

**Minutes of a meeting of the
CLIMATE CHANGE SUB-COMMITTEE
held in the Council Chambers and via Teams, Marlborough District Council Building,
15 Seymour Street, Blenheim on TUESDAY, 30 JANUARY 2024 commencing at 1.00 pm**

Present:

Cirs G A Hope (Chairperson), A R Burgess, R J Innes and Mayor N P Taylor

Also Present

Clr S R W Adams

In Attendance

Richard Coningham (Assets & Services Manager), Alan Johnson (Environmental Science & Monitoring Manager), Jamie Sigmund (Strategic Planner - Implementation and Review), Rachel Baggs (Data Analyst), and Nicole Chauval (Committee Secretary)

Also in Attendance via Teams

Kaye McIlveney (Solicitor)

Apologies

That the apology for absence from Pere Hawes (Manager Environmental Policy) and Mark Lucas (Solid Waste Manager) be noted.

The Chair, Clr Hope, welcomed Committee members and public to the meeting. The Chair outlined the process for the meeting noting that only members of the Sub-Committee and staff were able to speak to the items on the agenda and vote, however there would be an opportunity at the end of the meeting for discussion.

**1. Climate Change – Emissions Inventory Report 2022/23 C315-20-185,
E320-003-001, W470-04-02**

Members received the Council's Emissions Inventory report for the years 2022/23 for Council control operations. The inventory report was separately attached to the agenda.

It was noted that in March 2020, Council approved its Climate Change Action Plan. The first task in the action plan was for Council to generate an emissions inventory report on operations that it has control over for the purpose of setting a baseline by which to measure initiatives moving forward to reduce emissions in Council operations.

Members were advised there has been a reduction in Council's omissions from the previous reports. It was reported that Council uses an external third party to ensure independence in the analysis.

Mr Coningham noted that it is pleasing to see that some of Council's initiatives particularly in regard to waste minimisation has resulted in a reduction in omissions from the landfill which is Council's largest emitter.

It was noted that the inventory report is only for Council controlled operations not region wide as it is the Council's view that various industries should be reporting on their own omissions and sharing that separately. It was noted Council's roading contractor provides information in their monthly reports to Council regarding their fuel consumption which is their main emitting area.

Mr Coningham reported there are requirements from Central Government to have plans in place by 2030 to reduce the amount of green waste and food waste going to landfill. Work is being undertaken

in relation to that with discussions happening with the new solid waste contractor in terms of the wheelie bin operation and how they can deal with those areas moving forward.

The Chair also noted that the consent for the Liquid Wastewater stream is due for renewal in 2025. This will be a huge piece of work in conjunction with other parties.

Cirs Innes/ Burgess:
That the report be received.

Carried

2. Climate Change Action Plan Update – January 2024

Members were advised that when the Climate Change Working Group was established a goal for the group was to put in place an action plan. The action plan would focus on the long-term future of Council in terms of various initiatives that could be undertaken in relation to its own operations and work where it could with the community. The action plan was included with the agenda report.

Mr Coningham noted that a lot of the information in the report is business as usual and is reported through Council's Environment & Planning Committee and Assets & Services Committee and noted that this was why it has taken some time in providing an update.

Council has undertaken an initial sea level rise mapping exercise for Marlborough as part of the Climate Change Action Plan. This report was presented to the Environment Committee in October 2023 and sea level rise projection maps are available on Council's [website](#) for the public to view based on various scenarios.

It was reported that there is future work required particularly around the Wairau where the initial mapping (Bathub Mapping) indicates that there could be quite a bit of sea level rise affecting the lower Wairau Plains. Due to that there is an additional report being carried out to focus specifically on the lower Wairau with what is called a multi-dimensional mapping which will be able to give more accurate analyse on areas that will be affected and what potential mitigations could be put in place for those areas.

Jamie Sigmund, Council's Strategic Planner (Implementation & Review), is working with NIWA on this and it is projected to take 12 months to carry out.

Once the report is received Council will be able to move into another step on the action Plan Dynamic Adaptive Pathways which is talking with the communities to share that information and then being able to get their feedback on potential ways forwards in terms of how we can address sea level rise in those particular areas.

It was noted the other areas being focused on are:

- changing the Council vehicle fleet to hybrid vehicles. This is being undertaken as leases come up for renewal.
- Installing more efficient air conditioning units
- Energy efficiency buildings. Most effective time to do that is when a new building is being built as opposed to retrofitting eg Te kahu o Waipuna roof solar panels

Cirs Hope/Innes:
That the report be received.

