products in recyclable or reusable/refillable containers
- Ban single use plastic
- Introduce or encourage bio plastics - if suitably researched/proven technology
- Financial penalties and incentives
- Incineration of waste
- Composting on an industrial scale, for all households and businesses. TRY HARDER!
- Paperless life
- Harmonisation of recycling standards - influence change to make the public 100% confident in recycling
- Glass reused for road base if the demand for recycled glass reduced, if bottle can't or aren't refilled
- Alternatives to plastic
- Working towards waste free shopping centre
- Bins that sort waste, signal when full
- Charge waste - encourage waste reduction for individuals and businesses
- More Micro recycling centres
- Make recycling for e- waste and other toxic items simpler and easier for businesses
- Clothing - incentivising returning, deposit schemes or coupon for discounting, use for insulation
- Recycled concrete
- Build buildings and roads to last
- Reuse existing buildings, refurbish before demolishing and rebuilding
- Zero carbon construction materials

- Increased insulation requirements to reduce energy usage
- Integrate waste management in buildings, for water and multiple stream recycling
- Recycling in underground caverns, reduces visible clutter, visible in community spaces to remind to recycle, less regular emptying required

Green Public Spaces and land use:

- Expansive Tree coverages, streets and town squares
- Integrated Rooftop Gardens, Vertical Gardens, Farms Walls, Urban Farms
- Council retains their buildings and parks in perpetuity, keeping from private developers for capital gains
- Redevelop council spaces to suit emerging needs, rather than selling
- Planning guidelines that drive the inclusive community's needs
- Prevent unoccupied spaces with financial rewards or penalties
- Underground parking for future reservoirs of grey water
- Audit use of space
- Consider use of prime real estate - tourism, military
- Dense population hubs and buildings have staffed rubbish reception areas to assess reuse and repair
- Empty spaces are reclaimed for greater good - affordable housing, cultural spaces for art, green space, citizens assembly for discourse
- Democratising of space
- Flexible use floors of buildings- use for more hours of a day, basement reuse
- Charge spaces at sliding scale based community values
 - like art space,
- Homeless use of spaces like car parks - shelter with minimum infrastructure costs, using dead spaces like flyover for similar autonomous living spaces
- Cheap rent for public art spaces
- Open empty spaces by artists and community
- Electrical vehicle charging places in public (integrating into existing street furniture) and private spaces
- Encourage bicycling and e vehicles by dedicating parking spaces
- Providing more Green spaces - increasing tree coverage, parks, incentivising rooftop gardens

Energy

- Prioritising emission neutral technologies
- Green energy via micro grids
- Recycled in a closed system
- Further planning controls to push for sensors to reduce vampire energy usage
- Push for greater insulation standards to reduce heating

- and cooling costs
- Solar and wind - use communal roof spaces, share the outputs, distributed generation
- Battery storage to offset peak demand - especially in large buildings in spaces like basements
- Invest in solar farms to offset limitations in high density parts of City of Sydney
- Energy from biomass and incineration
- Increasing use of LED and sensed lighting in all spaces
- Integrated public lighting with solar panels and LEDs
- Food and water
- Grey water recycling - new properties should have dual water supplies - one potable and one reused water
- Fair trade produce
- Zero waste cafes and restaurants
- Supporting regenerative agriculture
- Rooftop gardens to create local produce Large new estates should have managed community produce gardens allotments
- Recycled in a system
- Ocean regeneration, introduce more seaweed like kelp to absorb carbon dioxide
- Less meat consumption

Education and social

- Public dashboards of information of eco goals and targets, tracking, billboards, inspires conversation, achievement, brings community together
- Emissions calculator for every event and business
- Incentivise the sharing economy and projects

Challenges

- We know it's not making money now, coal is cheap, energy policy is slow
- Legislation needs to lift the standards required of businesses, to achieve these higher goals beyond economic gains, for a more equal society.
- Plastic is cheap and lighter than anything else
- There's no market in Australia for recycling plastic, we've relied on offshore solutions
- Scare campaigns from strong and wealthy lobby groups
- Pollution taxes can fund change
- Reduce subsidies on 'dirty' options (oil, coal etc) so consumers see the true cost of the products
- We don't know what's possible in the future, but this will help guide your choice

Moving Efficiently and Sustainably

We want a city designed for people and not vehicles, where there is space to walk, bike, stroll, jog, chat, rest, relax and enjoy life.

