Climate & Biodiversity Emergency Action Plan (CBEAP)
for Bayside Council's Climate Emergency Planning

Submitted by - Bayside Emergency Climate Action Network (BECAN)

27 March 2020

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1. INTRODUCTION.

a) Who we are

The Bayside Emergency Climate Action Network (BECAN) is an alliance of community groups based in the Bayside local government area that share a vision of a safe climate for all in a healthy and sustainable environment. We believe that a prerequisite for mobilising the capacities and resources needed for emergency action is to educate towards an awareness of the crisis we face.
We represent a broad range of the community across many age groups and specialise in various environmental areas. Combined, we have volunteers with expertise in environmental science, community engagement, advocacy and benefit from the support of many members.

The groups within BECAN currently include:
- Bayside Climate Crisis Action Group
- Beaumaris Conservation Society Inc,
- Bayside Seniors Action Group
- Beaumaris Modern
- Bee Friendly Bayside
- Black Rock and Sandringham Conservation Association
- Brighton Foreshore Association
- Brighton Residents for Urban Protection
- Elsternwick Park Association
- Greenpeace Bayside
- Intrepid Landcare Bayside
- Marine Care Ricketts Point
- Marine Education Science Community Centre
- Sandringham Foreshore Association
- The Wilderness Society Bayside.

b) Title of the Action Plan

The crisis that Australia faces is not only one of threatened climate breakdown, it is also one of ecological collapse due to biodiversity loss. Whilst these two crises share common causes, specific mitigation strategies are needed for each of them. To highlight the broad nature of the crisis and hence the range of mitigation strategies needed, we recommend the Plan be renamed as The Climate & Biodiversity Emergency Action Plan (CBEAP) as used for this submission. Should this not be possible, we urge that biodiversity conservation and protection be articulated as a goal of The Plan.

A benefit of incorporating biodiversity with climate action is that many members of our community are actively involved in protecting and enhancing biodiversity in Bayside and beyond, so reinforcing the links between protecting and expanding our carbon stores as well as cutting emissions helps to mobilise community action on both dimensions.

c) Purpose of the submission

This submission comprises ideas and proposals which we as a broad coalition of Bayside groups hope see considered and adopted within the Bayside Climate Emergency Action Plan. It expands on the list of priorities identified by Council to date in its communications.

d) Current Setting

We have been witnessing the confusion and chaos that can occur from lack of preparedness for a crisis situation by the slow and often conflicting responses of Government both to the summer bushfire emergency and the subsequent Covid-19 health emergency. By preparing its Climate Emergency Action Plan now, Bayside Council is taking an essential step towards preparing the Bayside community to both mitigate the mounting impacts of climate change as well as building the community's resilience to cope with all but inevitable impacts. We can learn from recent experience of the need for preparedness in all sections of the community for impending emergencies, particularly ones that can be foreseen.

2. COUNCIL PRIORITIES

a) A New Strategic, Transformative Policy Change: Including setting a new strategic focus for all of Council to ensure that all Council's policies, strategies and practices are consistent with and enhance The Climate Biodiversity Emergency Action Plan (CBEAP). We believe that one of Council's top priorities must be to create a realignment of all Council's strategic thinking, alongside and integrated into maintaining the delivery of Council's day to day services.

In terms of establishing priorities for acting to reduce emissions from the community, Council's priorities and actions must be directed to the sources of highest emissions, both to reducing those emissions and to mitigating their impacts. It should also focus on avoiding long term 'lock-in' of future emissions through decisions made regarding infrastructure and buildings by Council, and through building and planning approvals.

Data shows the Bayside's community's annual greenhouse gas emissions comprise:
- o 75% from burning fossil fuels;
- o 22% transport; and
- o 3% waste.

These annual emissions focus on important short-term priorities. But they do not consider the significance of existing stores of carbon in local habitats and infrastructure, nor on the long-term impacts of decisions related to infrastructure and buildings. Whilst our high fossil fuel emissions are influenced largely by Commonwealth and State government policies and levers, Councils can have a major role, both through their sheer numbers in declaring Climate Emergencies, and through their individual direct actions e.g.
Bayside Council is already providing leadership through its Carbon Neutrality Action Plan and engagement with their communities.

Bold advocacy by Council on several fronts must become a top priority. At the same time, Bayside Council can promote the uptake of renewable energy and energy savings initiatives and act to reduce the urban heat island effect.

