

## Worksheet 3.2A

# Sustainability evaluation – property acquisition phase

The following evaluation should be undertaken with the help of technical specialists during the acquisition or handover period and given to the acquiring fund manager or portfolio manager. This worksheet includes both office space and retail space. This is an example only – adapt this worksheet to suit your organisation's requirements. Delete the sections not relevant to the property under review.

Section A: Property details				
Building/Centre name				City
Street address				
Building age				
Size:		Building functions:		
No. of levels (excluding basement)		Office space	m <sup>2</sup>	
Gross floor area	m <sup>2</sup>	Retail	m <sup>2</sup>	
Building net lettable area (NLA) incl. vacancies	m <sup>2</sup>	Food outlets	m <sup>2</sup>	
No. of car parking levels (or area in m <sup>2</sup> )		Carpark	m <sup>2</sup>	
Basement size	m <sup>2</sup>	Other (list)	m <sup>2</sup>	
No. of car parking spaces			m <sup>2</sup>	
No. of disabled parking spaces				
No. of lifts, escalators and travelators				
Office tenancy			Occupancy/use	
Major tenants	% NLA occupied	No. staff	Total no. building occupants (excl. visitors and building contractors)	
			Standard weekly hours of operation	
			No. of floors with 24/7 operation	
			% vacancy (at time of assessment)	
No. of tenancies:				
Retail capacity			Occupancy/visitation	
	Number	GLAR	Hours of annual occupancy	
Specialty tenants			Annual total visitation	
Major tenants			Peak visitation (people/day)	
No. of tenancies			Standard weekly hours of operation	
% vacancy (at time of assessment)			No. of levels with 24/7 operation	
Industry benchmarks				
NABERS Rating	Base	Tenancy	PCA Grade (Guide to Office Building Quality)	
NABERS Energy			Green Star Rating (specify tool number used)	

NABERS Water		n.a.		
NABERS Waste				
NABERS IE				

**Energy and greenhouse performance**

Monthly performance (base building)	J	A	S	O	N	D	J	F	M	A	M	J
Electricity consumption total kWh												
MJ/m <sup>2</sup> NLA or GLA												
Electricity costs total \$												
\$/m <sup>2</sup> NLA or GLA												
Gas consumption total MJ												
MJ/m <sup>2</sup> NLA or GLA												
Gas costs total \$												
\$/m <sup>2</sup> NLA or GLA												

Note: the above information may be available from property utility accounts or other property management records.

Year:	200X	200Y	Comments on any aspect of energy consumption or cost of energy supply.
HVAC electricity consumption (if known)	kWh		
	kWh/m <sup>2</sup>		
After hours HVAC electricity (if known)	kWh		
	kWh/m <sup>2</sup>		
Is there an Energy Management Plan (or similar) in place? If so, include a copy with this evaluation.			

**Industry benchmarks**

How does base building electricity consumption costs (\$/m <sup>2</sup> NLA) relate to PCA operational benchmarks for a building of this category and NLA/GLA?	
Has a NABERS Energy, Water or Waste rating been undertaken? If so, list outcomes and name of organisation that undertook the rating.	

<b>Greenhouse and global warming</b>				
	<b>Units</b> Tonnes CO <sub>2-e</sub> or kg CO <sub>2-e</sub> /m <sup>2</sup>	<b>200X</b>	<b>200Y</b>	<b>NABERS Energy</b> Most recent accredited NABERS Energy rating
Total GHG emissions				
What are the likely energy improvement measures that could be implemented to raise the NABERS Energy rating by 1 star?				
to 2 stars?				
to 3 stars?				
Estimate an indicative capital budget associated with raising the NABERS Energy rating to:				
3 stars				
4.5 stars				
Is a refrigerant leak detection system installed?				
<b>HVAC system</b>				
Briefly describe the <b>HVAC system</b> and its key components including any energy efficiency features.	Number	Type	Capacity and efficiency	Age
boiler plant				
chiller plant				
cooling towers				
air handling systems				
water reticulation systems				
air filtration systems				
Briefly describe the scope of the HVAC control systems and impact on energy efficiency:				
type (e.g. pneumatic, electronic, DDC)				
control of HVAC systems				
economy cycles				
night purge				
Has an energy audit been undertaken in the last 5 years? What improvements have been implemented?				
Describe the carpark and basement ventilation system. Is carbon monoxide monitoring provided? Have any ventilation improvements been made as a result of poor air quality?				
Describe the domestic hot water systems installed in the building.				
Does the building have CO <sub>2</sub> monitoring to tenant areas? Provide details:				

Is power factor correction installed in the building? Provide details.	
List scope of energy sub metering systems i.e.	
house power	
lifts	
mechanical	
carpark	
gas	
Are these monitored on a monthly basis?	

