

Enhanced bilateral collaboration framework for Tianjin Eco-City project, Upgraded National Green Development Demonstration Zone, and accompanying 15 initiatives announced in 2023

At the 15th Tianjin Eco-City Joint Steering Council meeting held in Tianjin on 7 December 2023, Singapore's Ministry of National Development (MND), China's Ministry of Housing & Urban-Rural Development (MoHURD) and Tianjin Municipal Government (TMG) announced a new collaboration framework for the Sino-Singapore Tianjin Eco-City project.

Anchored on strengthening the Eco-City as a pathfinder for climate-friendly cities, the **new framework broadens bilateral cooperation to span green growth, low-carbon living, ecological resilience, innovation and talent development, and governance.** Under the framework, both sides have put together 15 initiatives to foster wide-ranging cooperation across the public sector, businesses and academia in both countries. **Both sides will also jointly develop the Eco-City as an upgraded 'National Green Development Demonstration Zone' – a zone that can exemplify high-quality low-carbon economic growth and serve as a model for other cities in China and beyond. With these, the Eco-City is amongst the first demonstrations of the upgraded 'All-Round High-Quality Future-Oriented' bilateral partnership between Singapore and China.**

Enhanced Cooperation in Climate-Friendly Development

To foster enhanced cooperation on climate-friendly development between both countries, Singapore's Minister for National Development Desmond Lee signed the following two Memoranda of Understanding (MOU) with China's Minister of Housing and Urban-Rural Development Ni Hong and Tianjin Mayor Zhang Gong respectively.

1) *MOU between MND and MoHURD on Strengthening Cooperation on Climate-Friendly and Liveable Cities*

Under the MOU, both ministries will enhance cooperation on promoting the development of climate-friendly and liveable cities. This includes launching an annual MND-MoHURD Ministerial-level Leadership Dialogue on sustainability and liveability, as well as strengthening officials' exchanges on these topics. The inaugural Ministerial Leadership Dialogue was held on 15 May 2023 in Beijing. A series of MND-MoHURD officials' exchanges has started in Singapore since April 2023.

Both ministries will also support the Eco-City's growth as a test bed for climate-friendly development and broaden collaboration in the areas identified under the project's new collaboration framework.

2) *MOU between MND and Tianjin Municipal Government (TMG) on Strengthening Tianjin Eco-City's Green and Low-Carbon Environment and Economy to Achieve High-Quality Development*

This MOU will see both sides enhance cooperation to support high-quality development in the Eco-City through creating a low-carbon living environment and facilitating green growth.

Both sides will expand cooperation to cover the wide-ranging domains under the new collaboration framework and have already kickstarted initiatives to commemorate the Eco-City's 15th anniversary. A new series of reciprocal job attachments focused on sustainability was launched in September 2023. One National Parks Board (NParks) officer has since completed an attachment at China's Eco-City Administrative Committee (ECAC), and two ECAC officers did a similar stint at NParks and PUB (Singapore's National Water Agency). In addition, an officials' exchange programme between Tianjin and Singapore was initiated in Tianjin this year, with a first delegation of 10 Singapore officials visiting Tianjin from 25 to 28 September 2023 for knowledge exchange.

Green Growth

Building on the Eco-City's strong foundations in creating a sustainable and highly liveable home in the last 15 years, Singapore and Tianjin will strengthen the Eco-City as an incubator of low-carbon businesses.

3) Low-Carbon and Smart City Alliance between Keppel Corporation and Singapore SMEs

In support of this vision, Keppel Corporation has established a new industry alliance of enterprises developing solutions for low-carbon and smart cities, which will leverage the Eco-City platform to accelerate the expansion of Singapore enterprises in China. To date, four SMEs in the Alliance working on nano disinfection coating (Golden Forest), eco-friendly furniture (RenewMaterial), digital visualisation (Kardia World), and marketing (SPACElogic) have piloted their solutions in the Eco-City.