We need to UNCLOG our streets.

Underground and overground transport: 3D use of space

Non-emitting vehicles (e-bikes, e-scooters, etc)

Car-free CBD

Lanes for cyclists, pedestrians and public transport

Optimised space

Green corridors

77% of population growth over the coming 15 years is projected to occur in our fast-growing cities, leading to pressure including road congestion growing by \$18.9 billion to \$38.8 billion in 2031' (Infrastructure Australia Audit, 2019). The city infrastructure is currently setup to prioritise vehicles over people, and its air pollution - hazardous emissions from vehicles - has severe detrimental effects on human health. Air pollution [adversely affects 93% of children](#) around the world (WHO), and in NSW, transport is the second [largest component](#) of greenhouse gas emissions, with [28 millions tonnes of greenhouse gas emissions](#) being emitted per year (NSW Government). Australia has an increasingly sedentary population (90% of teenagers not getting adequate exercise, The Guardian) and we are currently facing an obesity epidemic in Australia, with 2/3 of the adult population being overweight or obese, so want to increase physical activity. Finally, we want to combat [social isolation and loneliness](#), providing health benefits across the population.

1. Car-free, Green Spaces

- Car-Free city
- Wide open Public spaces for People = Freedom to Move
- Substantial Green Trees - 50% Canopy coverage
- Multiple Piazzas and Town squares
- Walkable, Bike-able, Liveable, Loveable
- Seating, Picnic areas, Play areas, native plants, public art and music
- Foot traffic - improves social interaction, boosts local economy
- Exceptions for service vehicles, emergency vehicles
- Distinguishable Town centre, iconic architecture, creative street vibe

The best practice for liveability includes a [car-free](#) town centres. European cities are a great example and [major cities](#) are going [car-free](#).

[Paris](#) comes alive with families from all diverse parts of the community, when car free days are introduced to combat air pollution. Other car free towns include

Brussels, Copenhagen, Seville in Spain, Murren in Switzerland, Vienna in Austria, Cesky Kumlav, Dubrovnik and Trogir in Croatia.

It should also be noted that car ownership is [declining](#) and cars are parked assets and [unused 95% of the time](#), wasting precious space that could be devoted to people - social equality and connection.

Vibrant Wide-open Public Space

A town must be [designed for people](#) and not vehicles - with a distinguishable town centre, and wide open interconnected green public spaces (multiple [piazzas](#), town squares) that showcases the character and spirit of its citizens, and celebrates its history - in Sydney's case, it's Indigenous culture and heritage and multiculturalism.

A vibrant town needs to be a place that is accessible to everyone and where people enjoy arriving at - and not just pass through - so they can explore and connect with friends, family and community.

An aesthetics and appealing public realm - that invites people to walk, stroll, jog, bike, socialise, chat, relax and enjoy - could include these elements: piazza, fountains, gardens, churches, outdoor activities, picnic areas, rows of cafes and restaurants, amphitheatres, civic art and

sculptures, markets, stages, musicians. Ample tree coverage also needs to be provided to offset the heat island effect, and reduce heat strokes. This is not an exhaustive list, just starter ideas for consideration.

Examples:

In Spain Seville, there a many street musicians who entertain the public as they wander through the town centres along cobblestone streets.

In [New York](#), 50 pedestrian plazas were created by repurposing 26 acres of active car lanes into new pedestrian spaces.

