

## News Release

### **SUSTAINABLE COOLING AT TAMPINES – SINGAPORE’S FIRST TOWN CENTRE TO BE RETROFITTED WITH DISTRICT COOLING**

- *SP Group, supported by Temasek, Tampines Group Representation Constituency (GRC) and the Ministry of Sustainability and the Environment (MSE), will install and operate distributed district cooling at seven buildings in Tampines Central by 2025.*

**Singapore, 18 April 2022** – Tampines will be Singapore’s first town centre to be retrofitted with an interconnected, sustainable cooling solution designed by SP Group.

Seven existing buildings across the town centre – Century Square, CPF Tampines Building, Income At Tampines Junction, OCBC Tampines Centre 2, Our Tampines Hub, Tampines Mall and Tampines One, will be retrofitted to plug into this novel distributed district cooling (DDC) network, which is specially engineered for brownfield developments to provide the same cooling comfort while saving energy and lowering carbon emissions at the same time. The network will be completed and operational in the first half of 2025.

Signing the supply agreement at Our Tampines Hub earlier today, and becoming the first batch of building owners to join the network were CapitaLand, CPF Board, Frasers Property, NTUC Income, OCBC Bank, and People’s Association. The signing ceremony was witnessed by Mr Masagos Zulkifli, Adviser to Tampines GROs, Minister for Social and Family Development, Second Minister for Health and Minister-in-charge of Muslim Affairs. The event is held in conjunction with the CleanEnviro Summit Singapore and the Singapore International Water Week organised by the National Environment Agency and PUB respectively.

Instead of constructing a new centralised cooling plant, a DDC utilises existing in-building chiller plants that have been carefully evaluated. A few injection nodes are then selected based on their existing excess cooling capacity and superior energy efficiency factor.

By connecting the injection nodes through a piping network, the rest of the buildings can obtain chilled water for their cooling needs, thereby doing away with the need for their own chiller plants completely. This in turn optimises the installed cooling capacity, ensures chiller systems operate at maximum efficiency, and leads to more benefits including reducing equipment costs and freeing up leasable space.

Of the seven buildings in Tampines plugging into the DDC network, Century Square, Our Tampines Hub and Tampines One will serve as injection nodes. In addition, SP has signed a Letter of Intent (LOI) with Ascendas Reit to design, build, own and operate the chiller plant at Telepark. This will ready Telepark to be a potential injection node for the network to serve future demands.

All in, this brownfield cooling network will help the town centre reduce its carbon emissions by 1,359 tonnes annually, equivalent to removing 1,236 cars off our roads. It will also achieve energy savings of more than 2,800,000 kilowatt-hour (kWh) annually, which can power more than 905 three-room HDB households for a year.

The realisation of this green solution was brought about through a partnership between Tampines GRC, MSE, Temasek and SP Group, with the strong support of building owners. It comes just eight months after a successful [feasibility study](#) of brownfield distributed district cooling was published in August 2021, affirming the various parties' commitment to the nation's sustainable development.

Mr Masagos Zulkifli, Adviser to Tampines GROs, Minister for Social and Family Development, Second Minister for Health and Minister-in-charge of Muslim Affairs said: "The significance of this project should not be overlooked because it illustrates how sustainable solutions can be integrated to transform existing townships. 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 given that a significant proportion of our building stock today will continue to exist in 2050. 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.”

“Novel sustainable solutions such as distributed district cooling can help scale practical and sustainable benefits not only for cities, but also for businesses as well as communities around the world. We will continue partnering like-minded organisations and businesses to catalyse breakthrough technologies that mitigate the impact of the climate crisis, and pave the way to a low-carbon future,” said Dr Steve Howard, Chief Sustainability Officer, Temasek.