Carried

3. Climate Change Karanga Marlborough – Overview

A member of the Climate Change Karanga Marlborough group performed a karakia prior to Budyong Hill's presentation.

Budyong Hill spoke to the Committee and provided a powerpoint presentation. The report and powerpoint are attached as Attachment 1 and Attachment 2.

4. General Business

- 4.1 Bill Holvey, a member of the public, was present for the meeting and provided three articles for members' information and are attached as Attachment 3.

There being no further business the meeting closed at 2.00 pm

Record No. 2426964

Attachment 1

MDC Climate Change Sub-committee presentation – 30/01/2024.

Introduction.

Climate Karanga Marlborough appreciates the opportunity to be present and contribute at this inaugural meeting of the Climate Change Subcommittee. You have asked us for an overview of CKM, which we are happy to provide.

You will be familiar with some of our faces but CKM is a wide and growing regional network of about 140 highly skilled individuals from a diversity of backgrounds – education, health, viticulture, farming, engineering, energy.... We are also artists, builders, lifestyle block owners, and most importantly parents and grandparents held together by a value system that says we need to look after our world to ensure that those who come after us can still have a good life. Members of CKM take part on local pest management and biodiversity projects, produce articles for local and national consumption and write submissions to government, the Climate Commission and Council. We believe that we cannot have healthy, meaningful lives without a healthy natural environment around us. We are part of nature and nature is part of us.

We congratulate the Sub-Committee on bringing in voices from the Marlborough community from the outset of its working and hope proactive community engagement will be a key component of its function. What is of prime interest to us is to understand what the Sub-Committee's purpose is and what the thoughts of the committee members are about this purpose. It is not at all clear to us at this point. Is it focused only on reducing Council's carbon emissions and improving their resilience, or is its role to have a wider view of what the whole region needs to do? Are you responsible for establishing and leading the Climate Forum referred to in the Climate Action Plan?

We want to be upfront with you and say our hopes for this committee are that it takes a leading role and responsibility within the Council structure and within the wider Marlborough community. That it will show bravery and be an impassioned voice not only on the threats we all face due to global heating but also on other related threats such as ocean acidification and the overall integrity of the biosphere. We are very concerned for the myriad other lifeforms that share this amazing planet. They have the right to live on a planet with a biosphere that can continue to support all of them.

We are aware that the Climate Change Working Group comprising staff from across Council, is tasked with championing implementation of the Climate Action Plan. Does this include keeping you up to date with recent climate information? Are you exposed to information from the wider environmental science world regarding the various global challenges that are and will increasingly impact us here in Marlborough? We are keen to find out from you what sort of information is shared with you by the Staff Working Group? We hope that this committee's role is not just to receive reports such as the ones tabled today. Of course it is necessary that implementation of the Climate Action Plan is documented and this and the Emissions Inventory are important aspects of the Council meeting its responsibilities but these reports could just as easily be received by the Environment and Planning Committee as they have in the past.

We note in the Climate Action Plan that one of the *"focus areas"* is - *"Decisions of Council consider the implications of climate change for current and future generations."*

In due course, we hope to share some of our ideas on where and how the Council can take a lead with this focus in mind.

Our key concerns.

The large increase in global catastrophes and extreme events during 2023 have been shocking, and even experts who have been working for years on the climate crisis did not expect the magnitude of changes.

See <https://www.theguardian.com/environment/2024/jan/09/2023-record-world-hottest-climate-fossil-fuel>

1. We are exceeding 6 out of the 9 planetary boundaries as defined by the Stockholm Resilience Centre. To quote from two authors of their 2023 update assessing planetary resilience.

“We don’t know how long we can keep transgressing these key boundaries before combined pressures lead to irreversible change and harm.” Johan Rockström.

“Earth is a living planet, so the consequences are impossible to predict.” Sarah Cornell.

See <https://www.stockholmresilience.org/research/research-news/2023-09-13-all-planetary-boundaries-mapped-out-for-the-first-time-six-of-nine-crossed.html> AND

<https://www.stockholmresilience.org/research/planetary-boundaries.html> for further info.