References: [How Public Spaces make Cities Work](#), [Green Spaces](#), [New Urbanism](#).

2. Web of Green Corridors

- Green Corridors, connected network of walking and bike routes
- Connecting to Towns Squares and Transport Nodes
- Tree-lined Streets for Shade (heat stroke) and Clean Air
- Along Corridors: creative arts, cafes, benches, trees and plants



Car-Free, Green Spaces

- Car-Free city
- Wide open **Public spaces** for People = Freedom to Move
- Substantial **Green Trees** - 50% Canopy coverage
- Multiple **Piazzas** and Town squares
- Walkable, Bike-able, Liveable, **Loveable**
- Seating, **Picnic** areas, **Play** areas, native plants, public art and music
- Foot traffic - improves **social** interaction, boosts **local** economy
- Exceptions for service vehicles, emergency vehicles
- Distinguishable **Town centre**, iconic **architecture**, **creative** street vibe



Walkability

- Widen **Footpaths** as much as possible (accessibility)
- More **Pedestrian** crossings - all directions, every intersection
- Pedestrian Scramble crossings
- **Green-painted Priority** Crossings for pedestrians and cyclists
- Lights prioritise **people first**, bikes, public transport, then cars



Web of Green Corridors

- **Green Corridors**, connected **network** of walking & bike routes
- Connecting to Towns Squares and Transport Nodes
- **Tree-lined** Streets for **Shade** (heat stroke) and **Clean Air**
- Along Corridors: creative arts, **cafes**, **benches**, trees & **plants**
- High-line **Parks**

- **Super-Blocks**: alternating roads for people / cyclists / vehicles
- **Bicycle Highways**: open 24 hours everyday
- **Green Wave** on arterial roads
- Lights **go green** > 5 cyclists waiting

- **Remove** Street Parking (cars unused 95% of the time)
- **Convert** existing infrastructure (roads, railway lines, bridges) into Pedestrian and Cycleways

- Semi-automated **mobility**: e-bikes, e-scooters, e-wheelchairs
- Free **charging** stations, integrated to existing street furniture
- Solar-powered bright **LED lighting** of Public Spaces (safety)



Cycling for All

- Widen **Bicycle paths** (slow vs fast cycling)
- Separate **lanes** for pedestrians and bicycling (safety)
- **Safe transitions**: between bike lanes, shared paths, roads
- Leaning / Holding **rails** with **footrests**
- Bicycle **ramps** to Stations, hooks on Ferries
- Secure **storage** facilities at Transport Nodes
- - Bike cages: key or digital entry, security cameras
- - Automated Bicycle Parking
- **Teach** kids, adults to ride bike
- **Educate** learner drivers to respect people & cyclists
- Learn from **Denmark** (1 in 3 residents cycle everyday)



Accessible Public Transport

- **Electric** Public Transport for Distant Travel
- Powered by **Renewables** (Solar, Wind, Green Hydrogen)
- **Quality** - reliable, frequent, efficient, accessible
- Easy **Access** to Ramps & Platforms (wheelchair, elderly, kids)
- Public Communication - **Positive Benefits** of Public Transport
- Call for **help** - physical buttons, mobile app
- Clear **Signage** & guidance for complex journeys on public transport

- High-line Parks
- Super-Blocks: alternating roads for people / cyclists / vehicles
- Bicycle Highways: open 24 hours everyday
- Green Wave on arterial roads
- Lights go green > 5 cyclists waiting
- Remove Street Parking (cars unused 95% of the time)
- Convert existing infrastructure (roads, railway lines, bridges) into Pedestrian and Cycleways

Green Spaces and Corridors

People whom are active and live in a healthy environment connected to nature are happier and live longer. It is a moral obligation to maximise walking and cycling so that residents lead a healthy active lifestyle due to an environment that naturally encourages it. It has multiple wins - by reducing air and noise pollution, addressing the climate crisis from excessive Co2 emissions (cars), and alleviates the strain on the health care system by reducing obesity.

