

Green means more than you think



By [Stefano Contardo](#)

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The term "green buildings" is often bandied about, but what exactly does that mean for prospective tenants seeking real value out of this ubiquitous term.

In my opinion, these are the top questions to ask a prospective landlord when seeking out this type of rental space:

1. What exactly does "green" industrial property mean?

"Green" industrial property refers to physical premises that are attempting to minimise their carbon footprint or adopting greener practices, such as using sustainable technologies or designing their spaces to be more efficient.

Many of Improvon's newer properties have been designed and built with this in mind, specifically our "high-tech industrial" or "light industrial" developments.

The move towards sustainability is evidenced in the number of suppliers moving into the South African market with a view to supplying green technologies - over the past year, we have welcomed no fewer than four international suppliers to the Improvon stable.

Tenants are increasingly showing an interest in occupying green buildings, particularly those who are suppliers or manufacturers of green technologies themselves.

2. Does our company have to be green to occupy a green industrial space?

No, it doesn't, but we'd urge you to consider adopting greener or more environmentally sustainable practices.

Importantly, creating a green industrial building requires a philosophy of sustainability. Companies cannot achieve green status without a culture of sustainability being strongly inculcated within their organisation and for that to happen they not only need the buy-in of management, but also staff.

3. What are the benefits of maintaining a green building?

These are twofold, namely the environmental and long-term financial benefits. Many building operators are deterred by the perceived high upfront capital outlay, but, in our experience, these costs are recouped within three to five years. What's required is an understanding of the initial impact on their capital and an appreciation of the long-term benefit associated

with going green; namely the value of reduced long-term operating costs and the fulfilment of a moral obligation.

4. How will green options be built in during construction followed by activities during tenancy?

Green options include:

- Limiting the adverse effects of direct sunlight exposure by carefully orientating the buildings and using sun-shading devices, like louvres and parapets. This still allows for natural light to filter through without building up excessive internal heat.
- Utilising double-glazing or low emissivity (Low-E) glass. The former insulates and reduces heat transfer, while Low-E glass prevents radiation transfer. In doing so, both these components enhance the overall building's comfort and insulation. This is also of benefit to customer or to occupier as it reduces their electrical bill.

The reduction of external heating via the above measures also makes sense if one considers that air-conditioning is one of the worst offenders in terms of the inefficient use of energy and constitutes up to 60% of power consumption. We've therefore installed the latest technology in the form of variable speed drives (VSD) air-conditioning units in many of our buildings, which carefully control the power consumption of the unit's motor, according to the cooling or heating required.

The use of insulation (walls, floors and ceilings) also helps to keep internal temperatures consistent and reduces the overall power consumption load.

In terms of water usage, there are many options, including: rainwater harvesting, which stores rainwater in underground tanks and uses it in toilet cisterns; attenuation ponds to hold storm water and other run off for use in irrigating gardens; and moisture sensors to ensure that the irrigation system doesn't irrigate when it is raining or the soil contains sufficient moisture.

Some of our current buildings already use photovoltaic panels. The thinking behind this is to supplement electrical consumption from the grid and provide tenants with practical example of how they can benefit, hopefully resulting in them extending their installation.

5. Does current legislation demand that developers consider green issues in new developments?

Yes, most certainly, and we're pleased it does. For example, the new SANS 10400-XA building regulations state that 50% of water heating must be provided by means other than an electrical resistance heating, for example solar geysers or a heat pump. All our new developments include this or similar technology.

Further to the above, SANS requires new buildings to conform to certain energy usage criteria, which can be confirmed by one of three methods:

- a. A competent person:** An engineer, or similarly qualified person, conducts a study of the facility and certifies its consumption falls within tolerances.
- b. Architect calculations:** The architect completes the necessary calculations regarding fenestration, shading, materials etc and confirms the results meet the requirements as per SANS.
- c. Computer modelling:** Specific programmes are utilised to determine whether the building will comply.

Over time, new sections to the SANS code will be introduced that will further improve the standard of sustainable development in the country. As changes to accepted standards are generally accompanied by additional costs, these measures are introduced over time to make them easier to introduce.

ABOUT STEFANO CONTARDO

Stefano Contardo is developments executive at Improvon, a company that specialises in creating tailor-made building solutions suited to the specific needs of businesses looking for office, industrial and warehousing space.

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