

## ESG PUSH

# SP Group to invest S\$40-60m in new district cooling system

Brownfield project at Tampines will help town centre reduce carbon emissions and save energy

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AFTER taking over 2 years to convince building owners at Tampines town centre to be part of its vision of setting up Singapore's first district cooling system at a brownfield site, SP Group will go ahead and invest S\$40 million to S\$60 million to make it happen.

This comes as owners of 8 buildings there – including CapitaLand, Ascendas Reit, Frasers Property and OCBC – have decided to subscribe to the solution that will see some buildings letting up their excess chiller capacity for the rest of the buildings in the network.

The buildings to be connected via a 1 km underground piping network of chilled water are Tampines Mall, Century Square, Tampines 1, OCBC Tampines Centre 2, Telepark, CPF Tampines Building, NTUC Income Tampines Junction and Our Tampines Hub.

Once the network is up and running by the first half of 2025, existing in-building chiller plants at Our Tampines Hub, Tampines 1 and Century Square will cool 4 other buildings, which can then do away with their own chiller plants completely.

The 3 supply nodes were selected based on their excess cool-

ing capacity and superior energy efficiency factor.

The eighth building, Ascendas Reit's Telepark, will be plugged into the network later as it was identified as a possible fourth supply node. SP has signed a letter of intent with the real estate investment trust (Reit) to build, own and operate a new chiller plant there.

Owners of the first 7 buildings – CapitaLand, CPF Board, Frasers Property, NTUC Income, OCBC and People's Association – separately signed a supply agreement with SP Group at Our Tampines Hub on Monday (Apr 18).

At present, each building runs on its chiller plant systems, so excess cooling capacity is catered for but "stranded", leading to a situation where assets that can support 19,000 refrigeration tons (RTs) of cooling capacity are installed, but only up to 7,000 RTs are used.

The new system, which SP Group will take over to own and operate on a tenured basis, will tighten the buildings' cooling capacity to 10,500 RTs. This not only allows the chiller systems to operate more efficiently, it also frees up leasable space for the various building owners.

All in, the cooling network will help the town centre reduce 1,359 tonnes of carbon emissions a year,

which is equivalent to taking 1,236 cars off the roads annually, SP Group claimed.

The network is also expected to lead to annual energy savings of more than 2.8 million kilowatt-hour – energy enough to power about 905 3-room HDB households for a year – the utilities group added.

The initial plan drawn up by SP Group and state investor Temasek was to include 6 other buildings at the Tampines regional centre. They are UOB Tampines Centre, OCBC Tampines Centre One, NTUC Income Tampines Point, 7 and 9 Tampines Grande, Tampines Plaza 1 and Tampines Plaza 2.

