

Lightline

FROM THE CHAIR **CHRIS BYRNE** - LCNZ CHAIR



If the building and construction market outlook may be looking a bit quiet, Lighting Council certainly has not been. LCNZ has been kept very busy with technical and governance matters, and there are two particular activities I would like to comment on.

Firstly, there is a newly-formed Energy Sector Standards Advisory Group, or ESSAG as it is called. This government working group has been established under Standards NZ guidance as a cross-sector energy and building services group to advise government on the adoption of internationally aligned and integrated standards across all energy and building services sectors. Lighting Council is a key figure in lobbying for structural reform of NZ standards and government oversight to get started following the gaping void left by the rapid de-jointing of many of the traditional AS/NZS standards for product safety/performance, and application/design.

Lighting Council is now being seen as the most proactive and organised of all the industry groups operating in the energy, building, and electrical services sector. The ESSAG work is obviously going to be an ongoing project, with Lighting Council building the profile and positioning of the lighting sector for its members and for wider lighting sector stakeholders. As ESSAG activities unfold, we will have an update in the Winter Edition of Lightline.

Secondly, the upcoming International Organization for Standardization (ISO) Light and Lighting committee meetings are in Tokyo Japan in July. This year, for the first time, the NZ lighting sector will have three experts actively involved face-to-face in the development of new ISO international lighting standards, including workplace lighting, energy performance, and system commissioning. The fresh ISO standards will then most likely be adopted or adapted for NZ, to bring us well to the fore of international best practice for performance/energy/environmental outcomes, if the standards are subsequently incorporated in MBIE NZ Building Code requirements.

Please find below the second edition of our lighting industry newsletter. Hopefully, you will find it interesting and if you have any feedback or industry related questions, don't hesitate to be in touch – Enjoy the read!

LIGHTING COUNCIL NZ **WHO WE ARE AND WHAT WE DO**

Lighting Council New Zealand (LCNZ) is an industry association with around thirty member companies, representing NZ lighting industry interests to government agencies, regulators, and other industry and professional associations, spanning commercial, industrial, municipal, and residential lighting.

Our goal is to develop and promote effective and efficient lighting practices in NZ and to advance the capabilities and professionalism of members with technical and regulatory support for safety, performance, efficiency and fair trade in lighting.

Established in 2003, the impetus to form NZ's first lighting industry association came from the rapid onrush of new technology and energy regulation for compact fluorescent lamps that was fundamentally changing lighting at that time and creating much contention and confusion among suppliers, designers, contractors and users.

More information on the LCNZ website: [here](#)

PERSONAL IMPORTS OF LUMINAIRES



LCNZ frequently receives questions from the market about the regulatory compliance requirements for personal direct imports of luminaires (light fittings).

There are many internet opportunities to directly import luminaires at seemingly low prices. Luminaire imports into NZ must comply with the following regulatory requirements:

- They have been designed to comply with AU/NZ regulatory requirements
- They are marked in accordance with AU/NZ regulatory requirements
- The responsible importer holds product Technical Compliance Files (TCFs) with documentation that may include Supplier Declarations of Conformity (SDoCs), test lab reports and certifications

There are mandatory obligations for importers of luminaires in NZ. Products which may appear cheap overseas may not be so when the necessary NZ obligations are met. NZ lighting safety requirements are among the most stringent in the world and the technical requirements and administrative process comes with a cost, and is a reason why lighting products can be more costly in NZ than in some overseas markets. It is often not economic for personal users to import small quantities, as the cost of product testing, possible product modifications and compliance documentation often outweighs any financial benefits.

The NZ government requires licensed electricians to take personal responsibility for the safety and Electro Magnetic Compatibility (EMC) compliance of lighting products they install, and they are individually responsible. Electricians have to ensure that the products they are asked to install have the required compliance documentation and product marking. If not, the electrician is not allowed to install, and may be at risk of losing their electrical licence if they ignore this. Electrical installer code compliance signoff is a requirement to obtain building code compliance and consequently the ability to procure building insurance.