A town should be enjoyable to explore - whether by walking, jogging or cycling. Each neighbourhood in the city should be connected to other neighbourhoods with a safe and enjoyable 10-minute walk or cycle trail, accompanied by [tree-lined streets](#) to prevent heat strokes and provide cleaner air. The interconnectedness disperses traffic and encourages walking and cycling.

There is a proposal for Manhattan, New York to have [Green Corridors Express highways](#), and these are the images [one](#), [two](#), [three](#) and [four](#).

Connecting parks and wide open public realms with network of aesthetics walking and biking routes will make the public space seem much bigger than if each public site or neighbourhood was disconnected. People can exercise (walk, jog, cycle) for longer periods while seeing interesting sites along the way, and variety (of routes, scenery) adds re-usability and longevity.

Oklahoma town, had one of the highest obesity rates and is now of the fittest of American cities. The health outcomes of its citizens were transformed by adding [health-related infrastructure](#), to design everyday movement into daily life. This included green parks, making streets pedestrian friendly, narrow streets, improving walkability, walking routes, bicycle trails, and venues for water sports (canoe, kayak, rowing).

These initiatives are in line with [New Urbanism](#) guidelines that also recommend wide pedestrian and bicycle paths, narrow peripheral streets (to slow vehicle traffic for the safety of pedestrians young and old), and to set a high cost for parking to discourage car usage, or to remove street parking.

Cities all over the world are reinventing infrastructure for "green public spaces and corridors". Other examples include:

[In Atlanta, Georgia](#), a massive urban park - the Atlanta BeltLine - which was transformed from an abandoned railroad track into 22 miles of public green space.

[Vancouver](#) is building the Arbutus Greenway.

New York, Houston or Miami, Detroit, Philadelphia, Seoul, Hong Kong, Singapore, Toronto and Paris also have had grassroots movements, that led to a cultural momentum that desired and demanded life-affirming infrastructures with trails, parks, fishing, boating and community revitalisation, water quality and flood control.

References: [Walkable City](#), [Health related Infrastructure](#), [Old Railroad to New Green Corridors](#).

[Super-Blocks](#), [Green Wave Lighting](#)

[Super-Block are transforming cities](#) and can transform ours too. They often have alternating roads for people, cyclists, vehicles and within the superblocks - cars are banned or have restricted speed limits, priority is given to walking and cycling, and open space is reclaimed or created from parking. The net effect is that more space is allocated for pedestrians - improving the accessibility of sidewalks, air quality, acoustic comfort and liveability index. The efficiency in which foot, bicycle and vehicle traffic is managed can provide social and economic benefits. Intelligent traffic lights can provide [Green Wave Lighting](#) on arterial roads - whereby a series of traffic lights (usually three or more) are coordinated to allow continuous traffic flow over several intersections in one main direction. It is often used to [facilitate bicycle traffic](#) and emergency vehicles in Copenhagen, Amsterdam, San Francisco. Alternatively lights could automatically go green after 5 or more cyclists are waiting at the lights.

3. Walkability

- Widen Footpaths as much as possible (accessibility)
- More Pedestrian crossings - all directions, every intersection
- Pedestrian Scramble crossings
- Green-painted Priority Crossings for pedestrians and cyclists
- Lights prioritise people first, bikes, public transport, then cars

Citizens will be encouraged to walk more and lead healthier active lifestyles if the design of environment is conducive to walking.

People are discouraged from walking when there are too many cars or fast cars (dangerous), unsightly car parking (unappealing), insufficient trees (for shade on hot days, clean air), and the streets are too dimly lit (safety). Wide pedestrian footpaths connected to green-painted cycle priority crossings, and paired cycle priority and pedestrian crossings have already been implemented in [New Zealand](#) to encourage walking. And [pedestrian scrambles](#) are often used in major intersections to improve [safety](#) of drivers and pedestrians.