SP’s Group Chief Executive Officer, Mr Stanley Huang, said, “The widespread implementation of low-carbon technologies like distributed district cooling can make a significant contribution towards Singapore’s climate ambitions. We are encouraged by the strong support from building owners for this sustainable cooling solution, which will contribute towards Tampines’ Eco-Town ambitions and will also create a long-term sustainable impact for Singapore’s built environment.”

The introduction of a brownfield DDC at Tampines supports the Singapore Green Plan 2030, which is a whole-of-nation movement to advance Singapore’s national agenda on sustainable development. Cooling contributes to Singapore’s annual carbon emissions, as air-conditioning can utilise up to 50 per cent of a building’s energy consumption. With more than 80 per cent of Singapore’s landscape being brownfield, a wider application of such a sustainable cooling solution will contribute towards the energy goals under the Green Plan and Singapore’s climate targets of reaching net zero by or around mid-century.

In addition to the energy savings and reduction in carbon emissions, the DDC network will provide building owners combined life-cycle economic benefits of up to \$50.8 million over 30 years. Through interconnection across the various buildings, the DDC will also reduce the current unutilised cooling capacity by up to 42 per cent, freeing up chiller plant gross floor area (GFA) that can be converted to commercial and lifestyle spaces.

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## **Quotes from Building Owners**

### **Quote from CapitaLand Investment<sup>1</sup>**

“As a global sustainability leader consistently recognised as one of the most sustainable corporations in the world, CapitaLand has played an active role in greening the built environment to reduce our carbon footprint. Sustainability is integrated into everything we do, from investment to property design, development and operations. CapitaLand has adopted district cooling for nine of our properties in Singapore and China. As one of the pioneers to join Singapore’s first brownfield distributed district cooling network, we look forward to further reducing energy consumption and carbon emissions at our properties in line with [CapitaLand’s 2030 Sustainability Master Plan](#) to increase our sustainability efforts globally. We are also intensifying our global search for innovations through our CapitaLand Sustainability X Challenge and stepping up our adoption of sustainable finance, among others. As we grow our business, we remain committed to creating a positive impact to the environmental and social well-being of the communities.”

Ms Lynette Leong, Chief Sustainability Officer, CapitaLand Investment

### **Quote from CPF Board**

“At CPF, it’s ingrained in our culture to take a long view to build a strong foundation for citizens’ retirement needs. It is our collective responsibility to tread lightly on this planet and do our part for long-term sustainability. This Distributed District Cooling system could not have been more timely. It will reduce our carbon emissions by about 6% over 30 years.”

Mr Augustin Lee, Chief Executive Officer, CPF Board

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<sup>1</sup> CapitaLand Investment is the operator of Tampines Mall – owned by CapitaLand Integrated Commercial Trust, and Telepark – owned by Ascendas Reit

## **Quote from Frasers Property**

“As we move towards being a net-zero carbon corporation by 2050, sustainability is a key business priority for Frasers Property. Being one of the leading suburban mall owners in Singapore, we have a responsibility to build a sustainable environment as buildings are large emitter of carbon. The Tampines DDC project is a ground-breaking initiative which holds significant potential and positive impact for Singapore, and is one of our strategic partnerships with like-minded corporations to support and ensure a sustainable built environment. We are glad to be able to contribute to this project with Tampines One and Century Square serving as two out of the three injection nodes to produce and supply chilled water to the precinct, and look forward to seeing the township reap the benefits of this plan. In time, we hope that the success of this DDC network will attract the participation of other building owners and industry players, to contribute to the ever-important goal of promoting sustainable living and achieving a greener future for all.”

Mr Low Chee Wah, Chief Executive Officer, Frasers Property Retail

## **Quote from NTUC Income**

“As a well-known landmark building at Tampines Central, it is only apt for Income at Tampines Junction to be amongst the first batch of buildings to join the distributed district cooling network. We look forward to doing our part in Singapore’s efforts towards climate change initiatives while reaping the benefits of energy savings and lower carbon emissions.”

