

CARBON ZERO

Newsletter

From the WLASS energy managers

If recent Council meetings are anything to go by, there is significant interest and concern from our communities about climate change. A number of WLASS Councils are making progress on corporate carbon reduction strategies and wider community actions. Of course its not just greenhouse gas emissions reduction. Climate change adaption and understanding risks arising from greater exposure to climate is critical. We briefly touch on these aspects in our note "Climate Risk Management".

Energy efficiency and cost management is core to the work that we undertake and below we highlight two recent measures undertaken by Hamilton City Council in the last few months. Both measures include controls and sensors to benefit from changing environmental conditions.

We also share a presentation by CharIN Asia outlining the technological progress and standards necessary to support electric powered transport.

Kind regards
Martin Lynch and Kevin McGrath

Minimising Demand Costs

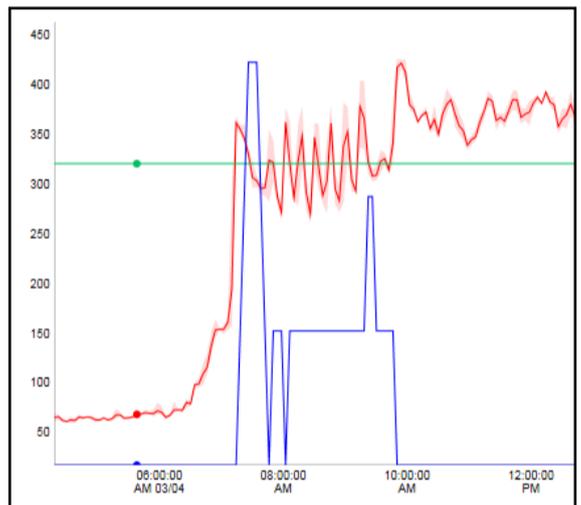
Hamilton City Council's Main Office uses its building management system (BMS) to automatically minimise electricity demand charges, saving about \$15,000 per year.

The graph to the right shows how it all works.

The red line is power used by the building which rises from 50kW overnight to up to 430kW during the day.

The straight green line is the demand set point (330kW). If this is exceeded during a demand charging period (7am to 9:30am) the BMS responds by reducing load in the building using up to four predetermined load shed steps. These are designed to minimise any impact on building comfort conditions.

The payback from this initiative was less than 3 months and demonstrates the strong incentives offered by network companies to minimize peak demand.



Climate Risk Management

There is increasing pressure on the public sector to identify, monitor and disclose climate change impacts, hazards and risk. Its not just physical risk, its also lack of policies or planning to manage climate change.

Implementing a policy allows a "climate change lens" to be run over the organisation's activities to make sure there is consistent application of agreed standards and specific triggers when planned activities fall outside policy objectives. A policy is typically from 1- 5 pages and would cover:

- Context - where are things at, what are the objectives of the policy. This must cover Community and Corporate;
- Reference to climate change scenarios - statements for mitigation and adaption;
- Governance - what is the core mechanism and how will an overarching approach be delivered;
- Capability and Capacity; (are there sufficient resources and expertise to deliver the policy?)
- Monitoring & Review - identify the metrics to measure changes, ie number of exposed properties, km of roading at risk, TCO2e emitted, specify agreed review intervals.

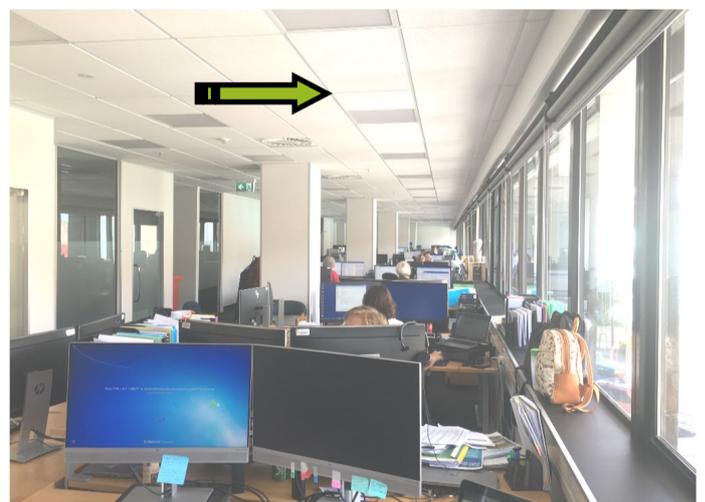
A Successful Lighting Upgrade!

Hamilton City Council has just completed refurbishment on Level 1 of its Offices in Garden Place. After a few initial hiccups, the new LED lighting is working perfectly. Its off! Natural daylight from the windows is providing more than 500 lux onto desks and artificial lights have automatically switched off. The office space is zoned into areas each with its own occupancy and daylight sensor. As light levels fall below a present minimum, the LED light levels rise to compensate natural light levels. This sort of control can make dramatic energy savings of up to 80%.

For further information see our September 2019 article [HERE](#).

What else is happening?

Hamilton City Council hosted a presentation on electric transport infrastructure from Jacques Borreman, representative of CharIN Asia. As well as HCC, the presentation was attended by Waikato Regional Council, University of Waikato, and Waikato District Health Board. Jacques gave us an insight into the international development of battery electric vehicle charging infrastructure and the incredible speed of transition that is occurring overseas. It also highlighted key considerations and steps we can take to avoid costly mistakes in our own region. View the presentation [HERE](#)



Recent Council Resolutions

Waikato Regional Council resolved:

- the leadership option of the corporate emissions reduction plan be approved, with the costings of that model to be determined for inclusion in the 2021-2031 LTP. This will deliver a 70% reduction in corporate GHG emissions by 2030;
- To endorse a specific process for considering climate change in work programmes and decision making;
- To initiate a proposal to help accelerate the uptake of low emission vehicles in the Waikato region.

Waikato District Council resolved:

- Staff develop a Climate Action plan including both mitigation and adaption for both Council and the District, that advances Council's commitment to climate leadership on behalf of its communities, whilst simultaneously implementing operational initiatives.

While Hamilton City Council's inaugural environment committee:

- Reviewed Council's corporate carbon footprint;
- Requested "low hanging" carbon reduction measures for FY21 be identified by April and adoption of a draft action plan in June.

How can I found out more?

Email us on info@waikatolass.co.nz

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