



# THE NEW ZEALAND ELECTRONICS INSTITUTE

(Incorporated)

Charities Commission Registration Number 39965

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## 2024 Secretary's Report

### General

We certainly live in times of change!

A couple of years ago, drones were an expensive toy for kids to play with. Nowadays they certainly have not only got cheaper but have morphed into deadly weapons of war. Along the way, there have been many positive developments too, from a labour-saving perspective and safety of personnel. Some examples are monitoring of hot spots after a bush fire, tower inspections, checking crops for disease and delivery of your pizza for tea tonight.

Hyperscale data centres have hit our shores with the arrival of Microsoft, Amazon and Google. They all arrive with the same set of challenges for New Zealand Inc's infrastructure power, water and access. The current data centre planned power usage in Auckland is 220MW equating to 13% of Auckland's total consumption. Mitigation for the high power usage is the funding data centre operators are providing to power providers to develop green energy sources.

New Zealand's international cable landing points being on the east and west coasts near Auckland helps explain why the concentration of data centres in North Shore. Today's count of 26, each requiring a minimum of three physically independent access cables certainly creates headaches for network planners finding suitable routes and seeking all the different approvals required from the various authorities.

So why the mass investment in data centres? Artificial Intelligence (AI) is commonly quoted as the driver but if you look a little deeper it is our insatiable demand for data. More and more data is being created at an ever increasing rate that is beyond our capability ingest and comprehend. AI is the **tool** to allow man to make sense of it all. A tool because ultimately it is still man in the driving seat. And like all tools, it can be used for good or evil! The choice is ours.

The world of our children and grand children will be very different from ours but then again so was our world from that of our parents. Your and my challenge is how can we use our electronic knowledge and experience to create an even better tomorrow?

The Institute has continued its sponsorship program by awarding another two grants to promising electronics students. The 2024 recipients are Jorja Chetburgh and Josiah Santonia. Another two grants will be made at the end of the 2025 year.

The Institute extends its appreciation to the Spark Foundation for making the video conference facilities available free of charge.

My thanks to Malcolm Wheeler and Peter Over for their continuing assistance and wisdom, throughout the year.

## Financial

The Statement of Financial Position shows the Institute operating profit held its own. Despite my prediction of lower interest income in 2024 reality was an increase of \$700 which more than offset payment of the second Ross Muir Award. Disturbingly there was a further reduction in the subscription revenue although some of this is possibly due to my failure to issue chasers to members who had not paid by the due date. Let's see what arrears I can collect this year.

Overall, the Institute maintains a healthy financial position with sufficient funds to survive into the foreseeable future.

## Constitution

The new Incorporated Societies Act requires the Institute to reregister by April 2026. Council has done great work revising our Constitution to make it compliant with the new Act. The revised Constitution is now published on the website, and approval is being sought from the membership. Once approved I will submit it to the Registrar and hopefully it gets the tick of approval. Job done. 😊

## Membership

	2022	2023	2024
Members as of 01 January	77	75	66
New	2	1	2
Gone No Address	-1	0	-1
Resignations	-2	-2	-2
Deceased	-1	0	-1
Non-Financial	0	-8	-1
Members as 31 December	75	66	63

Comprising:

Life Fellow	1
Fellow	2
Senior Member	43
Member	6
Associate Member	11

Auckland	25
Waikato/BoP	5
Palmerston North	7
Wellington	6
Christchurch	14
Dunedin	6
Overseas	3

## Website

The Institute's website is the principal way of communicating with the members. All electronically themed meetings I am advised of are posted along with articles of interest that cross my desk.

Members are always welcome to submit relevant items for uploading to the site for the interest of the wider membership.