

# Low Carbon Lighting for New Zealand

*There is action happening within New Zealand state sector buildings as energy and carbon emissions upgrades are now required for government owned and leased buildings. This provides business opportunity for lighting suppliers and contractors with LED lighting and smart control system retrofits.*

## CARBON NEUTRAL GOVERNMENT PROGRAMME (CNGP)

The mandatory CNGP is operated jointly by EECA, MfE and MBIE with the intention to accelerate emissions reductions within state sector agencies and an intended goal of achieving carbon neutral operations by 2025.

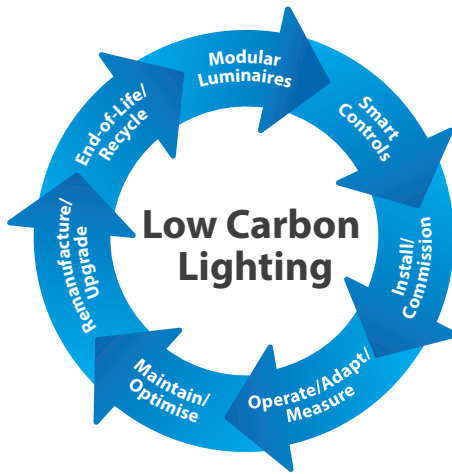
The required actions for state sector building managers are:

- Measure, verify and report energy use and carbon emissions annually
- Set emissions reduction plans and targets
- Adopt NABERSNZ energy efficiency ratings for large office buildings
- After 2025, purchase carbon offsets to cover any remaining emissions

This initiative clearly spells out the must-do actions and outcomes.

## STATE SECTOR DECARBONISATION FUND (SSDF)

The CNGP is financially supported by the \$220 million SSDF to finance investment in low-emissions technology within state agency building stock, and energy efficient lighting is specifically included.



1. **Modular Luminaires** – Plug-and-play components for longevity and circularity
2. **Smart Controls** – Adaptive lighting and data monitoring
3. **Install/Commission** – Implement and programme with finesse
4. **Operate/Adapt/Measure** – Light only where and when needed
5. **Maintain/Optimise** – Continuous operational improvement
6. **Remanufacture/Upgrade** – Periodic component and software refresh
7. **End-of-Life/Recycle** – Responsible material recovery

## DEFINING LOW CARBON LIGHTING

We have often seen broad and unsubstantiated advertising claims for 'green' or 'sustainable' lighting. However, the era of feel-good generalities is over, with standardised data now an expectation to credibly support energy, carbon and environmental performance claims. New ISO and IEC methods are emerging that provide structured ways for defining and reporting circular economy, materials efficiency, embodied and operational carbon emissions.

In overview, the essential elements of low carbon lighting for commercial buildings include:

Such approaches, along with standardised assessment methods, provide the means to determine systemic performance and to identify life cycle costs to support the investment case for better solutions.

## PRIVATE SECTOR OPPORTUNITY

The CNGP state sector initiative is a prime business opportunity for lighting suppliers and contractors to collaborate with well-funded government clients to improve building performance. It also paves the way for private sector property owners and managers to advance the commercial case for better carbon emission outcomes and sound long-term investment decisions.

*Lighting Council New Zealand is the industry association for lighting manufacturing, importing, and distribution companies in New Zealand, and associated lighting industry participants.. [www.lightingcouncil.org.nz](http://www.lightingcouncil.org.nz)*

LIGHTING COUNCIL NEW ZEALAND FULL MEMBERS