2. Global Heating is only a symptom of a much bigger dilemma facing humanity: that is our diseased relationship with Planet Earth. We wish to point out there is a big difference between a problem and a dilemma. Calling global heating a problem suggests there are solutions that can fix it.
3. We must find ways to reduce our energy use. The concept of energy descent needs to be better understood. It is our excessive energy use that is the main reason we are exceeding planetary boundaries.
4. We can't simply replace fossil fuels with renewable energy and expect to carry on our current high energy lifestyles. Mother Nature cannot continue to provide us with all the resources we require to do that and cannot continue to absorb the levels of waste that arise from it.
5. Issues such as ocean heating and ocean acidification are not something that have just appeared in the last couple of decades. It has taken us many decades to reach this point and the inertia of this process is so big that it will take many decades to stop the heating and acidification and to help Nature to turn it around. With the oceans absorbing 93% of the excess heat caused by GHG emissions and 30% of the CO₂ we have to plan and prepare for things to get worse before they get better. The marine heatwaves highlighted in the November report to Council were not rare, unexpected events but rather inevitable consequences of our way of living on planet Earth.
6. We are dealing with a long-term and ongoing predicament, not a series of problems for which all we have to do is find a series of more or less technological fixes.

The lack of central direction.

We understand that Councils throughout the country are faced with the awkward situation of having to deal with the impacts of climate crises while still waiting for guidelines from central government regarding roles and responsibilities and resource allocations.

We note that LGNZ openly regrets the lack of leadership from central government and calls on them to take up the reins of leadership regarding climate change and adaptation to change. We think such calls are in vain. - Internationally and nationally governments have shown themselves too much beholden financially and otherwise to industry lobbies and large companies, who depend on fossil fuel consumption (successive IPCC COPs conferences have demonstrated that.) We believe leadership is going to come from grass roots, and that is what the Council and its committees including this sub-committee should be fostering.

Leadership from the Sub-Committee.

Our hope is that the Sub-committee serves as a catalyst within Council to ensure the requisite leadership is adopted with bravery. An important aspect of the role of a committee such as this one should be to keep abreast of the implications of planetary limits being exceeded.

In that regard, we encourage this committee, with the support of MDC, to take a long-term view of its activity, knowing that we all have to put our long-term hats on and work towards not only adaptation but still also mitigation.

Conclusion.

We would like to finish with the following quote from [Barry Commoner](#) which is just as relevant today as when he wrote it in 1971. In his book *The Closing Circle*, he said: *"We are in an environmental crisis because the means by which we use the ecosphere to produce wealth are destructive of the ecosphere itself. The present system of production is self-destructive; the present course of human civilisation is suicidal."*

Commoner is best known for his four "laws of ecology", which he outlined in the first chapter of *The Closing Circle*.

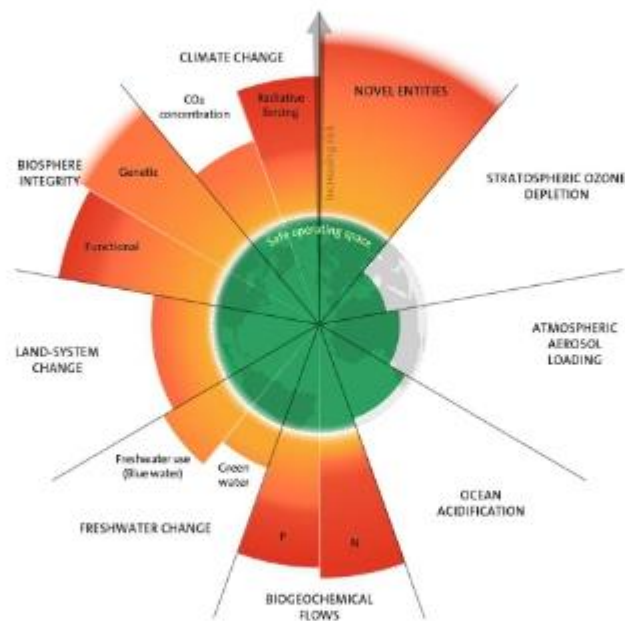
These are:

- **Everything is connected to everything else** - There is one ecosphere for all living organisms and what affects one, affects all.
- **Everything must go somewhere** - There is no "waste" in nature and there is no "away" to which things can be thrown.
- **Nature knows best** - Humankind has fashioned technology to improve upon nature, but such change in a natural system is likely to be detrimental to that system.
- **There is no such thing as a free lunch** - Exploitation of nature will inevitably involve the conversion from useful to useless forms.

CKM presentation to MDC Climate
Change Sub-committee –
30/01/2024.



PLANETARY BOUNDARIES



OUR KEY CONCERNS

1. We are exceeding 6 out of the 9 planetary boundaries as defined by the Stockholm Resilience Centre.
2. Global Heating is only a symptom of a much bigger dilemma facing humanity: that is our diseased relationship with Planet Earth.
3. We must find ways to reduce our energy use.
4. We can't simply replace fossil fuels with renewable energy and expect to carry on our current high energy lifestyles.
5. Issues such as ocean heating and ocean acidification are not something that have just appeared in the last couple of decades.
6. We are dealing with a long-term and ongoing predicament, not a series of problems for which all we have to do is find a series of more or less technological fixes.