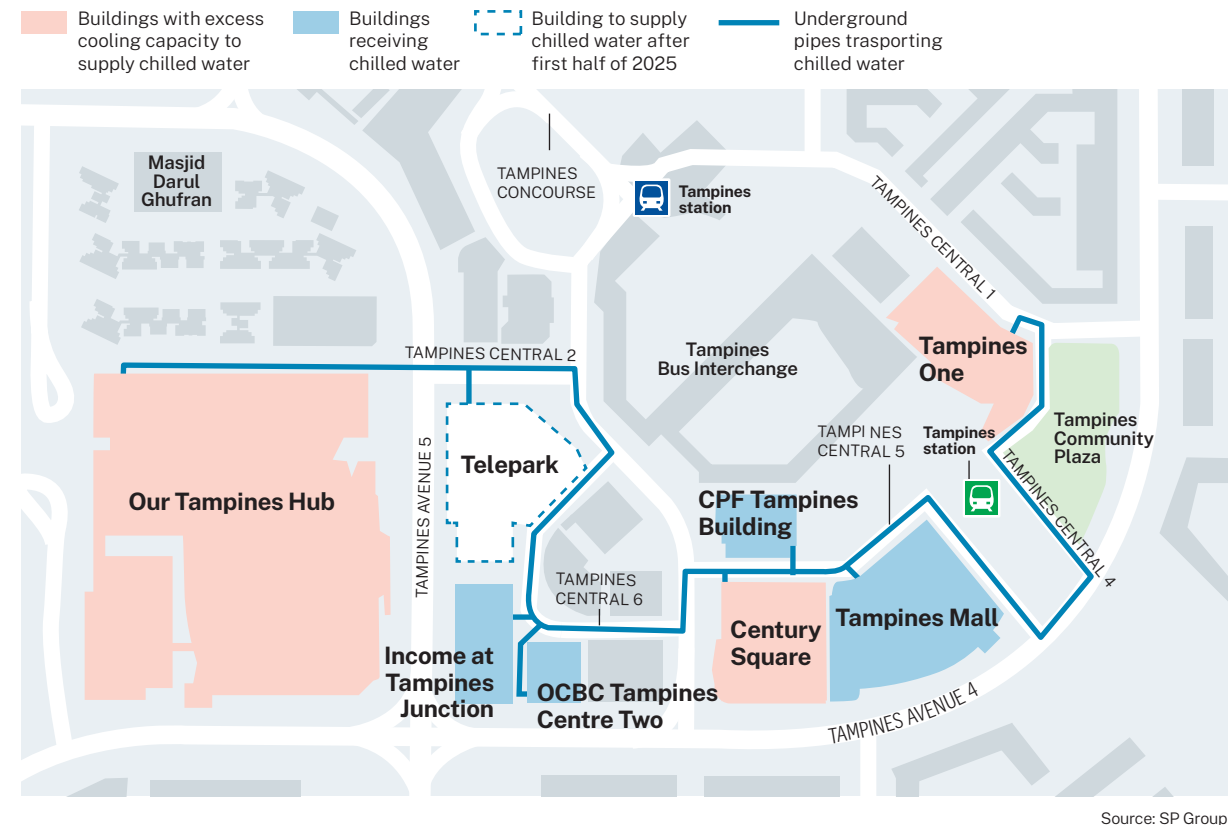
If all 14 buildings were plugged into the district cooling network, 2,475 tonnes of carbon emissions would have been cut annually, according to findings of a feasibility study which SP Group and state investor Temasek had published last August. This is equivalent to taking 2,250 cars off the road a year, or an 18 per cent fall in the buildings' carbon emissions.

SP Group told BT the 6 buildings were excluded for now due to a combination of technical and commercial factors.

Commenting on Monday's milestone, adviser to Tampines grassroots organisations Masagos Zulkifli, who was present at the signing ceremony, said the project is "crucial to Singapore" and its significance "should not be overlooked".

This is because it illustrates how

## Tampines' upcoming district cooling network



Source: SP Group

sustainable solutions can be integrated to transform existing townships, the former minister for environment and water resources said, as he noted that a significant proportion of Singapore's building stock will continue to exist in 2050.

"In international forums, pressure to show and prove commitment to adaptation and mitigation for climate change is mounting. This project is therefore crucial to Singapore," said Masagos, who is currently minister for social and family development.

"The energy and cost savings, as well as reduction in carbon emissions enjoyed by building owners prove that with the right solutions, doing good and doing well are not mutually exclusive and will address our challenge posed by climate change."

In a statement to the press, SP Group and Temasek further noted

that more than 80 per cent of Singapore's landscape is brownfield, and pointed out that air-conditioning can utilise up to 50 per cent of a building's energy consumption.

"A wider application of such a sustainable cooling solution will contribute towards the energy goals under the Singapore Green Plan 2030 and Singapore's climate targets of reaching net zero by or around mid-century," they said.

Other perks for building owners include combined life-cycle economic benefits of up to S\$50.8 million over 30 years, they said. Current unutilised cooling capacity can also be cut by up to 42 per cent, freeing up chiller plant gross floor area that can be converted to commercial and lifestyle spaces, they added.

Referring to buildings as large carbon emitters, Frasers Property Retail's chief executive officer Low

Chee Wah said: "In time, we hope that the success of this network will attract the participation of other building owners and industry players."

CapitaLand Investment's chief sustainability officer Lynette Leong said the group had adopted district cooling for 9 of its properties in Singapore and China, and looks forward to further reducing its energy consumption and carbon emissions with the Tampines project.

OCBC's group chief operating officer Lim Khiang Tong said the bank's involvement was based on OCBC's purpose to embed "responsible and sustainable business practices into everything we do".

CPF Board's chief executive officer Augustin Lee, meanwhile, said the project could reduce the statutory board's carbon emissions by about 6 per cent over 30 years.