Mr Teo Yung Fung, Chief Investment Officer, Mercatus Co-operative Limited (on behalf of NTUC Income)

## **Quote from OCBC Bank**

“Embedding responsible and sustainable business practices into everything we do is integral to OCBC’s purpose. Climate change and its effects have made sustainability a fundamental business driver and an agenda for collective action. We are pleased to be partnering like-minded organisations such as SP Group and our neighbouring building owners on this initiative that seeks to reduce energy consumption and our carbon footprint.”

Mr Lim Kiang Tong, Group Chief Operating Officer, OCBC Bank

## **Quote from People’s Association**

“Our Tampines Hub is a Green Mark Platinum certified building. Since the planning and development of Our Tampines Hub, People’s Association has paid special attention and incorporated various sustainable and eco-friendly elements throughout the entire building. These include but is not limited to harnessing solar energy to generate power and electricity, an on-site wastes treatment machine to convert food wastes to non-potable water, liquid plant nutrients and organic fertilisers and installation of Ethylene Tetrafluoroethylene (ETFE) roofs to lower temperature in the building. The largest number of Electric Vehicle (EV) charging stations was also launched in 2018 in Our Tampines Hub to encourage EV adoption. As one of the major injection nodes for the Distribution District Cooling in Tampines Central, the participation by Our Tampines Hub will achieve reduction in both electricity consumption and carbon footprint which are part of People’s Association effort towards Singapore’s agenda on sustainable development.”

Mr Lim Hock Yu, Chief Executive Director, People’s Association

## **About Temasek**

Temasek is an investment company with a net portfolio value of S\$381 billion as at 31 March 2021.

Our Temasek Charter defines our three roles as an Investor, Institution and Steward, and shapes our ethos to do well, do right, and do good.

As a provider of catalytic capital, we seek to enable solutions to key global challenges. We deploy financial capital to stimulate innovation and growth; develop human capital to uplift capabilities and enhance potential; enable natural capital and foster sustainable solutions for the climate and a better living environment; and seed social capital to transform lives for a more inclusive and resilient world.

Sustainability is at the core of all that we do. We actively seek sustainable solutions to address present and future challenges, as we capture investible opportunities to bring about a sustainable future for all.

Temasek has had overall corporate credit ratings of Aaa/AAA by rating agencies Moody's Investors Service and S&P Global Ratings respectively, since our inaugural credit ratings in 2004.

Headquartered in Singapore, we have 13 offices in 9 countries around the world: Beijing, Hanoi, Mumbai, Shanghai, Shenzhen and Singapore in Asia; and London, Brussels, New York, San Francisco, Washington DC, Mexico City, and Sao Paulo outside Asia.

For more information on Temasek, please visit [www.temasek.com.sg](http://www.temasek.com.sg)

For Temasek Review 2021, please visit [www.temasekreview.com.sg](http://www.temasekreview.com.sg)

## **About SP Group**

SP Group is a leading utilities group in the Asia Pacific, empowering the future of energy with low-carbon, smart energy solutions for its customers. It owns and operates electricity and gas transmission and distribution businesses in Singapore and Australia, and sustainable energy solutions in Singapore, China and Vietnam.

As Singapore's national grid operator, about 1.6 million industrial, commercial and residential customers benefit from its world-class transmission, distribution and market support services. These networks are amongst the most reliable and cost-effective world-wide.

Beyond traditional utilities services, SP Group provides a suite of sustainable and renewable energy solutions such as microgrids, cooling and heating systems for business districts and residential townships, solar energy solutions, electric vehicle fast charging and digital energy solutions for customers in Singapore and the region.

For more information, please visit [spgroup.com.sg](http://spgroup.com.sg) or for follow us on Facebook at [fb.com/SPGroupSG](https://fb.com/SPGroupSG), on LinkedIn at [spgrp.sg/linkedin](https://spgrp.sg/linkedin) and on Twitter @SPGroupSG.