



*Ministry for the*  
**Environment**  
*Manatū Mō Te Taiao*

# **Sustainable Government Buildings**

**Beyond Design  
A Best Practice Approach to  
Building Commissioning, Completion  
and Ongoing Operation**

**Appendix C:  
Green or Performance Based Leases**

This report was prepared for the Ministry for the Environment by:

David Fullbrook  
eCubed Building Workshop Ltd

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# 1 Introduction

Until recently the development of 'green' buildings in New Zealand, particularly for commercial offices, has been ad hoc. Briefs were very vague, designs were unchallenged and a building's performance has not been guaranteed in any shape or form. There has been an element of 'green wash'.

The new generation of 'green' commercial buildings for major government and corporate tenants are seeking to address these shortcomings by:

- providing outline building briefs and subsequent performance specifications with clearly defined and, wherever possible, measurable and sustainable objectives
- participating in a collaborative design and commercial leasing terms process to refine and apply the sustainable design objectives to a range of potential owners' particular development propositions
- the use of measurement tools during the design process to test how sustainable an owner's design is, including environmental ratings (g, Green Star NZ), energy-use modelling, water-use modelling and daylight modelling
- a higher standard of project delivery than has traditionally been accepted in terms of design, construction and commissioning/handover
- the use of a 'green' or performance-based lease to clearly define lessor and lessee obligations in terms of meeting agreed environmental outcomes
- an element of continuous commissioning in the first year of operation to fine-tune the building and its systems to suit the building occupants and the sustainability objectives
- producing an environmental management plan or building user guide on the continued sustainable use of the building
- a triennial building audit.

A green or performance-based lease is similar in most respects to a standard lease for a conventional building, but also provides for the lessor and lessee to maintain and conform to the environmentally sustainable design<sup>1</sup> (ESD) aspects included in the building to minimise environmental impacts and to achieve agreed energy- and water-use outcomes, with associated reduced operating costs.

Components of this type of lease normally include:

- the *agreement for lease* and the *lease*
- an *ESD schedule* – this will include the required ESD outcomes and the associated assumptions and requirements for meeting them, along with the requirement to make the lessee's fit-out consistent with the ESD principles of the base building and an environmental management plan or user guide on the correct and sustainable use of the building.

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<sup>1</sup> Also known as ecologically sustainable development (ESD) in Australia.

Green or performance-based leases are starting to be developed overseas for sustainable commercial buildings. Probably the most prominent Australasian example of this type of lease is that developed for the 60L building in Melbourne. The Australian Federal Government has also issued a Green Lease Schedule Template, and is intending to procure all new lease arrangements on this basis. Performance-based contracts have been used for some years in the energy contracting area, where companies take over the energy supply to a client's business and guarantee a minimum level of energy cost saving.

In New Zealand there is particular interest in these types of leases from government tenants due to the obligations of the Govt<sup>3</sup> programme,<sup>2</sup> which seeks to improve the environmental performance of government operations. These types of leases also support more collaborative property solutions by tending to favour long term lease/total occupancy cost arrangements between the lessor and lessee rather than traditional short-term leases with net rentals and recoverable operating expenses.

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<sup>2</sup> A programme run by the Ministry for the Environment that helps central government agencies to become more sustainable. It focuses on four key areas, including buildings, and seeks to improve energy, water and materials use, reduce waste and wastewater, improve occupancy health and wellbeing, and influence staff travel.

## 2 Key Features of Green or Performance-based Leases

A green lease builds on the features of conventional leases but also includes commitments from both the building owner and the tenant. This type of lease will generally include a specific environmentally sustainable design (ESD) schedule, which is generally structured as follows:

- ESD outcomes
- ESD outcome assumptions
- ESD outcome calculation
- lessor obligations relating to the ESD outcomes
- lessee obligations relating to the ESD outcomes
- co-operation required
- dispute resolution.

### 2.1 Environmentally sustainable design outcomes

Setting measurable targets that can be transformed into achievable outcomes for environmental performance is extremely important to enable the lessor and lessee to measure their own and each other's performances. For example, the lease could specify the achievement of a certain environmental rating score and/or specific energy, water and waste outcomes over the life of the lease for both the lessor's base building and the lessee's fit-out. These should be evaluated every year for the entire term of the lease, and will require the co-operative efforts of both the lessor and lessee to maintain.