The Eco-City will also provide a vibrant R&D and talent ecosystem to spur net-zero innovation and catalyse the growth of low-carbon business ideas. To this end, both sides will strengthen joint innovation and talent exchanges through the following initiatives.

4) *Strategic Cooperation Agreement between SUTD, Eco-City Administrative Committee and Sino-Singapore Tianjin Eco-City Investment & Development Co. Ltd on launch of new SUTD Eco-City Research and Innovation Centre*

This Centre will support joint R&D projects, enterprise development, education and training, and talent exchanges in low-carbon innovation. SUTD is the first Singapore institute of higher learning to set up such a centre in the Eco-City. The Centre will be housed within the Low-Carbon Living Lab building in the Eco-City.

Under the auspices of the Centre, SUTD has also launched a new undergraduate programme in sustainable built environment with a component based in the Eco-City. Students enrolled in this programme will have the opportunity to participate in study trips, university exchanges and internships in Tianjin and the Eco-City. This programme will provide Singaporean students with greater exposure to green economy solutions and developments in China.

Collectively, this Centre holds potential to further strengthen the Eco-City as a 'living lab' for innovative development of green and low-carbon technologies, as well as nurture talents for green growth sectors in both countries.

5) *New TEC Collaborative Innovation Centre for Green and Low-Carbon Technologies*

This Centre will support a flagship R&D project between National Research Foundation Singapore and China's Ministry of Science & Technology in the fields of water and environment. It is set up by Sino-Singapore Tianjin Eco-City Investment & Development Co. Ltd, in collaboration with Tiangong University and partners. It will be sited within the Low-Carbon Living Lab building in the Eco-City.

6) *MOU between MoHURD Centre of Science and Technology and Industrialisation Development and NUS Department of Architecture, College of Design and Engineering*

Under this MOU, both sides will strengthen mutual learning on urban-rural development in areas such as research on technologies and financial support for green and low-carbon urban development, exchange of experience on construction standards for residential buildings, as well as sharing of relevant insights from bilateral cooperation projects such as the Eco-City.

A strong low-carbon port economy in Tianjin, anchored by Tianjin Port, can enhance the Eco-City's competitiveness and propel its development as an engine of green growth. This can also unlock new economic opportunities from the decarbonisation of the maritime industry for both sides. To realise this potential, both sides' port authorities and operators have signed the following MOUs to deepen cooperation on green and digital shipping.

7) *MOU between Maritime & Port Authority of Singapore (MPA) and Tianjin Municipal Transport Commission on Cooperation on Green and Digital Shipping Corridor*

Under this MOU, Singapore and Tianjin will establish a new Green and Digital Shipping Corridor (GDSC) – the first such corridor between Singapore and China. The GDSC will serve as a valuable testbed for both countries to pilot and trial digital solutions, alternative fuels and technologies, as well as facilitate manpower development to support the decarbonisation and digitalisation of the shipping industry.

Singapore and Tianjin will work with the research community, the institutes of higher learning, and industry stakeholders such as shipping lines, port operators, shipbuilders, classification societies, and bunker suppliers to (a) enable more efficient port clearance through digital exchanges, (b) encourage the offtake of zero or near-zero greenhouse gas emission fuels and adoption of new fuel technologies, (c) spur innovation and support the growth of the maritime startups community, and (d) facilitate manpower training and professional development.

8) *MOU between MPA and Tianjin Port & Shipping Authority on Maritime Cooperation*

This MOU complements the Singapore-Tianjin cooperation on GDSC. Under this MOU, both sides will cooperate in areas such as (a) discussion on issues related to maritime digitalisation and decarbonisation; (b) exchange of information on port and shipping developments, policies and regulations, maritime training etc; (c) support talent exchanges in maritime industry; and (d) sharing of experiences on the development of shipping and regulatory frameworks.

9) *MOU between PSA International and Tianjin Port Group on Further Strategic Cooperation*

Building on their longstanding cooperation, both sides will enhance their partnership under this MOU in areas such as (a) digitalisation and smart port equipment; (b) renewable energy; (c) talent exchange programme and (d) logistics parks.