The Energy Safety division of Worksafe NZ has published 'A Guide to Supplying Safe Electrical and Gas Products', which provides information on NZ safety and compliance requirements for importers of electrical equipment. Download [here](#)

LIGHT APPLICATION

HOME SYSTEMS - SMART HOME GUIDELINES

Standards New Zealand (SNZ) have recently released a Publicly Available Specification (PAS) SNZ PAS 6012:2022 - Smart



Home Guidelines. This is part of a suite of documents supported by EECAs as part of its Energy Efficient Homes Strategy. Lighting experts and LCNZ members Jarred Gibbs of Signify and Brendan Everett of Halcyon were voluntary advisors to SNZ in the development of this important Smart Home technology publication.

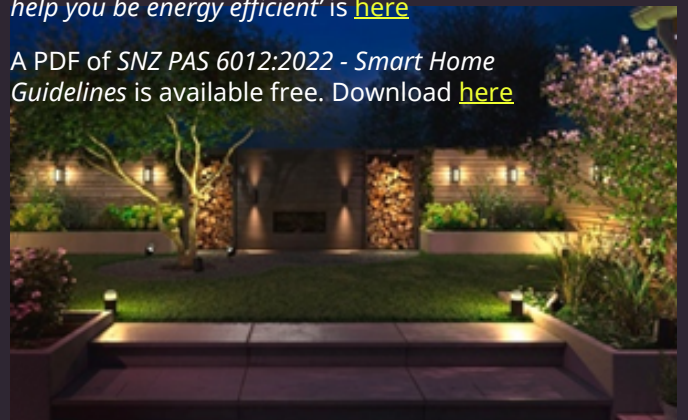
Like all developed countries, NZ is experiencing step-change technological shifts driven by environmental goals and carbon emission reduction targets. There is increasing investment in the uptake of distributed energy generation for homes, such as photovoltaic and battery storage systems. With user convenience in mind, Internet of Things (IoT) smart appliance initiatives, home EV charging, and LED lighting with smart wireless controls (e.g. Bluetooth communication) have emerged as key features of many new and renovated homes.

The adoption of internet connected technologies across the building sector does bring some challenges, and there are significant awareness and knowledge gaps in NZ. SNZ is bridging the gaps through the development of standards solutions in the form of PASs. In fast evolving markets PASs serve to introduce new technologies to consumers and provide impartial guidance from a recognised standards organisation. Such information positively contributes to consumer pre-purchase decisions and provides industry clarity on compliance obligations for safety and performance.

As the number of electric vehicle home charging installations grows, there will be even greater demand for electricity use at peak times. Homes that integrate smart controls technology, including wireless LED lighting controls, can help to reduce energy use and emissions.

A SNZ explanatory article 'Smart Home Guidelines can help you be energy efficient' is [here](#)

A PDF of SNZ PAS 6012:2022 - Smart Home Guidelines is available free. Download [here](#)



LIGHT APPLICATION NEW MASSEY UNIVERSITY LIGHTING LABORATORY

Susan Mander, Head of the Massey University Lighting Programme in the School of Built Environment has recently opened the flagship lighting laboratory at Massey's Albany Auckland campus.

