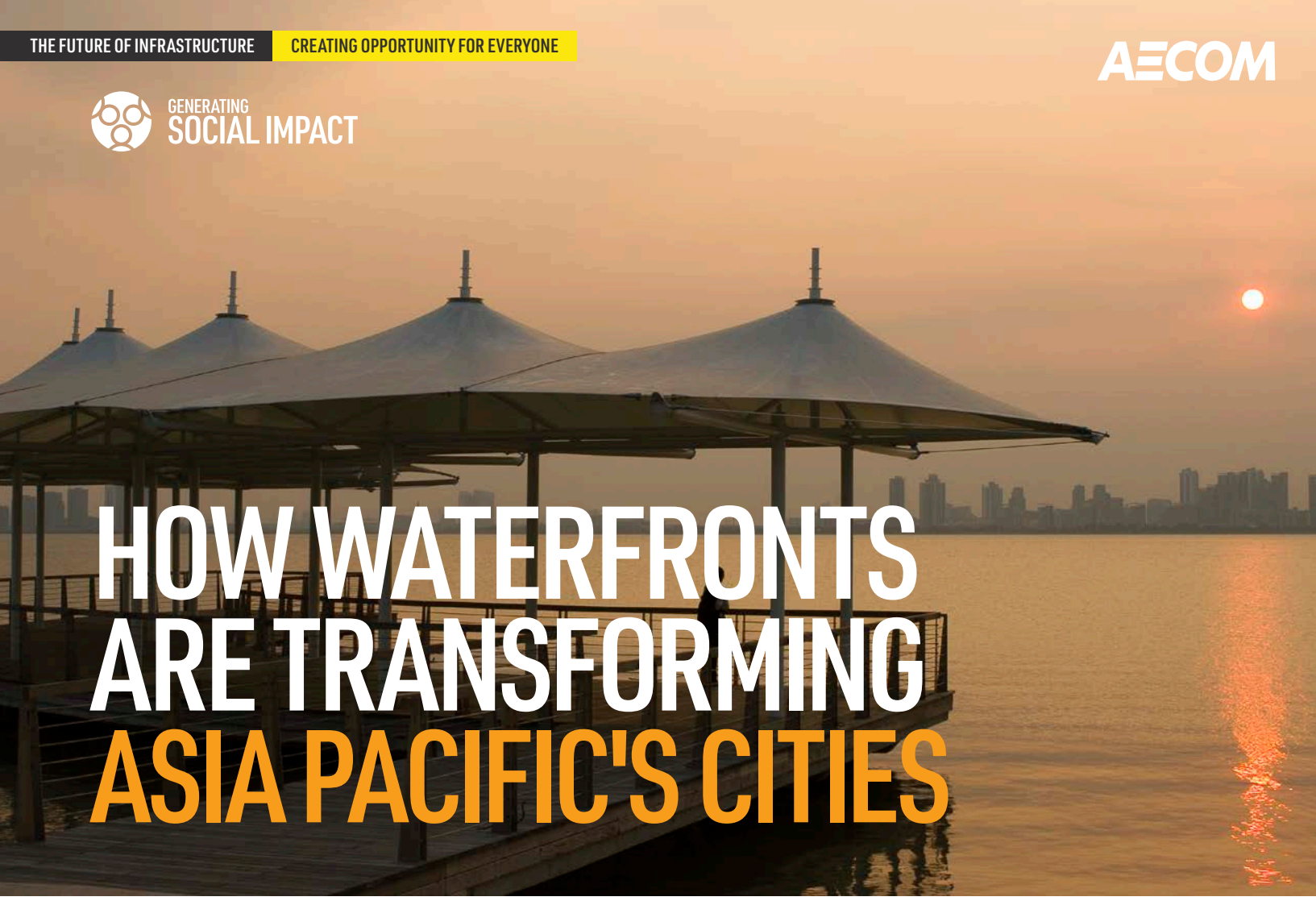
AECOM

GENERATING SOCIAL IMPACT



HOW WATERFRONTS ARE TRANSFORMING ASIA PACIFIC'S CITIES

In the first of a series covering our participation in the 2019 Urban Land Institute Asia Pacific Summit, landscape specialist **Yaping Chai** discusses the need for, and essential requirements of, successful waterfront restoration projects to drive economic growth, boost urban water resources and improve people's lives.