10) *MOU between PSA International and Tianjin Port Group on New Energy*

This MOU complements the Further Strategic Cooperation MOU between PSA International and Tianjin Port Group. Under this MOU, both sides will explore joint investment in new energy projects and strengthen cooperation in areas such as wind power and photovoltaics.

Low-Carbon Living

In the next bound of the Eco-City's development, both sides will continue to strengthen the Eco-City as a model for climate-friendly urban living and a thriving 'living lab' for innovative net-zero solutions.

11) *Green Innovation Park in TEC's City Centre*

The Eco-City's development commenced with the 8 km² Start-Up Area located in the south of the Eco-City. Today, the Eco-City is home to over 150,000 people and 30,000 companies. A range of residential developments, community and recreational spaces, schools as well as workplaces have also been completed to make the Eco-City an attractive and liveable home.

This year, works will commence for a Green Innovation Park in the city centre. The groundbreaking ceremony was officiated on 7 December 2023 by Singapore's Deputy Prime Minister and Minister for Finance Lawrence Wong and China's Executive Vice Premier Ding Xuexiang. The Green Innovation Park will offer further possibilities for piloting and scaling innovative net-zero solutions in Tianjin and beyond.

Ecological Resilience

Over the years, both sides have jointly pushed boundaries in the harmonious integration of nature and urban living in the Eco-City. In 2016, the National Parks Board and Eco-City Administrative Committee (ECAC) first signed a MOU to jointly develop the Sino-Singapore Friendship Garden in the Eco-City, which has since been completed. In 2021, they signed another MOU on collaboration to enhance the Eco-City as a 'Garden City' to bring nature even closer to the Eco-City's residents. Building on this longstanding cooperation in the Eco-City, both sides will deepen mutual learning on strengthening ecological systems in support of nature-based climate action.

12) *MOU between NParks and ECAC on Contemplative Landscape and Therapeutic Gardens*

In a latest MOU inked in 2023, NParks and ECAC will commence a new project on contemplative landscape design and therapeutic gardens. Both sides will embark on R&D in these areas and joint formulation of related strategies and guidelines. They will also use the Friendship Garden as a ‘sandbox’ for nature-based strategies that enhance our resilience against climate change, while improving communities’ well-being.

Innovation and Talent Development

In support of efforts to jointly seize new opportunities in the green and digital economy, both sides will tap on the Eco-City project to catalyse collaborations that enhance innovation capabilities and talent development efforts in various domains.

13) *MOU between Temasek Polytechnic (TP) and Tianjin Eco-City Investment and Development Co. Ltd (TECID)*

For example, TECID is the main operation and management arm of TP’s current MOU partner, the National Animation Industry Park (NAIP) in the Eco-City. Under this new MOU, the collaboration with TECID will go beyond NAIP and provide ample opportunities for TP, especially in the overseas student internship as well as innovation and entrepreneurship space. This will offer Singapore students more opportunities to gain industry exposure in China.

Governance

Both sides will enhance the Eco-City as a focal platform for deepening mutual learning on governance for low-carbon growth and other areas of mutual interest through the following MOUs.

14) *MOU between Civil Service College and Tianjin Administrative Institute*

This MOU aims to strengthen people-to-people ties and capability-building of both sides' public service. Under this MOU, both sides will (a) conduct study visits, (b) jointly organise training and exchange programmes for visiting scholars, as well as (c) share experiences in officials' training, teacher training, pedagogies, education reforms and public service.

15) *MOU between KK Women's and Children's Hospital and Tianjin Central Hospital of Gynaecology and Obstetrics*

Over the last 15 years, the Eco-City has catalysed new partnerships and mutual learning platforms in sectors beyond the built environment. This MOU is a latest example. Under this MOU, both hospitals will deepen collaboration through fostering bilateral clinical exchanges and scientific research cooperation.