

9.7 CLIMATE CHANGE UPDATE

Information Only - No Decision Required

Report To: Strategy and Policy Committee
Meeting Date: 3 March 2022
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Report Number: RSPC22-03-7

1 Summary

1.1 This report provides:

- a quarterly update on the Tasman Climate Action Plan; and
- climate change updates in brief at the regional, national and international level.

2 Draft Resolution

That the Strategy and Policy Committee receives the Climate Change Update report.

3 Background

- 3.1 The Tasman Climate Action Plan (Action Plan) was adopted by Council at a Full Council meeting on 12 September 2019 (RCN19-09-11). The Action Plan contains three focus areas and actions under four goals.
- 3.2 An internal working group, comprising of 12 staff from across Council, meet bimonthly to ensure the Action Plan progresses.
- 3.3 Highlights from the last quarter are summarised below. It is also worth noting that staff have also drafted a project plan to review the Tasman Climate Action Plan and will commence this review in March 2022.

4 Update on progress with implementing the Tasman Climate Action Plan

Measuring emissions

- 4.1 During the past quarter (November 2021 to February 2022) we have focused on progressing projects to measure baseline greenhouse gas emissions for both the Council's own operations and for the Tasman region. Staff are collating and analysing data and creating reporting templates. The next step will be to prepare the reports and have these verified by external auditors, before presenting them to a future Strategy and Policy Committee meeting.
- 4.2 For the Council's baseline inventory, we have been sourcing and collating data about a wide variety of emissions – including fuel, electricity, waste, wastewater, landfills, forestry planting and harvesting, air travel, accommodation, construction materials and freight etc. We have also identified the 18 suppliers that are likely to make the largest contribution to Council's greenhouse gas emissions and requested details of their emissions. To date, we have only received data from seven of these suppliers. The information has not been collected before and comes from a variety of sources, both within Council and externally (e.g. from Council suppliers, joint ventures).

Energy efficiency and generation

- 4.3 The mobile power quality meter that we purchased last year has arrived. This meter can be installed at any of the 250 locations that have an electricity supply and is useful for resolving power supply issues. It can be used to measure the electrical performance of pumps which enables us to improve pumping performance. It can also be used to help the Council better undertake preventative maintenance on the pumps.
- 4.4 We have been investigating the potential to install solar energy at both the Richmond Library and Collingwood Wastewater Treatment Plant, with the intent of purchasing and installing these in 2022.

Waste minimisation

- 4.5 We continue to run Secondhand Sunday events quarterly, giving Tasman and Nelson residents the opportunity to rehome goods they no longer need, and reduce waste to landfill. The most recent event was held on 13 February 2022.
- 4.6 On 28th February the Tasman EnviroSchools team will be hosting a webinar for local teachers and environmental educators about how waste and recycling are managed in Tasman. Following this we intend to launch a waste minimisation grant for schools and community groups to support them with waste minimisation projects and initiatives.

- 4.7 We are also working on a larger waste minimisation grant to encourage innovative new projects/initiatives that reduce waste or divert waste from landfill. These measures are all designed to help support our community to reduce waste in line with our Joint Waste Management and Minimisation Plan.
- 4.8 Nelson City Council's 12-month food waste collection trial comes to an end in February 2022. We will consider the results of their trial and work to identify possible next steps for organic waste in Nelson and Tasman.
- 4.9 We continue to offer the compost, worm farm and bokashi bin subsidy of \$20 to Tasman residents and will be engaging a contractor to help with promotion of this subsidy at Tasman retailers. We are also exploring options to run workshops or community events during compost awareness week in May, however our ability to do so will depend on how things unfold with Covid-19 over coming months.

Community engagement

- 4.10 The "What can I do?" webpage on our Climate Change hub part of Council's website has been updated with relevant local actions and links. Out-dated information has been removed.
- 4.11 We have renewed our FutureFit subscription for another six months, until 30 June 2022. FutureFit is a carbon footprint measurement tool that identifies actions individuals can take to reduce their carbon footprint. We have engaged a contractor to support community engagement activity with the FutureFit tool. To increase use of FutureFit, the contractor will be encouraging community groups to use the tool and will collate stories from individuals and groups using FutureFit to share across Council communication channels.

Climate risk assessment

- 4.12 A project team has been formed to scope development of a regional climate change risk assessment, drawing on existing information (where available) and other resources such as the MfE guidelines published last year: <https://environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments/>. We have had some preliminary discussions with staff at Nelson City Council to talk about the possibility of collaborating on this project, or aspects of it, if timeframes could be aligned.