There are currently 2.1 billion people living in cities across Asia Pacific - home to 17 of the world's 28 megacities -with that figure expected to grow by an additional billion people by 2040, nearly two-thirds of the region's population.

The pressure on urban water resources

Set to continue, this increasing urbanisation is putting pressure on cities' water resources. For example, overpopulation, informal settlements, point-source pollution and other causes have already resulted in the waters of many city lakes and rivers becoming derelict, with a lack of funding and integrated solutions for water infrastructure impacting the resilience of urban environments.

The potential for growth

At the same time, cities with neglected and polluted waterfronts miss out on important growth opportunities. Successful waterfront cities attract both people and money. They create energy and character, and bring a certain vibrancy to the surrounding communities while contributing to their environmental and economic resilience. With amenities such as beaches, beautiful harbours, boardwalks and green spaces, they are attractive places to live, work and visit.

2.1BN

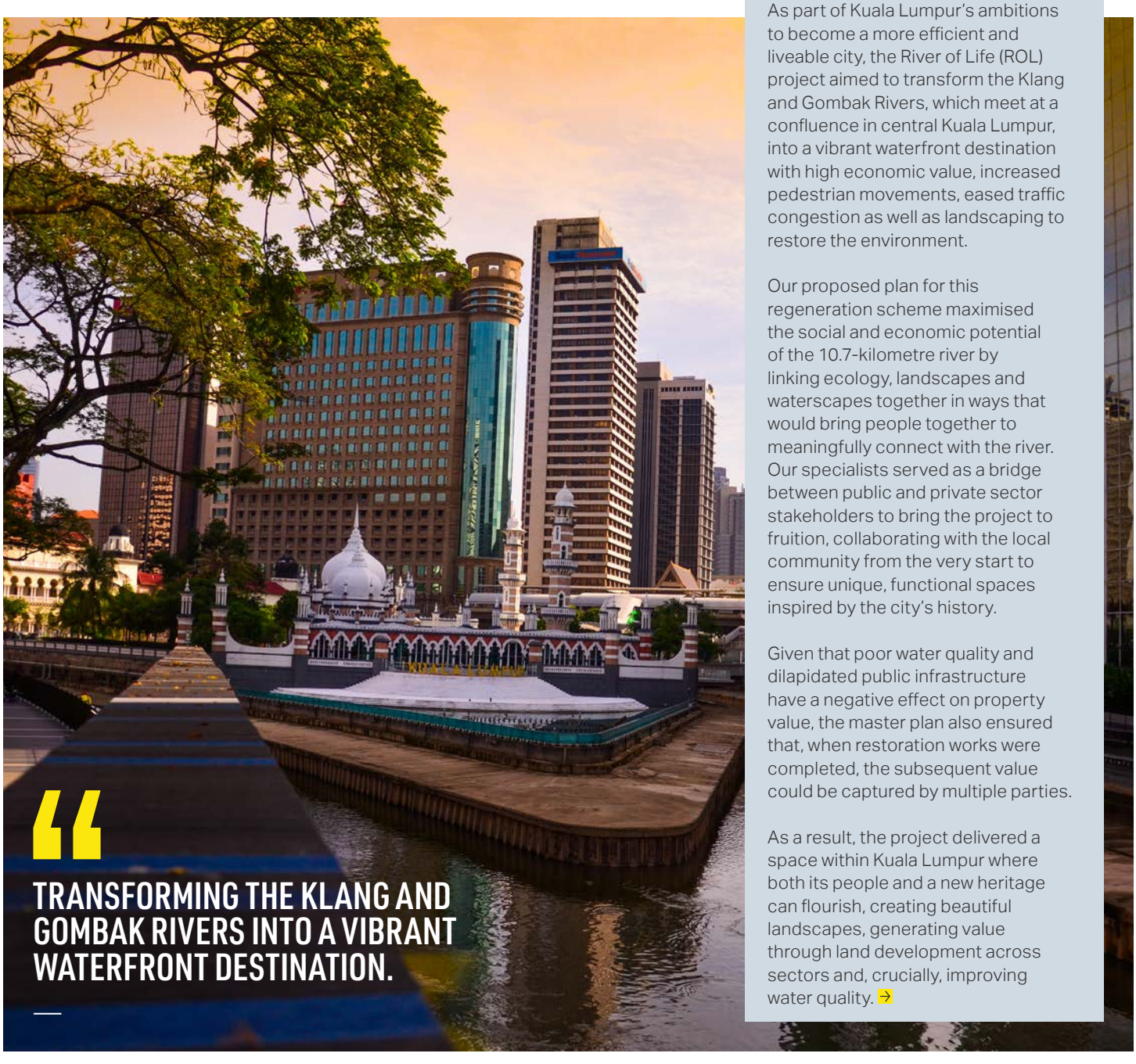
Currently 2.1 billion people living in cities across Asia Pacific and expected to grow by an additional billion by 2030