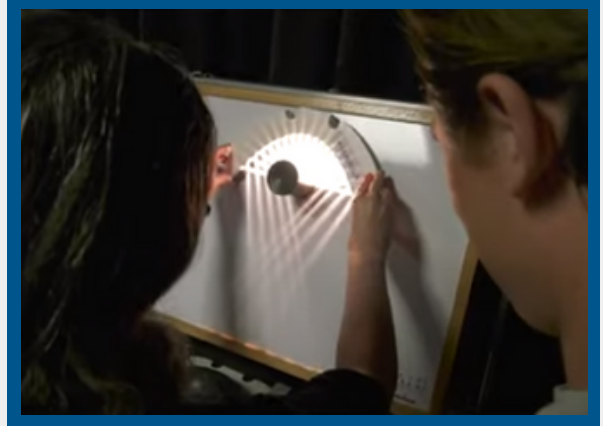
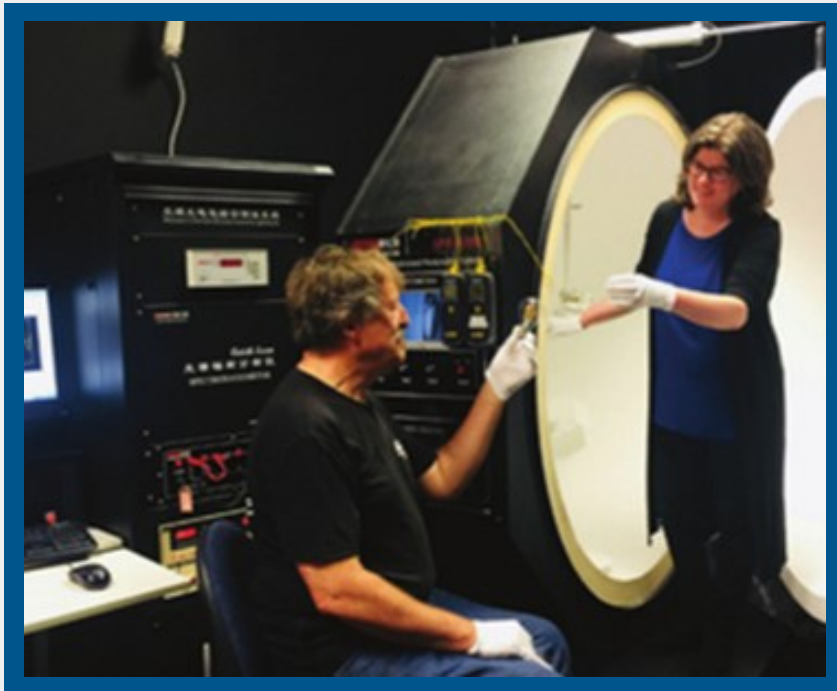


The Massey Lighting Programme has built a reputation as NZ's pre-eminent provider of education in lighting technology, application and design within the built environment. The new lab has been specifically built as a dedicated photometric laboratory and is mainly conceived as a teaching resource, but will also serve for lighting research purposes and for contracted commercial projects as required by industry or user groups.

Massey University Lighting Programme You Tube Video [here](#)

Susan is keen to communicate with parties that may have lighting research, investigative or commercial projects to discuss.

Susan's email address is s.mander@massey.ac.nz



EVENTS IESANZ EXHIBITION AND CONFERENCE – SYDNEY

WATT'S NEXT In Lighting

The Illuminating Engineering Society of ANZ (IESANZ) will be hosting the next lighting exhibition and conference *WATT'S NEXT in Lighting* on Wednesday 7th and Thursday 8th June 2023 at Jones Bay Wharf, Pyrmont, Sydney.



The conference programme will feature international and Australian speakers, including those from Harvard Medical School, Rensselaer Polytechnic Institute and the International WELL Building Institute. This will deliver thought provoking content and topical industry discussions. This is a convenient opportunity for NZ lighting and building practitioners to access international best practice for lighting application. More information [here](#)

LIGHT POLLUTION PARLIAMENTARY PETITION

A Parliamentary Petition regarding light pollution is currently in process - "New Zealand needs a national law to limit light pollution and promote dark skies".

More information [here](#)

LCNZ has significant concerns about the nature of this petition and the scope and applicability of the supporting information. LCNZ absolutely supports and endorses the desired goal to reduce the proliferation of light pollution in NZ and will participate to the full in collective action to minimise unintended consequences of light at night. However, LCNZ does not support the approach of introducing new national legislation, a heavy-handed and costly intervention. Other less invasive measures exist that could serve to reduce adverse effects of light at night.

LCNZ recommends that a multi-stakeholder consultation workshop be organised to properly assess NZ light at night and light pollution issues. This would evaluate measures to



reduce light pollution with improved harmonisation and implementation of the technical standards, codes and bylaws that already exist.