4. Cycling for All

- Widen Bicycle paths (slow vs fast cycling)
- Separate lanes for pedestrians and bicycling (safety)
- Safe transitions: between bike lanes, shared paths, roads
- Leaning / Holding rails with footrests
- Bicycle ramps to Stations, hooks on Ferries
- Secure storage facilities at Transport Nodes
- Bike cages: key or digital entry, security cameras
- Automated Bicycle Parking
- Teach kids, adults to ride bike in city wide program
- Educate learner drivers to respect people and cyclists
- Learn from Denmark (1 in 3 residents cycle everyday)

Cycling is for Everyone

This article summarises what we can learn from [Denmark's cycling culture](#) to establish a more live-able and love-able city.

Cycling is great for health (physical exercise, reduced air pollution from cars), social cohesion; and a great space saver in cities. There are also [economic benefits](#) as well, as cycling culture has been associated with shorter commute times (reduced / no traffic congestion), reductions in sick leave, and increased retail spending.

In Denmark, 1 in 3 residents commute by bicycle and [90% of Danes own a bike](#). The infrastructure and city programs are set-up to make cycling accessible to everyone - young and old, and also comfortable so ordinary everyday clothes can be worn to cycle around. Bicycles need to be in separate lanes to pedestrians and cars, and designed in a way, where lanes are wide enough for two bikes can pass each other, and curbs are wide enough so that accidents with people opening doors from stationary cars is unlikely. Safe transitions between shared paths, bicycle lanes, road, and priority crossing is important too for efficient flow of traffic and safety.

To make cycling comfortable and accessible to everyone, [leaning / holding rails and footrests](#) are provided at intersections, sloped (tilted) bins provided as [street furniture and service stations](#) or stops include tyre pump, bike repair stand, and water fountain.

[When biking is faster and more convenient](#) than driving, the number of cycling citizens increases. Thus policies and laws that make discourage car use in the town cities is welcomed - as the public spaces should be maximised and designed for people and not vehicles.

Education

Education plays an important role in establishing a cycling culture.

Cycling is promoted earlier in Denmark by creating positive and safe experiences for children and families. Eleven and twelve-year-olds can obtain a "cycling license" in a nationwide program organised by schools and police,

which includes class training, homework, a written exam and a riding test in traffic.

As mostly every person in Denmark is a cyclist, drivers can also put themselves in the shoes of a cyclists - they tend to respect their rights in traffic and can predict how cyclist may behave.

When undergoing training for a driver's licence, there should also be substantially more theoretical and practical training revolving around cyclists. It should include learning the rights of cyclists in traffic, how to predict the behaviour of cyclists and develop a habit of situational awareness of cyclists.

Securing Bikes

Securing bikes at the destination point which is typically transport node or station, should be made easy and convenient, with ramps (if required) leading to the bike racks and bike storage facilities and hooks on ferries. Bike cages with security cameras and underground [automated bicycle parking](#) as seen in [Singapore](#) (holds 500 bikes) and [Japan](#) can be considered as well.

5. Accessible Public Transport

- Electric Public Transport for Distant Travel
- Powered by Renewables (Solar, Wind, Green Hydrogen)
- Quality - free, reliable, frequent, efficient, accessible
- Easy Access to Ramps and Platforms (wheelchair, elderly, kids)
- Public Communication - Positive Benefits of Public Transport
- Call for help - physical buttons, mobile app
- Clear Signage and guidance for complex journeys on public transport

In 2050, we have a public transport system that is accessible to all users (reliable, safe, low expense), connected to other modes of transport and sustainably powered.

Electric Public Transport, Renewable Energy

For cleaner air and more efficient travel, we should be transitioning to renewable energy and shared electric public transportation (trams, buses, trains). Renewable energy examples include solar farms, wind farms, hydropower and green hydrogen (produced with renewable energy). As citizens we prefer the solution that is both the most environmentally friendly and also substantially reduces the cost of energy and transportation service for the populace.