Holistic restoration

For cities working to restore their waterfront to seize these opportunities for growth, a holistic approach is key. Restoration that employs an integrated development strategy and alignment of investment for water-related infrastructure can help to reconnect people with water. It can revitalise and enhance their quality of living, while ensuring that an area's cultural heritage is maintained and even celebrated.

To fully realise the socio-economic benefits of these kind of projects, AECOM has developed a seven-tier planning process, focusing on connecting the waterway with communities, reinforcing cultural values and contributing to economic development. Our process comprises: an understanding and management of the watershed hydrology and channel hydraulics; stabilising flow regimes; restoring geomorphology; improving water quality; enhancing ecological structure and function; transforming the landscape and, finally, supporting the local culture.

Here are two projects — Kuala Lumpur's River of Life and the Suzhou Jinji Lake in China, each of which utilise open spaces for different functions to support a wide range of users — where we've collaborated with governments and communities using our seven-tier approach to revitalise city waterfronts and resources, strengthen resilience and improve quality of life:



"TRANSFORMING THE KLANG AND GOMBAK RIVERS INTO A VIBRANT WATERFRONT DESTINATION.

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CASE STUDY

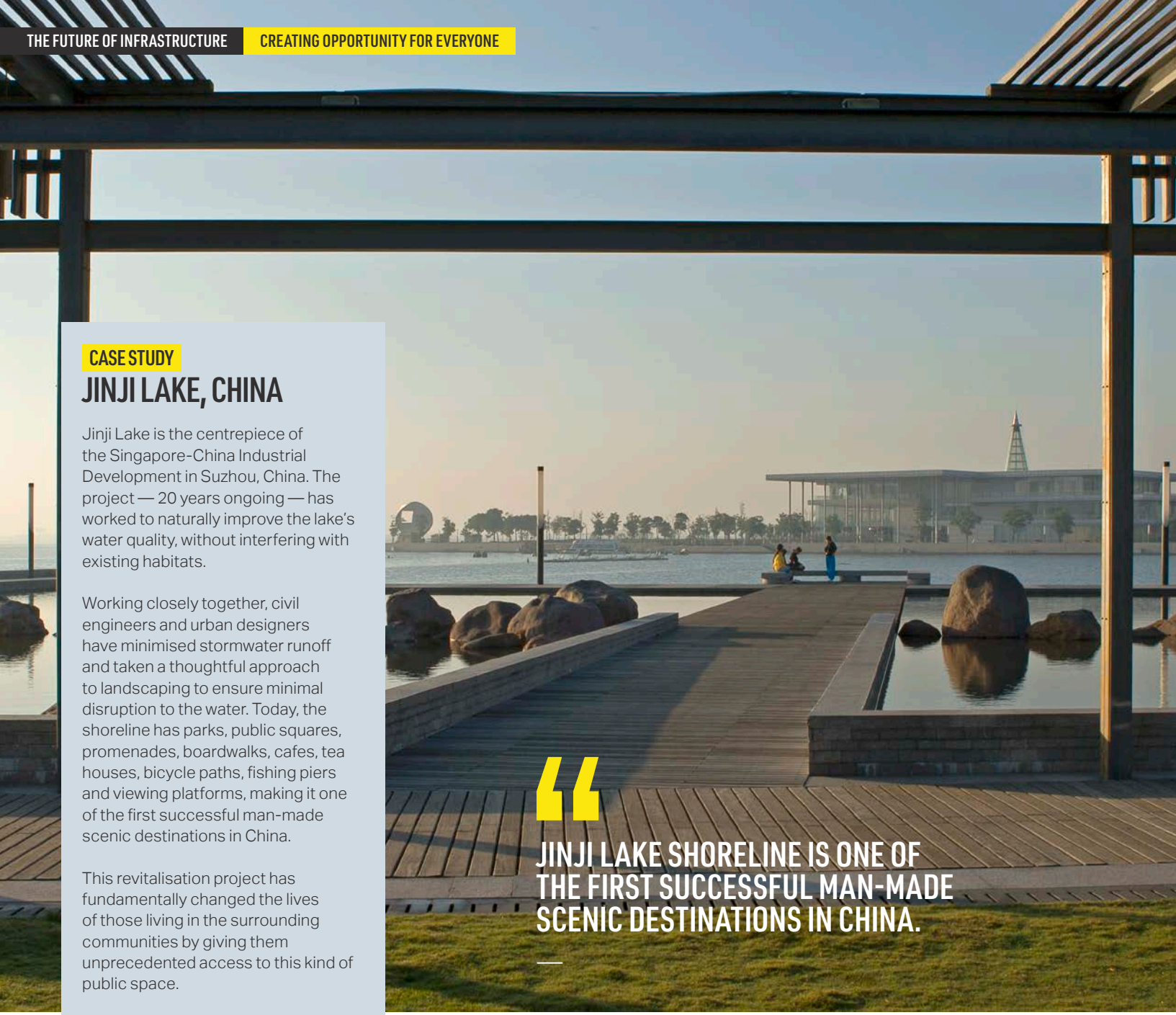
THE RIVER OF LIFE, KUALA LUMPUR

As part of Kuala Lumpur's ambitions to become a more efficient and liveable city, the River of Life (ROL) project aimed to transform the Klang and Gombak Rivers, which meet at a confluence in central Kuala Lumpur, into a vibrant waterfront destination with high economic value, increased pedestrian movements, eased traffic congestion as well as landscaping to restore the environment.

Our proposed plan for this regeneration scheme maximised the social and economic potential of the 10.7-kilometre river by linking ecology, landscapes and waterscapes together in ways that would bring people together to meaningfully connect with the river. Our specialists served as a bridge between public and private sector stakeholders to bring the project to fruition, collaborating with the local community from the very start to ensure unique, functional spaces inspired by the city's history.

Given that poor water quality and dilapidated public infrastructure have a negative effect on property value, the master plan also ensured that, when restoration works were completed, the subsequent value could be captured by multiple parties.