Flaring gas from Council landfills

- 4.13 The Nelson Tasman Regional Landfill Business Unit (NTRLBU) has installed a gas ring main onto the existing Eves Valley Landfill Stage 2 gas wells and has relocated the York Valley Candle Flare to the Eves Valley landfill. The flare has been commissioned and is in operation burning the gas from the landfill.
- 4.14 Measurements of the gas removed from the landfill show a methane content of between 65% and 70%. However, at this time the flowmeter and the permanent gas analyser have not been received and are therefore not installed.
- 4.15 A flow estimate has been undertaken based on the gas fan characteristics and speed of the fans. It is estimated that around 175 m³ per hour of gas is being burned. With a methane content of around 65% this would be a volume of around 113m³ per hour of methane. Methane has a density of 0.55kg/m³. If this estimate is accurate, it means the flare would be destructing around 550 tonnes of methane per year.
- 4.16 One tonne of methane has a Global Warming Potential equivalent to 25 tonnes of CO₂. This means that the flare is removing around 13,750 tonnes of CO₂ equivalent from being discharged to the atmosphere. To put this into context, a standard car in NZ has an emission

of around 170g CO₂/km. Therefore, the removal of 13,750 tonnes of CO₂ is equivalent to reducing car travel by 81 million km. That's approximately equivalent to 1/6th of vehicle kilometres travelled (VKT) in all of Tasman in year, or just under the VKT's generated annually by Mapua's residents and business.

- 4.17 The key takeaway from this is that the installation of the flare at Eves Valley is making a material difference to CO₂ production in the region.
- 4.18 The expenditure on the flare project is around \$650,000 in total at present. This expenditure includes the installation of a new enclosed flare at the York Valley Landfill.
- 4.19 The new flare has allowed a significant reduction in emissions from York Valley Landfill. The reduction in ETS liability for emissions during the 2021 year is around 27,500 tonnes of CO₂ equivalent. This creates a saving to the region's waste disposers of around \$2.2 million at current NZ ETS Carbon prices (\$83 per tonne).
- 4.20 From a gas management and carbon reduction perspective, 2021 was a significant year, but our carbon reduction journey still has a long way to go.

5 Regional update

Nelson Tasman Climate Forum

- 5.1 On 27 November 2021, the Mayor attended and spoke at a hui of the Nelson Tasman Climate Forum held at Saxton Field. At this hui, the Mayors of both councils formally signed the Climate Forum Charter. As per the resolution made by the Strategy and Policy Committee in April 2021, Tasman District Council signed as a 'climate ally'. The definition of 'climate allies', as stated in the Charter, is:

"Climate allies are individual people or organisations that endorse the Charter and commit to personal action to support its goals. Climate allies can expect to be kept informed and offered opportunities to participate in the Forum's activities."

- 5.2 The Nelson Tasman Climate Forum's leadership group has been focusing on developing projects relating to actions identified in the Forum's 'Climate Action Book'. Draft descriptions of these projects follow:
 - a) Outreach campaign. This project aims to encourage all Forum members to have targeted conversations about the impact of climate change at their place of work, study, play or worship.
 - b) Earth emotions photography exhibition. A Top of the South collaborative exhibition of local photography, dedicated to sharing experiences of the climate crisis. Open for ages 13+.
 - c) Raising the Forum's profile. This project is going to be Tasman focused. It will involve writing five articles for publication in local newspapers, featuring interviews with individuals involved in local environmental initiatives.
 - d) A sustained long-term behaviour change social media campaign in Nelson Tasman, based around a simple and compelling objective, similar to the "Smokefree Aotearoa 2025". The campaign is proposed to include baseline research of the current attitude and workshops to develop the programme outline.
 - e) Development of a modern and more interactive website for the Forum.

- 5.3 In addition, both the Transport subgroup and School Engagement subgroup of the Forum have undertaken a significant amount of work, which will be reported on in the next quarterly update to the Committee.