THE FOUR LAWS OF ECOLOGY.

- **Everything is connected to everything else** - There is one ecosphere for all living organisms and what affects one, affects all.
- **Everything must go somewhere** - There is no “waste” in nature and there is no “away” to which things can be thrown.
- **Nature knows best** - Humankind has fashioned technology to improve upon nature, but such change in a natural system is likely to be detrimental to that system.
- **There is no such thing as a free lunch** - Exploitation of nature will inevitably involve the conversion from useful to useless forms.

Thanks to Barry Commoner.

8/24/23, 1:39 PM

Water Cremation - The Future For New Zealand Funerals | infonews.co.nz New Zealand News



The Resomator CREDIT: Supplied

Water Cremation - The Future For New Zealand Funerals

Sunday, 23 February 2020, 11:58AM

By Heather
5112 views

CHRISTCHURCH

Dissolving the deceased in water is a far more environmentally sustainable way of caring for the bodies of our loved ones, than the process of flame cremation or burial.

That from the company planning to introduce water cremation to New Zealanders.

Water Cremation Aotearoa New Zealand spokesperson Debbie Richards, says the process, also called Alkaline Hydrolysis, is not currently an option in New Zealand however there's an opportunity to introduce water cremation as an option here, after the Law Commission recommended changes to the Cremation Regulations Act 1973.

"The changes allow for different ways for us to manage the death of a loved one and the choices around where their body ends up," she says. "Water cremation has massive environmental benefits but also we would like the recycled water that is left at the end of the process, to go back into the land, in a place that family (and others) can visit and enjoy."

Richards is talking about a native forest or plantings onto which the recycled water can be used and possibly surrounded by a bird sanctuary. She is in the early stages of discussions with Ngāi Tahu as she says it's essential to recognise Tangata Whenua as Kaitiaki of the land, something that is so important to all of us.

Although it is currently not legal or illegal to carry out water cremation in New Zealand, with the recent changes suggested by the law commission, Richards thinks it will be an option in the next couple of years.

"As a society focused on environmental sustainability, and of course climate change is a major concern, providing an option for families that puts something positive back into the land, has to be a good thing," she says.

Water Cremation Aotearoa New Zealand is planning to bring a Resomator machine into the country; a pressurised chamber that dissolves a body over a period of between three to four hours leaving a liquid and porous bones which can be crushed and provided to a family should they wish to have a physical memento of their loved one.

"I visited the US and the UK late last year where these machines have been developed, to see them working," says Richards. "We believe this is truly the way of the future," she says.

ENDS

Note: Debbie Richards is based in Christchurch

<https://watercremationaotearoanewzealand.com/>

infonews.co.nz
INDEX

Cremation by water
By Rebecca Speare-Cole

CO-OP Funeralcare is to pilot water cremations called resomation.

The little-known green alternative to traditional cremations and burials involves placing the body in a pressurised container of water and potassium hydroxide.

Over four hours, tissues and cells are converted into a watery solution. Softened bones are treated to become powder, which can be given to loved ones.

Resomation does not release air pollutants or toxic gases and is already popular in parts of the US, Canada and South Africa. Co-op will announce its pilot areas later this year.

(canistic potash)

IX 12/7/23

<https://www.infonews.co.nz/news.cfm?id=116204>

4/4

Environment

Andy Brew

Express

28/8/23

Climate-conscious pensioner Bill Holvey said he would try and stick around for a bit longer on planet Earth – at least until greener ways to be cremated are legalised in New Zealand.

The 87-year-old said he had decided to go back on his decision to donate his body to medicine following his death after learning his remains would be cremated in a fossil fuel guzzling crematorium afterwards.

"I'm getting a bit long in the tooth now, so I made a pledge to donate my body to the Otago Medical School for medical research," he said.

"But I've written to them and said I'm no longer happy with the idea of having my essential being being converted into CO₂ because we've already got too much bloody CO₂ in the atmosphere anyway.

"Cremations concern me because you're putting CO₂ into the air, and you're burning fossil fuels."

Holvey said he had read of a new cremation technique involving water – alkaline hydrolysis aka aquamation – that was being used in the United States, Canada, and the UK, but the process was not currently legal in New Zealand.

Aquamation involves placing the body in an alkaline solution, heated and then treated so that it dissolves leaving only the skeletal remains and waste water behind.

The process released significantly fewer emissions into the atmosphere than a crematorium furnace and, therefore, caused less harm to the environment, Holvey said.