Bayside Council can proudly promote the achievements of this Plan to the public, to local businesses and to higher levels of government. Its commitment to zero net emissions is an important example, and the reality that this provides a financial signal (linked to the price of carbon offsets) for all decisions within Council, by junior and senior staff alike. Council should communicate this, and also advise other councils how it is practically implementing this measure.

With the above considerations in mind, we recommend the following reordering of Council priorities with amendments to the scope of each priority and the addition of priorities not yet

listed. (NOTE: BECAN recognizes that every item is important and a holistic approach should be taken in the Action Plan.)

b) Advocacy: including strong advocacy by Bayside Council to Commonwealth and State governments to reduce emissions as rapidly as possible in all sectors and to act on the biodiversity emergency; advocacy for needed funding for climate emergency programs; supporting volunteering, activism and education programs to inform and equip the community to take timely and appropriate mitigation actions; and increased resources to develop 'stocks and flows' carbon foot-printing methodologies so that there is appropriate recognition of the importance of existing and enhanced biological and infrastructure stores of carbon that reinforce focus on biodiversity strategies.

c) Engagement with the Community and with Business: Including promoting Council programs and actions, provision of climate information and updates, holding of seminars and workshops, liaising with sports clubs, other community groups and local business networks and businesses to help them to cut climate impacts and to identify budding leaders and champions to advocate for environmental sustainability within their areas of expertise.

d) Renewable Energy: including the installation of solar and wind powered technology to produce electricity and heat water, to move away from fossil fuels to the purchase of electricity from solar, wind, and new hydro resources, the use of battery storage technology and the transition away from the use of natural gas.

e) Energy efficiency in Sustainable Buildings, Businesses and Homes: including environmentally sustainable design in all buildings, community facilities and homes to create all-electric, energy, water efficient and thermally comfortable homes and buildings, maximising any open space with natural or where appropriate, artificial permeable surfaces.

f) Public Space, Biodiversity and Urban Forestry: including immediate protection measures for all canopy trees, the urgent planting of large indigenous canopy trees and varied understory, where space permits, throughout all of Bayside; actively protecting all open space in Bayside, including by ensuring shared public access to Bayside community facilities and banning new commercial premises on public land; maintaining the health and integrity of trees on public land and nature strips; control of feral animals and weeds.

g) Sustainable Transport: including modes of transport which involve a significant reduction in or elimination of fossil fuel use; includes walking, cycling, micromobility, electric vehicles, and public transport. This also refers to changes to the infrastructure which supports these options.

h) Water: including reduction in water usage, or use of recycled water, in all sports fields, open space and conservation, stormwater harvesting, recycling and for watering holes for wildlife. Stormwater management schemes can not only provide useful water and habitat for plants and animals, but can also reduce risk of flooding in low-lying areas within Bayside and adjoining communities.

i) Waste: including avoidance, reduction, reuse, and recycling. Provision of further convenient e-waste and other recycling facilities, along with effective promotion of their availability, which is important to the community.

j) Coastal Environment: including working with the relevant authorities for protection from cliff and beach erosion and protection of the marine environment from the effects of

global warming, pollution, and protecting and enhancing carbon stores in the coastal environment.

k) Health: including reduction in air pollution and to provide ways of assisting the vulnerable in the community to avoid heat stress, respiratory ailments and other health conditions exacerbated during heat waves and other extreme climate events. Facilitating low carbon travel to help improve fitness.

3. SPECIFIC ACTIONS

Council's actions should be guided by common principles that are emerging and the experience of experts. Utilise the resources gathered by various agencies such as The Australian Energy Foundation, Council Action in the Climate Emergency (CACE), the Cities Power Partnership, the South-East Councils Climate Change Alliance (SECCCA) and other city councils already leading the way in responding to the Climate and Biodiversity Emergency.

This plan needs to be a 10-year plan with annual monitoring and reporting, and periodic reviews for example 3-5 years against achievements and targets, including at a departmental level within Council, and so that CBEAP can be completely updated based on new technologies, new information, including best practices, accountability and incentives etc, to reach the goal more quickly if necessary.