Nelson City Council

- 5.4 The NCC Environment and Climate Committee adopted NCC's first Climate Action Plan at a meeting held on 23 November 2021, which is available online at <http://www.nelson.govt.nz/climate-change/climate-action-plan/>. The Plan includes actions across four areas (mitigation and adaptation for Council and the community). It identifies how NCC will meet operational targets, as well as support the community in achieving net zero carbon and adapting to the impacts of climate change. The initiatives are aligned with the resources allocated to climate change projects over the next ten years, as set out in NCC's Long Term Plan 2021-2031. The Plan's mitigation actions cover a wide range of areas, including carbon sequestration; informing and educating the community; waste minimisation; infrastructure; and influencing transport emissions. Adaptation initiatives follow the Dynamic Adaptive Pathways Planning (DAPP) approach, starting with the risk identification and assessment of climate change risks, that will identify options and pathways for future adaptation plans.
- 5.5 NCC has appointed a Climate Change Manager and has recently advertised a Climate Change Adviser role, whose focus will be on adaptation. Along with their Senior Climate Change Adviser (who focuses on mitigation), and a dedicated 0.4FTE analyst that supports the calculation of the Council and community carbon footprint, their climate change team is now 3.4 FTE.
- 5.6 NCC has completed its Council operational carbon footprint emissions inventory for the 2019/2020 financial year using in-house expertise. A third-party verification was also conducted last year.
- 5.7 NCC is leading a working group to estimate Nelson and Tasman region greenhouse gas emissions (community emissions) based on the Global Protocol for Communities. The group includes members of Tasman District Council, the Nelson Tasman Climate Forum and the Nelson Regional Development Agency. This work aims to provide a finer breakdown of emissions and a wider source of data, which will take current inventory reports for communities further (i.e. the community emissions published by Statistics NZ). The group has also been awarded pro-bono hours from KPMG to provide external support in carbon accountancy.
- 5.8 On 17 November 2021, NCC resolved to undertake a detailed assessment of all Council land under ownership and management for eligibility in the Emissions Trading Scheme (ETS), and requested that eligible NCC owned and managed land (including exotic forestry) be registered into the Emissions Trading Scheme.

6 National update

Emissions Reduction Plan (ERP)

- 6.1 The Climate Change Response Act 2002 requires the Government to prepare emissions reduction plans setting out how New Zealand will meet emissions budgets, which will act as stepping-stones (or interim targets) towards our 2050 emissions reduction targets.
- 6.2 The Government will adopt its first ERP in May 2022. The ERP will set out the policies and strategies New Zealand will take to meet the country's first emissions budget. It will aim to reduce emissions and outline ways to mitigate the impacts that reducing emissions will have on people, along with targeted policies for specific sectors (transport, building and construction, agriculture and forestry, waste, and energy). It will also set direction for how future emissions budgets will be met.
- 6.3 The Ministry for the Environment (MfE) consulted on an ERP discussion document over a six-week period ending on 24 November 2021. Council lodged a submission on this discussion document by the deadline. The submission was retrospectively adopted at the at the Full Council meeting held on 16 December 2021.

Managing Forestry Land-Use under the influence of Carbon

- 6.4 In mid-February Yule Alexander Ltd published "Managing Forestry Land-Use under the influence of Carbon, the issues and options – A Green Paper". Authored by Former Hastings Mayor and National Party MP Lawrence Yule, this paper advocates for urgent changes to government policy to control the conversion of sheep and beef farms to pine trees for carbon farming. An overview of the paper is provided in this news article:
<https://www.stuff.co.nz/business/farming/agribusiness/127764631/report-calls-for-urgent-changes-to-control-carbon-farm-conversions>

7 International updates of interest

- 7.1 In the northern hemisphere, despite pledges to reduce their greenhouse gas emissions and transition to renewable energy, many countries are increasingly reliant on fossil fuels for meeting their power and energy needs. Energy prices have surged this year, as countries and households confront shortages of oil, gas and coal – meaning energy poverty is becoming a big issue. Councillors may be interested in watching this short 15-minute video on '*Energy crisis: Will a green transition throw the global economy into recession?*' <https://www.youtube.com/watch?v=n0GT-oZD8nc>. This episode looks at some of the major factors behind the energy crunch, from the role of green policies to Russian gas manoeuvring to China. It considers who is to blame and how the crisis will impact plans to give up fossil fuels.
- 7.2 Meanwhile, the price of polluting is soaring: <https://www.eco-business.com/news/the-price-of-polluting-is-soaring-report/>. The value of traded global markets for carbon dioxide (CO₂) permits grew by 164 percent to a record US\$851 billion last year, according to analysis by Refinitiv, a financial markets data provider. Higher volumes and skyrocketing prices underpinned the growth.

8 Conclusion/next steps

- 8.1 We will continue to present brief quarterly reports and then a detailed annual report on progress with implementing the Tasman Climate Action Plan to the November 2022 Strategy and Policy Committee meeting.
- 8.2 We will initiate a review of the Tasman Climate Action Plan in March.
- 8.3 The Government is due to produce an Emissions Reduction Plan in May 2022 and a National Adaptation Plan in August 2022. These will provide national guidance on actions to help Aotearoa/New Zealand contribute to limiting the increase in average global temperature to 1.5°C above pre-industrial levels and adapt to climate change impacts.

Attachments

Nil