The method made global headlines last year when the Archbishop Desmond Tutu was aquamated following his death in December 2021.

If Holvey was to be processed post-mortem, that's the way he would like to go, he said.

"The water cremation seems a real sensible alternative, because once you're reduced down to a slurry and dried into powder, then it can be scattered on the earth and taken up by trees and whatever," he said.

It is estimated that cremating one corpse required two to three hours at up to 1300C – enough energy to release around 260kg of carbon dioxide (CO₂) into the atmo-

sphere. Around 70 per cent of the more than 30,000 people who die in New Zealand each year are cremated.

Yet the number of cremations across the country were expected to continue to rise as the prices for burials continues to increase.

And with several crematoriums around the country being blamed for excessive smoke and air pollution by local residents, Holvey said new laws legalising water cremations should come in sooner rather than later.

"Surely it can't take that much to get it into law, but everything happens so slowly going through the legislative process, apart from pay rises for politicians," he said.

"For a country that is supposedly trying to reduce its greenhouse gases, it really should be looking at it hard and quickly, and not in five years' time.

"In the meantime I'm sort of in limbo, so I've got to stay alive until we sort this out," Holvey said.

Meanwhile, Ethan Williams, funeral director and embalmer at Geoffrey T Sowman Funeral Directors, said he held a personal interest in water cremations and would be keeping a close eye on any developments to legalise the practice here in New Zealand.

"I have done quite a bit of research into alkaline hydrolysis because I'm a bit fan of new technology and seeing how we can use it to benefit those that we care for and give people more options," he said.

▼ Sorting the day's catch at Kollam beach

MAHAJANATH K RANAJAYAGETTY

Spotlight South Asia



INDIA

Net gains as plastic catch helps rebuild Kerala's roads

By Neeta Lal

For years, plastic caught by fishing communities on the Kollam coast in India's southern state of Kerala was thrown back into the water, damaging aquatic ecosystems and killing fish.

But fishers are spearheading an initiative to clean up the ocean - along with their hauls of fish, they pull in and collect the waste that gets enmeshed in their nets. Bottles, ropes, toys, shoes, discarded fishing nets and polythene bags are sorted, washed, shredded, before being recycled into material added to asphalt for local roads.

In 2017, the Kerala government's harbour engineering department (HED) launched its *Suchitwa Sagaram* (Clean Sea) initiative, providing nylon bags to the 1,000-odd fishing boats for the crew to collect the rubbish. The plastic is processed onshore then sold to roadbuilders.

Nearly 3,000 fishers and boat owners in Kollam are involved and the programme is expanding to other harbours. With one million people working in the fishing industry in Kerala, of whom 25% are directly involved in fishing, the project could have a real impact.

Peter Mathias, president of the

All Kerala Fishing Boat Operators' Association, said: "Previously, we didn't care much about the plastic we collected in our nets. We'd simply take the fish and toss the rest back into the ocean. But not any more - we're now protecting the ocean to save our livelihoods. Had we continued to be reckless, there wouldn't have been any more fish for us to catch."

Washing and sorting the plastic is also providing jobs for a small group of local women in a traditionally male-dominated sector. "Most of the garbage is too mangled to recycle in traditional ways. So we shred it into strips and sell it to local construction companies, who mix it with asphalt to construct roads. This helps us pay the women's salaries. This road surface is increasingly popular as it makes the roads more resilient to India's extreme heat," said VK Lotus, an engineer with the HED.

"Every kilometre of plastic road uses the equivalent of a million plastic bags, saving around one tonne of asphalt. This not only saves the environment but also cuts costs by roughly 8-10% per kilometre of road paved with plastic as compared with a conventionally built road," she said.

Since its launch, about 80,000kg of plastic waste has been collected off Kollam, of which more than half was recycled to lay 135km of road.

The project has resonated with many fishing communities - including clam collectors and divers - along Kerala's 600km coastline. Other groups are now seeking funds to help launch their own plastic collection and recycling programmes.

The initiative has not only brought economic gains for Kollam but also changed attitudes in the fishing community about their environment. They now try to ensure that local people and tourists do not litter the land or sea with rubbish, and have pledged to cut back on plastic use. "Our boats also carry stickers to create awareness against marine pollution," added Mathias.

Despite the Covid pandemic leading to rising fuel prices and fewer fishing boats going to sea, there is determination for the project to continue.

Mathias believes the community has never before been so united and effective in protecting the ocean. "Our future depends on it. Our children are also getting inspired, which can be life-transforming," he said.

NEETA LAL IS A JOURNALIST BASED IN DELHI