Lease terms to achieve these objectives could include any or all of the following:

- achievement of an agreed as-built environmental rating and score for the base building and fit-out (eg, Green Star NZ)
- an obligation on the lessor to separately meter the energy and water consumption of each lessee and the building end uses for diagnostic purposes
- establishing a mechanism for the appointment of a qualified and independent consultant to monitor energy and water consumption, and to assess compliance with the ESD outcomes prescribed by the lease to ensure these are achieved
- prescribing a fair and reasonable calculation formula for failing to comply with the lease obligations or to achieve prescribed ESD outcomes. It is important that the parties assess and agree to a penalty that provides sufficient incentive for them to comply with the lease terms and achieve environmental outcomes and performance criteria prescribed by the lease. For example, the lease might require a reduction in the rent commensurate with the increased costs associated with the lessor's failure to achieve the ESD outcomes.

## **2.2 Environmentally sustainable design outcome assumptions**

Given the number of variables that could reasonably be used to predict a building's performance, it is important to have a clear basis on which to derive the ESD outcomes. This should:

- define the assumptions on which the ESD outcomes are based and identify variables that are beyond the scope of the outcomes (eg, use of the building, loading of the building, climatic data)
- apportion obligations for meeting the ESD outcomes to both parties.

## **2.3 Environmentally sustainable design outcomes calculation**

For ESD outcomes to be acceptable and not merely regarded as a potential penalty, they must be equitable to both the lessor and the lessee. To achieve this they should:

- include a tolerance on the outcome given the accuracy of modelled versus real building performance
- make allowances or corrections for factors that will influence energy usage but are beyond the control of the lessor (eg, non-average climatic effects or an increased intensity of use of the building)
- define a calculation basis for fair cost recovery if the ESD outcomes are not met.

## **2.4 Lessor's obligations in respect of environmentally sustainable design outcomes**

The lessor will have obligations, which would include:

- meeting an agreed as-built environmental rating score for the base building
- meeting agreed performance targets, normally for energy and water usage under the building owner's control, including:
  - the energy used by heating, cooling, ventilation, common area lighting, pumping, lifts and hot water
  - the flushing water contribution
- ensuring all fundamental building elements and systems are installed and operated with maximum efficiency, which may require certification by an engineer with relevant qualifications
- monitoring and, where necessary, adjusting air-conditioning levels to reduce energy use
- ensuring that an easily accessible and dedicated area for recyclable collection and storage of waste is set aside

- ensuring recyclable waste is actually being recycled
- providing bicycle storage and changing rooms.

ESD outcomes prescribed by a lease must be achievable. The lessor should be in a position to demonstrate to the lessee that the building can, under normal operating circumstances, achieve the proposed ESD outcomes provided the lessee conducts its operations in a particular manner.

### **3 Lessee Obligations Relating to Environmentally Sustainable Design Outcomes**

In conventional commercial leases, fit-out is usually the responsibility of the lessee, although this should be integrated with the base building and subject to approval by the lessor. A lessor of a green building will wish to impose obligations on the lessee regarding the nature or type of materials used in the fit-out to achieve ESD goals, or require the lessee to comply with a fit-out policy annexed to the lease. In essence, the environmental standard of the fit-out should be consistent with that of the base building and the lessee would be required to meet an agreed as-built environmental rating for the building, including the fit-out.

Commercial properties typically have building rules, and for a green lease these would be extended to prescribe the lessee's ESD obligations. An environmental management plan or user guide would be prepared for the building, which the lessee would have to comply with. There would also be an obligation on the lessee for a proportion of the building's ESD energy outcome, including:

- on-floor small power equipment energy use
- on-floor-lighting energy use
- potable (drinkable) water use.

## 4 Co-operation Required

Achieving the desired ESD outcomes will require the full co-operation of each party at every stage of the design and construction process, and during the lessee's occupation of the premises. The lessor and lessee need to review the achievement of the ESD outcomes at an agreed frequency, normally quarterly, via a building management committee (BMC) meeting. If required, they also need to review and agree on any potential remedial measures needed by either party to bring the outcomes back on track if they are not being achieved.

The lessor and lessee may need to appoint professionals to help achieve this co-operation.

## 5 Dispute Resolution

A green lease should not only specifically define the responsibilities of the lessor and lessee, but ideally should include a dispute resolution mechanism in the event of a disagreement between the parties as to why a particular target or objective prescribed by the lease has not been achieved.

The manner and form of the dispute resolution mechanism is, as always, negotiated on a case-by-case basis. If, however, the lease includes a requirement for an annual independent audit, then the lease could include a requirement that the auditor's brief not only advise on the performance of the building, but also include:

- an explanation as to why the building is not achieving a prescribed target
- advice on who, in the auditor's opinion, is responsible for that non-performance.

Depending on what the parties agree to, the auditor's report may be binding on the parties or form the basis of triggering the dispute resolution mechanism.