All progress on Council's Plan to be reported on in a manner similar to reporting implementation of Council's Environmental Sustainability Framework and against specific KPIs. All senior council staff should have specific climate KPIs linked to their salaries and bonuses and the climate costs of decisions should be included in financial accounting and reporting.

a) A New Strategic, Transformative Policy Change:

Given the failure thus far of higher levels of government to respond to the scale and urgency of the climate emergency challenge, Council needs to act with clarity and unity of purpose to set a new direction for Government. To meet the challenge, all Council's policies, strategies and practices must be consistent with and enhance CBEAP. Council must engage extensively, not only with its own staff, but with the community as a whole to ensure broad support for CBEAP and its aims.

Actions to achieve this might include:
1. Training all staff about the CBEAP, what has brought it about and the role of staff in its implementation.
2. All staff receive specialist staff training within their own area of responsibility to ensure they can implement their aspects of the plan. This should include best practice and visiting innovative solutions being developed elsewhere within Victoria.
3. A comprehensive review of all existing Council policies, strategies and practices to align them with the Climate Emergency Action Plan,
4. Embedding climate emergency concepts into Council processes, KPIs and strategies and the design, and construction of assets. Individual managers should be required to track and report on the lifetime climate impacts of their decisions, and the cost to Council of offsetting those emissions.

5. Embedding climate emergency concepts into the contractual obligations of contractors working for Council and tenant leases for council facilities. Require contractors to purchase approved carbon offsets when specified emissions reduction targets are not met.
6. A review of legal and financial risk vulnerability as per the report 'Local Council Risk of Liability in the Face of Climate Change' (2011) commissioned by the Commonwealth Government (and currently being updated) as well as the latest APRA Guidelines, to the extent such risk could apply to Council.
7. Embedding climate-related financial disclosure in annual reporting processes, relating to governance, strategy and risk management including the interrogation of the need to buy carbon offsets to achieve Council's zero net emission commitment.
8. A budget review to identify how contingency and discretionary funds can be used and other funds re-directed, for the climate emergency response. Establishing the rationale for additional federal and state funding required to implement programs as part of an all of government approach to tackling the climate emergency.
9. The issue of Green Bonds backed by blockchain technologies (Using the Victorian Govt, Green Bond as a model), to finance select climate emergency related projects, such as large scale solar projects and energy efficiency projects.
10. Community Engagement to highlight Council's response and to call for community support and cooperation to act as champions in preparing and developing capability to match the emergency threats to health, infrastructure and Council services.

b) Advocacy:

1. Advocate and lobby to Commonwealth and State governments to act and use their levers to drive down emissions across all sectors. Collaborate with other councils, acting through SECCCA, the Municipal Association of Victoria (MAV), the Association of Bayside Municipalities (ABM) and other frameworks to amplify the impact of the advocacy.
2. Advocate for State and Commonwealth funding support for climate and ecological emergency programs.
3. Together with the Municipal Association of Victoria, advocate to the State Government for the adoption of significantly higher minimum ratings for Environmentally Sustainable Design of residential buildings with appropriate measures provided for verification of performance.
4. Advocate to the Commonwealth and State Governments to reduce overall migration numbers to pre-2006 levels (when the migration rates were doubled) in order to reduce overall Australian emissions, noting that each Australian emits approximately 16 tonnes of carbon emissions pa (on average). Note also that this proposal relates ONLY to reduction of total annual migration intake, and does not propose reduction of refugee intake or change to principle of non-discriminatory migration policy intake. This will also reduce pressure for rapid increases in infrastructure such as hospitals, schools and transport systems, reduce encroachment on Melbourne's green wedges, and moderate house prices.
5. Advocate to other local government authorities to establish Climate Emergency Action Plans; share opportunities and strategies to maximise overall impact.
6. Adopt a similar program to the "Envirochamps" program run by the City of Port Phillip in late 2018 - The aim is to encourage a local project as well as educate on leadership and motivation behind behaviour. Council could look at this model as a way of engaging 'local climate champions', giving them momentum by connecting with like-minded people and feeling confident to spread the word. https://www.sustainableportphillip.com/articles/2018/8/16/could-you-be-an-enviro-champ

c) Engagement with the Community and Business:

1) Facilitate education programs for school students and all ages regarding climate change, biodiversity and environmental issues and actions.
2) Identify local champions from a variety of backgrounds to advocate for Bayside Council climate change actions.
3) Engage with the Bayside Business Network,
    a) to encourage local business to advocate for an all of government –from top down-approach to hastening emissions reduction across the board, and
    b) to reward businesses meeting set emissions reduction targets and businesses that are setting an example for others.
4) Engage with community groups (e.g. sports clubs), but also business groups to seek out local champions, especially business (social influencers within the broader community) to advocate for environmental sustainability and climate action.
5) Include climate information and updates based on Monash Climate Change Communication Research Hub releases in Council publications.
6) Organise community engagement programs. e.g. exhibitions on environmental sustainability and sustainable living at community centres, with involvement of commercial and not-for-profit groups and Business.
7) Report on Council's climate change and biodiversity story regularly, including the impact on our health, economy, infrastructure, ecosystems and community; and what Bayside Council is doing to mitigate this.
8) Establish one central repository on the history of the natural environment and climate action of Bayside, and invite the community to provide documentation, including written material, artwork, film and other archival material. Promote action days for community members to work on particular sustainability projects (Parks Victoria research suggests people are more prepared to volunteer for one or two day weekend events than for longer term activities).
9) Consider support for high-quality Australian carbon farming as part of a transition to a carbon-neutral economy.

d) Renewable Energy:

1. Bayside Council operations to be carbon free without offsets by 2025 except as provided for in items 4 and 5 below.
2. Set target for the whole Bayside Council community to be carbon neutral by 2030. Consider a mechanism for bulk purchase of quality carbon offsets to be used by council but also made available to residents, local businesses and Council contractors. This would provide quality assurance and reduce costs through economies of scale.
3. Switch Council's top 3 premises from gas to all-electric by 2025.
4. Switch all other Council buildings to all-electric as gas appliances approach their end of life. (Whereas the fuel cost savings derived from switching from gas to high efficiency electric solutions would help justify the switch in the case of buildings with relatively high gas usage, this may be more difficult to justify in facilities with lesser, or more intermittent usage.)
5. Emissions by Council's service providers to be carbon neutral by 2025 and carbon free (without offsets) by 2030. Establish criteria for reduced fossil fuel consumption in tendering and awarding of contracts for Council's service providers. Interim emissions reduction target by service providers of 50% within 3 years with specified offsets allowed to meet any shortfall.

6. Prioritise emissions reduction of Council-run operations in open-space management by switching equipment to electric and trucks to renewable fuel sources.
7. Develop a strategy within 12 months to promote renewable energy, energy efficiency and demand management, and storage uptake by businesses and householders to meet the 2030 target.
8. Consider promotion of micro-grids and local energy storage where feasible. Liaise with local electricity network operators to introduce neighbourhood energy storage trials.
9. Facilitate the installation of roof top solar and storage through the provision of accessible advice, and bulk purchasing arrangements for both business and residents.
10. Support the elderly and those with financial hardship with programs to install solar panels and save on energy bills including for adequate winter heating.
11. Set a target to have 50% of households and businesses in Bayside with rooftop solar installed by 2030, borrowing ideas from other Councils, in particular [Darebin's Solar Savers program](#)
12. Facilitate the phasing out of household gas appliances, including for heating, by promoting energy efficient and cost effective electric alternatives and promoting local examples where this has been done.
13. Promote periodic, subsidized tours of renewable energy projects and green waste facilities to help engage the community and local students in broader acceptance of renewable energy options, zero emission, high efficiency energy options.
14. Ensure all street and Council lighting is best practice efficiency standard by 2022.
15. Establish a 'CitySwitch' type program to assist commercial and industrial building tenants and owners to reduce their environmental footprint. Maybe this could be done by linking to existing schemes in other local government areas, e.g. City of Melbourne, or with state level schemes
16. Increase number of carbon-neutral and single-use plastic-free Council events.

e) Energy Efficiency in Sustainable Buildings, Businesses and Homes:

1. Mandate greening and zero emissions buildings through Council's planning scheme.
2. Incentivise the building of environmental best practice buildings (including solar efficiency and storage), to significantly exceed current building requirements through rates reduction and subsidies, as well as promotion of examples that have achieved these outcomes.
3. Produce a Bayside Council webpage and conduct workshops that advise on best practice passive energy design principles for new homes, residential complexes, and commercial and industrial buildings, as well as retrofits, including appropriate tree and understorey planting, natural or where necessary and appropriate permeable surfacing where practical, runoff and grey water recycling etc. Promote all-electric buildings, solar panels, energy storage, and low energy building materials. Provide a free service for all permit applicants to be advised on these issues
4. Provide awards and publicity for best environmentally sustainable design of commercial and industrial buildings in Bayside, based on actual performance after occupancy over a period of at least 12 months. Initiate a similar process for performance of new residential buildings with support from the Municipal Association of Victoria (MAV) and the Council Alliance for a Sustainable Built Environment (CASBE). No awards should be made if buildings do not reach specified standards of excellence.

