

# More incentives needed to encourage wider use of solar panels among building owners: NUS poll

The reasons cited for slow adoption of BIPV include high upfront costs for installation and high maintenance costs

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THE majority of building owners seem unconvinced that the adoption of building-integrated solar panels will contribute to higher valuations of their property assets, with only 30 per cent of them viewing these installations favourably, according to the findings of a survey.

The results from the quarterly survey, conducted by the Institute of Real Estate and Urban Studies at the National University of Singapore (NUS), suggest that developments fitted with building-integrated photovoltaics (BIPVs) are expected to enjoy “only a modest lead over their counterparts, both in terms of capital appreciation and rental rates”. This is regardless of property type, the survey noted.

BIPVs are photovoltaic materials that are used in parts of a building such as roofs, facades, windows or canopies, to replace conventional building materials with solar photovoltaic panels, to provide an ancillary source of electrical power.

The main advantage of BIPV panels over the traditional roof or ground-mounted solar panels is that they allow buildings to retain their intended look without compromising on solar adoption.

Sing Tien Foo, provost's chair professor of real estate at NUS, believes that as the technology for BIPV is still evolving, landlords will be able to gain learning experience from first-mover advantage from implementing such a system, thereby reducing the long-term fixed costs of BIPV investments over time.

However, the poll results show



**An NUS poll has shown that BIPV-fitted buildings are expected to enjoy only a modest lead over their counterparts, both in terms of capital appreciation and rental rates. PHOTO: CDL**

that most respondents remained “conservative” when asked how much premium BIPV installations will add to their properties, believ-

ing that such fittings would add value by only between 1 per cent and 3 per cent.

“Responses were fairly consis-

tent across different property types, ranging from office and industrial to residential and retail,” added Prof Sing.

The top four cited reasons for slow adoption of BIPV include: high upfront costs for installation, high maintenance costs, a lack of government incentives to support the adoption of such technology, and a lack of clear revenue and business models for BIPV.

The report cited that the main factor motivating companies to adopt the technology is an increase in economic incentives and cost subsidies from the government.

Prof Sing said that the benefits of installing such sustainable solutions may be felt only over the long term, as the time horizon for returns on investment is similarly long.

He added that “it may be timely

for the government to first provide financial support through subsidies to help defray higher initial costs of adopting renewable energy”. “Hopefully, when clean energy becomes more prevalent, companies could reap the economic benefits of going green”.

Besides of the lack of incentives from the government, the report shared that high construction costs and a shortage of manpower continue to pose a risk to companies.

With the clean energy segment still at its infancy stage – with neither the economies of scale nor an established ecosystem of transmission and distribution to a wider user base – “it is understandable that companies are reluctant to take on additional cost commitments at this juncture”, Prof Sing said.