

URA offers developers incentives to tap energy-efficient cooling systems

Building owners will receive bonus gross floor area for their developments should they establish new district cooling systems, or utilise existing ones

MORE buildings here might soon use centralised chillers for their air-conditioning needs, after the government announced new incentives for developers that tap these energy-efficient cooling systems.

From Sep 18, building owners will receive bonus gross floor area for their developments should they establish new district cooling systems, or tap existing ones, said National Development Minister Desmond Lee.

This means developers will be given additional floor space over and above what is prescribed for their respective development sites in the Urban Redevelopment Authority's (URA) masterplan.

Lee, who announced the new incentives at the NUS Cities Symposium on Sep 18, said such central-

ised cooling solutions help Singapore achieve both space and energy savings, contributing to efforts to make the country greener.

Air-conditioning can account for about half of a building's energy consumption. The government previously said that users of the district cooling system in Marina Bay – presently the largest such system in the world – have seen energy savings of more than 40 per cent.

Sharing the load

District cooling systems typically supply the cooling needs of several buildings using centralised chiller plants, doing away with the need for each building in the network to build and operate its own plants.

By sharing the load of cooling and optimising energy consump-

tion, members of the network lower carbon emissions and save costs.

There are also centralised cooling systems here, such as in Tengah housing estate, where chiller plants are located in a few host buildings within the estate.

URA said in an industry circular on Sep 18 that the gross floor area incentives will apply in two scenarios.

First, where mechanical and electrical spaces are needed to support district or centralised cooling system infrastructure, these spaces will be considered bonus utility gross floor area.

This means that such spaces will not count towards the maximum allowable gross floor area for the development based on URA's masterplan, giving developers the

flexibility to maximise their permitted floor area for other uses.

Second, for existing developments that have their own chiller plants, building owners will be allowed to repurpose the space allocated to these plants after addition and alteration works have been carried out for the building to tap a district or centralised cooling system.

Depending on the building context, building owners will be allowed to either repurpose the space previously occupied by the chiller plants, or to decant the equivalent floor area to another part of the development where it can be used for something else.

URA said the incentives will not apply retroactively to existing buildings that are already part of a district or centralised cooling net-

work, such as those in Marina Bay and Punggol Digital District.

The incentives will also not kick in for buildings that were previously required to adopt district or centralised cooling, such as those built on Government Land Sales sites that had district cooling systems as part of tender conditions.

The agency also added that bonus gross floor area under the new incentives will be capped at 10 per cent of the allowable gross floor area for the site based on URA's masterplan, and that the perks will be valid until Sep 17, 2029.

Associate Professor Ernest Chua from NUS' College of Design and Engineering said the new incentives are a "significant step towards promoting sustainable development".

He pointed out that mechanical and electrical spaces of district and centralised cooling systems can occupy up to 5 to 15 per cent of the area of buildings here. Meanwhile in-building chiller plants can take up 2 to 10 per cent of total space in a building, he said.

Professor Sing Tien Foo, provost's chair professor of real estate at NUS Business School, said the bonus floor area will be attractive for commercial properties in

prime locations which have "maxed out" their allowable gross floor area.

They would be able to deploy the bonus area they get to more valuable commercial uses, he said, adding that this could be more valuable to building owners than the costs incurred in decommissioning their in-building chiller plants.

Lush programme

Speaking at the NUS University Cultural Centre on Sep 18, Lee also said the authorities are working on the fourth edition of the Landscaping for Urban Spaces and High-Rises (Lush) programme – a scheme that includes requirements and incentives for greenery and communal spaces to be included in buildings.

The Lush programme was first introduced in 2009, and subsequent editions were released in 2014 and 2017.

Lee said new guidelines "to improve the potential biodiversity of skyscraper greenery" will be introduced in the forthcoming instalment of the programme, adding that URA is discussing the scheme's guidelines with industry professionals, academics and nature groups. THE STRAITS TIMES