f) Public Space, Biodiversity and Urban Forestry:

An immediate way available to reduce the heat island effect and enhance the health of the Bayside community is to undertake as the utmost priority the protection and increase of open, public space and tree canopy in Bayside, including by:

1. Actively protecting the amount of open and public space in Bayside, and actively seeking to increase that space, including by requiring community and sporting facilities on public land to equitably co-share with other local Bayside Council community groups;
2. Increasing where appropriate, the number of higher-rise community, sporting and related parking facilities, in appropriate areas, to reduce the pressure on open space, to increase overall usage of such facilities and to minimize the overall footprint of public buildings in Bayside. Such facilities should have highest rating environmental design, including water and energy production and conservation;
3. Working with clubs to establish shared sporting and community facilities which demonstrate and champion the concept of shared space, with equitable and transparent best governance practices, rules of management and costs so as not to penalise smaller and lighter users. Build upon the current work being done with clubs on single-use plastic.
4. Requiring community and sports facilities on public land to be available free or at nominal cost, where suitable times are available, for the use of local Bayside Council community groups
5. Limiting the building and expansion of buildings for commercial use on public land, with any such building that is approved required to meet minimal footprint, and highest rating environmental design, including water and energy production and conservation.
6. Vigorously opposing the removal of existing canopy trees;
7. Urgently embarking upon planting canopy trees wherever there is space to do so.
8. Surveying the entire municipality and compiling a database of notable canopy trees that may merit protection on both public and private land (BECAN to assist). Utilise the database to expand the register of Significant and Protected Trees on public land.
9. Providing incentives for private landholders to have eligible trees registered.
10. Undertaking an audit of the health of all trees on public land; include check list of remedial or maintenance work recommended; monitor periodically.
11. Increasing penalties significantly to perpetrators of damage to protected and/or significant vegetation.
12. Requiring the placement of a significant monetary bond for the protection of significant vegetation together with all planning applications.
13. Increasing penalties significantly for developers who do not plant specified trees and vegetation in accordance with approved planning permit conditions and/or withholding the issuing of Certificates of Occupancy till such plantings take place.
14. Establishing a target for annual tree planting across the municipality involving local community groups in the achievement of the target. (Suggest a doubling of canopy trees in Bayside over 10 years).
15. Publishing a list of plants and trees with the help of the Bayside Community Nursery that are suitable for Bayside that will attract and provide a habitat and food for our native wildlife.
16. Encouraging residents to plant indigenous plants and canopy trees from the Bayside Community Nursery with a scheme for low cost or subsidised options, to restore Bayside's tree canopy cover.
17. Facilitating hardy native plantings in small public spaces (e.g. kerbsides, roundabouts etc)
18. Replenishing grasses along the 'Bay Trail' with suitable carbon absorbing plants that are hardier than at present.

19. Transforming unutilised areas into urban forest gardens.
20. Encouraging residents to convert lawns into mini forests and nature strips into low maintenance shrubberies of indigenous and native plants.
21. Encouraging kerbside native gardens through pilot projects, and periodic classes at community centres. Involving local gardening businesses, nurseries and Citywide.
22. Advertising the Bayside 'Nature Strip Planting' guidelines more widely to encourage community involvement; https://www.bayside.vic.gov.au/how-plant-your-nature-strip
23. Avoiding the approval of double driveways/crossovers where that reduces the space for tree planting.
24. Exploring the feasibility of progressively putting power lines underground; require telecom cables and connections to be placed underground to minimize disruption to tree canopy space in streets.
25. Increasing the budget for the expansion of open space, parks and the greening of streetscapes.
26. Increasing funding and support for the control of feral animals, particularly of common mynahs and foxes.
27. Publicising and enforcing the night curfew of cats.
28. Expanding plans to eradicate or control noxious weeds. Reviewing Council's control practices to ensure methods and applications are targeted and non-toxic, to avoid impacting non-target species.

g) Sustainable Transport:

Provision for 'micro-mobility' options such as e-bikes is becoming increasingly important, as these can reduce pressure on parking in shopping centres and at public transport stations/stops while cutting emissions. We recognize there are significant issues with these options in terms of pedestrian safety, and that any initiatives in this area must protect pedestrians. 'Shared' paths are not in the interest or safety of pedestrians.