As a result, the project delivered a space within Kuala Lumpur where both its people and a new heritage can flourish, creating beautiful landscapes, generating value through land development across sectors and, crucially, improving water quality.



CASE STUDY

JINJI LAKE, CHINA

Jinji Lake is the centrepiece of the Singapore-China Industrial Development in Suzhou, China. The project — 20 years ongoing — has worked to naturally improve the lake's water quality, without interfering with existing habitats.

Working closely together, civil engineers and urban designers have minimised stormwater runoff and taken a thoughtful approach to landscaping to ensure minimal disruption to the water. Today, the shoreline has parks, public squares, promenades, boardwalks, cafes, tea houses, bicycle paths, fishing piers and viewing platforms, making it one of the first successful man-made scenic destinations in China.

This revitalisation project has fundamentally changed the lives of those living in the surrounding communities by giving them unprecedented access to this kind of public space.

In addition to the social value generated by these works, Jinji Lake has attracted considerable international investment, with the neighbouring Suzhou Industrial Park (SIP) home to some 25,000 companies. From when it was created more than 25 years ago until today, SIP[1] has reached more then US$1 trillion in foreign trade volume and made more than 900 billion yuan in fixed asset investments, while utilising US$31.27 billion in foreign capital.

> "JINJI LAKE SHORELINE IS ONE OF THE FIRST SUCCESSFUL MAN-MADE SCENIC DESTINATIONS IN CHINA.
>
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Bringing new life

Waterfront projects with successful government, private sector and community collaboration can create transformational outcomes for cities. The interface between private developers and public waterways has the potential to generate a lot of social value, but only if the investment is well managed across its numerous stakeholders. A holistic approach to these developments enables project teams to break down silos, and work seamlessly together to create sustainable urban spaces that integrate the natural environment, communities and local economy.

The most successful waterfront restoration designs across Asia Pacific focus on bringing new life to cities by improving the water's ecological environment and rebuilding the often broken-down, but all-important relationship between people and water. WL