See LCNZ letter to Environment Minister Hon David Parker. More information [here](#)

See LCNZ and IESANZ joint Position Statement: 'Good Lighting and Dark Skies - a Pathway to Progress' Weblink [here](#)

STANDARDS

COMING SOON...TECHNICAL SPECIFICATION AS TS 5386 MULTI-FUNCTION POLES

AS TS 5386 *Multi-Function Poles* is an all-new Technical Specification (TS) from Standards Australia to assist with the specification, procurement, and application of complex Multi-Function Poles (MFPs) (sometimes called smart poles) used for lighting and communications in city centres, campus and park pathways, and urban streets.

Lighting poles are often integrated with Internet of Things (IoT) modules for easier and more economic operation of devices for smart city functions such as CCTV, LED signage, EV charging, and for real-time sensing of parameters like weather, noise, vibration, vehicle and pedestrian traffic. The IoT technologies may be owned, managed, or used by multiple entities and the engineering configuration requires more sophisticated treatment than with traditional poles. Procuring an MFP can be a complex process due to the multitude of possible technology options.

The new TS is being compiled by the Standards Australia Committee *IT-269 Smart Cities Systems* (Bryan King of LCNZ is a participant on this committee.) The objective of the TS is to assist the specification and procurement task by identifying the capabilities of MFPs and providing physical and performance requirements for the devices, sensors and communication modules integrated inside or outside the pole.

The TS is currently undergoing a peer review process and will likely be published mid-year 2023. This guidance document will be of much benefit to NZ lighting pole suppliers, street lighting consultants, and local council engineers and asset managers.





ISO LIGHT AND LIGHTING – TOKYO ANNUAL MEETING

ISO, the Geneva based International Organization for Standardization is an independent, non-governmental international organisation with a membership of 168 national standards bodies. A network of international subject experts share knowledge and develop voluntary, consensus-based International Standards that support innovation and provide global standards.

NZ is now much involved with the committee ISO TC 274 Light and Lighting, as a 'Participating Member'. This committee develops application and design standards for lighting, complementing the product standards (safety and performance) developed by IEC (Geneva). A major advancement for NZ lighting and energy interests was the 2021 formation of the ISO NZ National Committee for lighting. The NZ ISO Light and Lighting committee members and their representative organisations are:

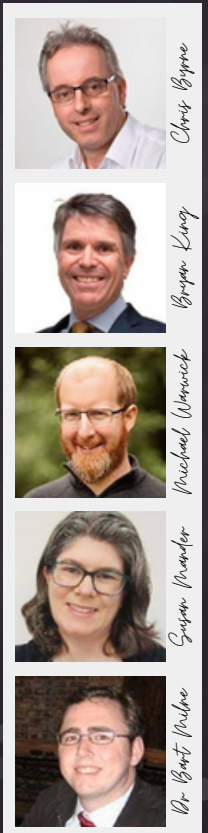
- Chris Byrne – Lighting Council NZ (LCNZ) - Head of Delegation
- Bryan King – Lighting Council NZ (LCNZ)
- Michael Warwick – Illuminating Engineering Society of ANZ (IESANZ)
- Susan Mander – Massey University
- Dr Bart Milne – Energy Efficiency and Conservation Authority (EECA)

This committee appraises and reviews draft ISO lighting and energy standards for their technical accuracy and for application relevance to NZ. The 2023 Plenary and Working Group meetings of ISO TC 274 Light and Lighting are being held 3-6 July 2023 in Tokyo, Japan, and Chris, Bryan and Michael will be face-to-face in Tokyo, supported by Bart and Susan participating by Zoom.

Along with plenary sessions on overall projects, the meeting will cover new standards of likely interest for adoption or adaption for NZ. These include:

- Lighting for Workplaces – Interior and exterior
- Energy Performance of lighting in buildings – Explanation and justification
- Commissioning process of lighting systems in buildings

The four-day session will also cover planning of future ISO lighting standards projects.