1. All Council vehicles to be emissions free by 2025.
2. Facilitate solar-powered charging stations for e-bikes as well as electric cars.
3. Expand the network of interconnected, safe, separated cycle and pedestrian pathways, subject to assessment of the effect on mature trees and native biodiversity, including to all council facilities and parks.
4. Consult with Vic Roads to have road rules amended to allow for the use of e-scooters.
5. Seek State government support for continuous, separated cycle and pedestrian pathways along and between railway lines, subject to assessment of the effect on mature trees and native plantings and in accordance with the Victorian Cycling Strategy.
6. Work with neighbouring councils to improve safety and convenience of bicycle/micromobility routes to railway stations on Council boundaries. Ensure there are safe and convenient micro-mobility routes to all council facilities and parks.
7. Develop a network of low cost, Dial A-Ride Transit (DART) aimed at providing efficient connections to railway stations and activity centres to reduce private vehicle dependency.
8. Prioritise public transport and cycling through dedicated lanes, traffic light priorities, and parking controls. Undertake survey to understand what would incentivise community to use more sustainable transport.
9. Demand the Federal Government release the promised funding for two multi-level carparks in Bayside (Hampton and Brighton North) and update rate payers on the the Federal Government response. Encourage ratepayer pressure on local Federal MPs to help achieve this outcome. Ensure multi-level carparks are designed so they can

be adapted to other uses if no longer needed in the future, (ensuring ceiling heights are compatible with other uses such as offices or apartments etc).

10. Include electric charging points and other incentives to encourage electric vehicle use including for e-bikes, e-scooters and mobility vehicles in these carparks. Green bonds might be considered to build such facilities. Consider support for further multi-level car parks close to railway stations.

11. Adopt New Zealand and Melbourne City Council model - to buy electric cars and then sell to residents after 2 years of use.

h) Water:

1. Undertake an assessment of water usage across all sectors, including when and how, with a view to making recommendations on how to reduce the quantity of potable water used in each sector in Bayside.

2. Undertake a review of the best ways to encourage reusing and recycling of potable water in residential, commercial and business areas

3. Require Bayside Council Planning to prioritise natural and where appropriate and applicable permeable surfaces in sports and play areas, footpaths, and private property.

4. Accelerate the upgrading of drains for storm-water harvesting in Council's area; strongly advocate to State Government to provide funds for this purpose; capture and reuse water in all Council facilities and grounds. Work with Melbourne Water to implement more habitat creation and flood management projects – and work with Port Phillip Council to promote the benefits of measures to limit flooding of homes

5. Review the design of some storm-water drains currently causing beach erosion and dangerous deep crevices for beach walkers.

6. Monitor the effects of rain water runoff from the road and car parks for signs of cliff erosion.

7. Provide educational one-day trips to Council staff to areas which demonstrate stormwater harvesting and water sensitive design, and capture and reuse water in Council facilities and grounds.

8. Include third pipe design for recycled water in residential and council buildings.

i) Waste:

1. Facilitate education around reduction, reuse and recycling with an emphasis on reduction.

2. Incentivise waste reduction, including food waste reduction and the use of sustainable packaging by local businesses.

3. Advocate for immediate introduction of the Victorian container deposit scheme and ensure Bayside is an early adopter of proposed changes.

4. Examine ways for apartment buildings to participate in green waste and other recycling, with monitoring of compliance and penalties for non-compliance.

5. Provide subsidised educational trips to targeted groups of the community to demonstrate the value of new green and food recycling and other recycling.

6. Explore the production and usefulness of Biochar, and the cost of producing it to use or sell back for community use.
   https://www.dpi.nsw.gov.au/content/research/topics/biochar
   https://www.agriculture.gov.au/ag-farm-food/climatechange/australias-farming-future/biochar
   https://biochar.international/guides/biochar-reactor-to-meet-needs/

7. Enforce litter laws, including dropping of cigarette butts, given our increasingly fire-prone country. Include enforcement data in public annual reports.
8. Examine collaboration with a major recycling charity and other south-east Councils to establish a warehouse for unwanted usable furniture to be sold very cheaply.

j) Coastal Environment:

A new climate era driven by global warming will increase risks to settlement, industry, the delivery of services and natural ecosystems within Australia's coastal zone. The main effects of climate change on our coastline are rising sea levels and storm/wave erosion of the beaches and cliffs. Increasing water temperature will affect the temperate climate of Port Phillip Bay's marine flora and fauna with flow on effects to the balance of our marine ecology and fisheries industry.