[Germany](#) already has zero-emission Hydrogen Trains and RMV has ordered [27 Hydrogen Trains](#).

[Shenzhen](#) has 16,000 bus fleet which is 100% electric and plans to electrify its taxi fleet.

[1 hour of the sun's energy](#) that reaches earth is enough to power the world's energy needs for a whole year. With the

abundance of energy reaching the earth from the sun, it is extremely wasteful and immoral to burn hundreds of billions of tonnes of fossil fuels which exacerbates the climate crisis with more extreme weather, flash floods, heat waves and droughts, catastrophic bushfires etc.

Accessibility and Benefits

A lot of citizens have voiced their preference for public transportation to be free, reliable, frequent, efficient, accessible and environmentally friendly. Public transport should be easy to access by all citizens, as well as to the stations and platforms - from kids to elderly, and for those on crutches and wheelchair bound. Clear signage and guidance for complex journeys, and quick access to Help buttons (physical buttons, or mobile app) is welcomed. Public campaigns to promote the connectivity (to other places, and other modes of transport) and the benefits of public transport could assist uptake, as well as making public transport naturally the more convenient and cheaper option than driving. (e.g. limit / remove street parking, congestion charges for ICE cars, and less so for hybrid or electric vehicles).

6. Semi-automated Mobility, Electric Vehicles

E-bikes

E-bikes makes cycling even more accessible for everyone - cycling long distances (for commutes) become easy even for beginner rides and one can ride to a destination without sweating and needing to have a shower. The cyclist still needs to pedal - the electric components just give extra assistance (push) when pedalling. Thus pedalling uphill and long distances takes less effort.

In Sydney, e-bikes allows for a more comfortable ride as some streets are hillier than others. The price of a standard good quality ebike is around \$2000 and price to convert a normal bike to an e-bike is around \$1000-1500 - both options are more environmentally friendly, healthier (exercise) and cheaper than driving a car.

The growing popularity of e-bikes in Sydney is evidenced by the growing number of stores for Sydney Electric Bike stores, they now have 3 stores across Sydney: Pyrmont, Hornsby and Engadine. E-bike sales are growing world-wide and is becoming a very popular mode of transport, so much so that we should plan for their increased used in the city.

To assist citizens ride their e-bikes, re-charge stations can be established and integrated with street furniture, as well as wide lanes and solar powered LED lights that illuminate the cycle ways during peak commuter times - early morning, evening, night.

Electric Vehicles

Note the preference is for public transport, bikeability and walkability. However, electric vehicles powered by renewable energy, is preferred over petrol-powered internal combustion engine (ICE) cars. We also have a

moral obligation to future generations to move towards environmentally friendly transportation to mitigate the climate crisis.

Norway leads the electric vehicle revolution, most cars sold today are fully electric, and by 2025 fossil fuel cars will be phased out. The noticeable trend is for more electric vehicles, thus more availability of EV charging stations with faster speeds in the streets, residential and commercial buildings - combined with public education on the benefits, tapered incentives and subsidies, and a raft of clean energy policies like Colorado is welcomed (e.g. temporary free registration, bus lane usage, etc). We recommend to listen to the experts for best practice.

However the best practice for liveability is to prioritise walking, biking, and electric public transport, and there is also a declining trend in car ownership. Thus even with the uptake in electric cars (replacing ICE cars) we still believe there is substantial opportunity to reclaim public space and prioritise streets for people and bicycles, instead of cars. And with home affordability being a challenge (disparity income and property prices), articles suggesting millennials are more interested in the sharing economy, and that driverless vehicles will arrive in future, we sense that there may be options in future for driverless shared electric transportation - ordered as a service like a taxi - in certain areas of Sydney where walking, cycleways and public transportation do not reach.