**Lighting**

Briefly describe the lighting system including energy efficiency features:	
tenant controls	
lighting controls	
types of luminaires	
lighting zones (size in m <sup>2</sup> /number/floor)	
dimming systems	
after hours controls	

**Water and wastewater**

	Units	200X	200Y		Units	200X	200Y
Total water consumption (mains supply)	kL			Cost of mains water	Total \$		
					\$/kL		
	kL/m <sup>2</sup>			Cost of effluent discharge	\$		
					\$/m <sup>2</sup>		
Quarterly performance (200X)	July to September		October to December	January to March	April to June		
Consumption (kL)							
Supply costs							

Toilets			Urinals		
Flush volume	Number of women's	Number of men's	Type	Number	Flush volume
6/3 L dual flush			Manual flush		
9/4.5 L dual flush			Sensor-operated flush		
6 L full flush			Waterless		
9 L full flush			Other		
11 L full flush					

Showers			Basins in amenities				
Number	Flow rate (L/min)		Number	Tap type	Tap flow rate (L/min)		
Water storage tanks			Cooling towers				
Capacity (kL)	No.	Location/use	Type	Refrigeration capacity (kWh)	Operating times		
NABERS Water rating							
How do water supply and wastewater costs (\$/m <sup>2</sup> /pa) relate to the PCA operating cost benchmarks for a building of this type and NLA/GLA?							
Are submeters installed to monitor tenants' consumption and major water-consuming equipment? If so, provide a breakdown of % of total water use for each metered component. Are these submeters connected to a stand-alone system for monitoring?							
Have any water leaks been identified and repaired in the past 2 years?							
List any water saving devices used in the building (e.g. flow restrictors, low-flow shower heads, automatic taps etc)							
Is stormwater or rainwater collected and stored for use on site? If so, describe storage capacity and use.							
Waste and recycling							
	Unit	200X	200Y		Unit	200X	200Y
Total solid waste sent to landfill	T			Annual cost of waste collection sent to landfill (collection, transport and tip fees)	\$		
					\$/m <sup>2</sup>		
Total paper and cardboard waste collected for recycling	T			Annual cost of paper and cardboard collection and removal	\$		
					\$/m <sup>2</sup>		
Total other recyclables (e.g. commingled containers)	T			Annual cost of other recyclables collection and removal	\$		
					\$/m <sup>2</sup>		
NABERS Waste rating							
Is there a current Waste Management Plan in place, or similar e.g. waste minimisation strategy, to reduce waste going to landfill (e.g. increase recycling)? If so, attach a copy to this evaluation.							
Has a waste audit been undertaken in the last 5 years? If so, attach a copy to this evaluation.							
Describe the waste recycling system in major tenancies e.g. plastics, paper & cardboard, organics etc.							

Describe the waste recycling systems or infrastructure (e.g. compactors) in the base building e.g. plastics, paper & cardboard, organics etc.	
Describe any additional waste recycling or collection systems in the building for other materials e.g. fluorescent tubes, batteries, mobile phones, construction & demolition waste, furniture, electrical equipment etc.	

**Workplace productivity**

Is there a history of tenant concerns relating to poor indoor air quality? If so, what actions have been taken to address these concerns?	
Have regular air quality audits been undertaken? List key issues identified and rectification measures implemented.	
Has a hazardous material audit been undertaken within the last 2 years? List any key recommendations from the environmental due diligence assessment.	
NABERS Indoor Environment rating	

**Transport and accessibility**

Distance from bus stop	m	Disabled toilets on each occupied floor?	Y/N
Distance from nearest train station	m	Estimated workforce using public transport	%
Distance from public carpark	m	No. of designated motor bike spaces provided	
Disabled access from street to lift lobby?	Y/N	No. of designated bicycle spaces provided	
Disabled access from carpark to lift lobby?	Y/N	No. of shower facilities for cyclists	
Secure bike storage	Y/N		

List specific facilities for disabled accessibility (e.g. lifts, toilets etc)

**Ecological diversity**

Are there any trees on site subject to Council Tree Preservation Orders? Does the location of these trees impede future redevelopment (if intended)?	
Are there any areas of natural vegetation or wetlands on site that may have some ecological conservation value? If so, describe them. For example, old growth forests. See Green Star – Ecological (ECO – Conditional Requirement) Does the location of these areas impact or need to be considered in future redevelopment potential (if intended)?	
Does the site have a history of soil or groundwater contamination? List any key recommendations from the environmental due diligence assessment.	

**Heritage conservation**

Is there a current Heritage Conservation Order (or similar) on part of the site or the entire site? If so, describe the subject and the area of site affected.	
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