1. Liaise with appropriate authorities on the effects of storm water run-off on cliff erosion and sand movement so that funding is available for regular repairs and replenishment.
2. Review and upgrade storm water drains on beaches, some of which are causing beach erosion.
3. Liaise with government authorities e.g. DELWP who have authority over the coastline, to consider other options for protecting our coastal zones other than hard structures which increase erosion. Current published research from around the world demonstrates using natural engineering strategies to protect the beaches and cliffs, with sea grass beds, or sowing sea shells to create new reefs. (I.e. Engineering With Nature®) . Some options can also store carbon.
4. Ensure that upcoming DELWP and other modelling about coastal sea rise levels in Bayside are used to decide whether to proceed with building or rebuilding buildings already located on the shoreline. No hard protective barriers should be built to protect these buildings, as evidence suggests such barriers cause more damage to the rest of the coastline.
5. Encourage DELWP to engage with universities and other organisations which are working on 'soft' solutions to coastal erosion before DELWP goes to engineers versed only in 'hard' solutions to solve these issues.
6. Build into CBEAP what is required of Council to promote to the public why we need to minimise the effects of Climate Change on the Bay with available information from Parks Victoria, research groups and the Australian Fisheries Management Authority. Also loss or damage to properties, roads and public infrastructure can be large costs and impacts on community amenity and services
7. Support Community groups who monitor the wellness of the Bay, its reef, wildlife and fauna.
8. Work with other councils to reduce the waste and pollution that runs into the Bay from rainfall particularly after storms and flooding.

   https://www.environment.gov.au/system/files/resources/fa553e97-2ead-47bb-ac80-c12adffea944/files/cc-risks-full-report.pdf
   https://www.afma.gov.au

k) Health:

Pollution:
The World Health Organisation (WHO) has declared that the Climate Crisis is a health crisis. World-wide, air pollution kills an estimated 7 million people every year, while climate change

causes increasing extreme weather events, exacerbates malnutrition and fuels the spread of infectious diseases. Climate refugees are now a reality.

The same emissions that cause global warming are responsible for more than one-quarter of deaths from heart attack, stroke, lung cancer and chronic respiratory disease. Reducing emissions of greenhouse gases through better transport, food and choice of energy-supply and use. Leaders in both the public and private sectors must work together to clean up our air and mitigate the health impacts of climate change.

Heatwaves:
In Australia, heatwaves are becoming hotter, longer and more frequent.
Heatwaves are responsible for more deaths in Australia each year than any other natural disaster. In the heatwave that preceded the Black Saturday bushfires in 2009, heat killed 374 people – more than double the fires themselves. (https://environmentvictoria.org.au/our-campaigns/safe-climate/victoria-heatwaves-climate-change/:) Most of those people were older. Heatwaves also drive high peaks in demand for limited health services.

Within Bayside, air pollution and heat stress have a particular impact on our health, particularly given that Bayside Council has one of the oldest demographics in metropolitan Melbourne.

If the actions suggested by CBEAP in the above priority areas are adopted by Bayside Council, it will help mitigate global effects, as well as provide local relief for ratepayers within the municipality.

Specific actions within health should include:

1. Provide public health information and infrastructure around heatwave early warning systems, especially for the most vulnerable populations
2. Increase investment in:
   a. raising the awareness of Council staff and the community in general of the impacts of the climate crisis on human health and wellbeing,
   b. public education in dehydration prevention, targeting seniors and those with disabilities, with training provided through groups such as U3A, Probus and golf and bowling clubs,
   c. increasing availability of air-conditioned centres for residents: libraries, U3A and Seniors Centres, bowling and golf clubs with TV, refreshments etc. and with Red Cross volunteers present,
   d. advice on obtaining, or providing useful home aids, table torches, thermos bottles for drinking water, battery operated fans etc; advice on retrofitting existing homes to improve performance in extreme weather.
3. Promote vaccination.
4. Provide information on effective and rapid response to emerging infectious diseases.

   https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade
   https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health