ENVIRONMENTAL

GLA RANKS ENVIRONMENT A NO.1 PRIORITY



For the last four years LCNZ has participated in and contributed to the activities of the Global Lighting Association. The GLA is the international NGO of lighting councils internationally, representing 36 countries worldwide. More information [here](#)

Very recently, the GLA conducted a poll of its member organisations to determine the hot-topics and pressure-points in each country. This was to establish priorities for cross-nation collaborative work to deliver more effective, more harmonised, and more economic outcomes.

The member poll delivered a result that ranked 'Environmental Sustainability' as the No.1 priority for developing strategies, plans and communication. This position was almost unanimous across the participating countries.

Consequently, the GLA will soon establish a Working Group to research best practice and to develop published industry positions on environmental sustainability. Topics will include:

- Life cycle assessments
- Environmental product declarations
- Durability, lifetime, reparability, upgradeability
- Material efficiency
- Circular economy
- Product carbon footprints
- Extended producer responsibility
- End of life treatments

The aim of this initiative is to provide practical guidance on best practice for product designers, manufacturers, maintainers, specifiers and users, on how to reduce the environmental impact of lighting products and systems. This will identify harmonised KPIs for consistency in measuring and assessing the environmental impact throughout the whole life cycle, from material extraction, to production, operation, maintenance, and end of life. The intention is that a unified industry approach will better drive global understanding and better outcomes. When available, LCNZ will publish this topical international information.

MEMBER PROFILES



John Heimgartner

[Gartner Superlux](#)

The origins of Gartner Superlux Ltd were established in Auckland over sixty years ago by



Emil Heimgartner, a manufacturing engineer who emigrated from Switzerland in 1950. He formed Gartner Engineering Ltd, and produced automotive, electrical, and architectural parts and equipment, along with lighting products including the iconic Superlux Equipoise desk lamp that emerged as a staple of Kiwi student and work-desks for decades to come.

In the 1970s sons Mark and John, trained manufacturing technologists, took over the business, and with a lighting emphasis, developed this into Gartner Superlux Ltd, a company now with a 2000+ product line and supported by a production facility in Mangere, Auckland.

John Heimgartner, Director and head luminaire design engineer leads the company, and the family passion for design and manufacturing continues into a new generation with daughter Jennifer Heimgartner now part of the design and management team.

Gartner Superlux is focused on residential and light-commercial lighting markets and has a combination of locally manufactured and imported luminaires. The company is actively involved in researching and engaging with the wider international lighting community which feeds back into product development. Many of the products are designed from scratch, locally in NZ. The engineering knowledge of the design team and the experience gained from over sixty years of manufacturing assist with specification development and collaboration with European and Asian suppliers.

An in-house product testing facility enables full control over the measurement of light output, heat testing and durability testing, as part of the many tests carried out on components and products.



MEMBER PROFILES



Richard Thorburn

[ECC Lighting](#)

The Electric Construction Company of NZ Ltd, now known as ECC, was established in Auckland in 1909 by George Thorburn and is now run by grandson Mike Thorburn, and great-grandsons Richard and Andrew.



Over the last forty years, Mike has been the driving force behind developing the business into a supplier of an extensive world-class range of lighting products and design solutions.

With retail stores and specifier showrooms in Auckland, Wellington, and Christchurch, ECC specialises in lighting for residential, office and commercial, retail and hospitality, and street and urban projects. The Thorburn's continually search the world for innovation to meet increasingly complex lighting requirements. Passionate about making exceptional design available to New Zealanders, ECC represents many of the world's leading lighting and design brands from Italy, UK, US, Belgium, Germany, Spain, Australia, and NZ.

ECC firmly believes in building long-term relationships with manufacturers, as represented by the forty-year association with Italian companies iGuzzini, Flos and Artemide, global brands which showcase the talents of world-leading product designers. The best classic designs transcend design-fashion cycles, and some of ECC's iconic luminaire and lamp designs have been available continuously over many decades and prove to be just as popular currently as when first released.

Mike and his sons have a huge focus on relationships and have worked with many of their clients across generations. As a family business, they carry deep connections with clients and suppliers, and these relationships, with a strong family bond, sustains an enduring business.