<https://www.centreforpublicimpact.org/case-study/electric-cars-norway/>

<https://www.forbes.com/sites/davidnikel/2019/06/18/electric-cars-why-little-norway-leads-theworld-in-ev-usage/>

<https://amp.theguardian.com/environment/2017/dec/25/norway-leads-way-electric-cars-green-taxation-shift>

<https://www.forbes.com/sites/davidnikel/2019/06/18/electric-cars-why-little-norway-leads-theworld-in-ev-usage/>

Colorado is transitioning to a greener cleaner city with electric vehicles and a raft of clean energy bills: <https://www.vox.com/energy-and-environment/2019/8/12/20801602/colorado-electric-vehicles-2019-renewable-energy>

This is their legislation to transition to clean energy: <https://www.documentcloud.org/documents/5991965-Colorado-Energy-Office-2019-Legislative-Session.html>

Embed creative arts in everyday life

Acquire Space for Artistic Pursuits:

- Less restriction (red tape) on the utilisation of unused outdoor and warehouse spaces
- Open access for practising artists to tender for commercial/ government spaces
- Long-term, low-cost spaces
- Rent to buy studio spaces

We wish to change the experience of the city to one in which art is practised and valued not as an industry, but as much as industry.

Support structure

Support from various sources including government, business and community for professional and emerging artists of all disciplines for the long term, in studios and property, to remain and flourish in the city.

We need to promote multidisciplinary creativity. All aspects of creative industry.

- Professional and community artists to work together to foster community identity.

Designate Local Artists Committee

- A cyclic board (by application) of architects and artists to design the artistic pursuits that happen in the city.
- Professional and community artists to work together to foster community identity

Art is Life. Life is Connected with Art

- Professional and Community Creatives to Practice in our City
- Significant public art pieces from local artists from the city for the city

Foster relations

- Between artists and communities to create opportunities for artistic pursuits, festivals

24-hour City

- Have an efficient night-time (24 hours) transport system which specifically includes; trains, buses and light-rail (and metro)
- Night Mayor (like London and Amsterdam)
- Reinvent the business day and incentives for businesses to open longer. Law reform around trading; licensing, opening hours, diversify types of shops
- Quota on diversity of shops, which would include essential services ensuring everyone has access at all times (e.g. pharmacies, healthy convenient food etc).
- Put a cap on the amount of empty shops in one area before action can be taken by the council and incentivise businesses to open there with more attainable means, i.e. lower rent, waving rates,
- Safety measures to ensure all feel safe moving around at all times of the day and night. (E.g. police patrols, better, smarter street lighting, normalising night-time foot traffic)
- Introduce late-night precincts; where festivals and late night events can occur - give specific examples of streets and areas
- Sydney 2050 is a city that is lively, culturally diverse, and an entertainment and recreational hub. Sydney 2050 is a 24 hour city that is alive and has a soul and identity that its people can enjoy at all times. It has normalised a night-time economy, including business trading, foot-traffic, public transport, and socialising.
- Sydney 2050 has a diversified night-time economy that goes beyond nightclubs and partying. Sydney opens itself up to live music, theatre, art, shopping, education, food and dining for all demographics and for all hours of the day and night. Increased foot traffic and accessible public transport will mean an increase of people moving freely and efficiently throughout the city and therefore increase the safety at night.
- It is acknowledged that the City will need to make moderate to severe infrastructural accommodation and allowance to the city in order to facilitate this.
- Introduce a reliable, accessible and safe 24 hour transport system.
- To begin with, pilot a 24 hour transport system to service a smaller precinct as a trial. This should be done in Newtown, and surrounding areas. Increase train frequency, promote the use of buses and eliminate car-only lanes to increase efficiency.
- Once successful, expand into different precincts to promote 24 hour safe and efficient transport. Ultimately, the entire city will then be connected through various modes of transport all day and night

Sydney 2050

