

LEE KUAN YEW  
WORLD CITY ○  
PRIZE

10

LIVEABILITY

SUSTAINABILITY

VIBRANCY

QUALITY OF LIFE

#### CO-ORGANISERS



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# Celebrating Ten Years of the Prize

2010 – 2020

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# The Prize that Inspires

by Dr Cheong Koon Hean

“The Prize will play an important role in focusing global attention on mounting issues and drawing out the innovative and effective solutions to address them.”

—Dr Cheong Koon Hean

## ITS ORIGINS

In the past few decades, cities have grown at an unprecedented speed and scale. This has inevitably created a whole slew of urban challenges arising from unmet demand for infrastructure, services, and affordable housing, to choking pollution and traffic gridlock.

Amidst these worrisome developments, in 2008, when I was Chief Executive Officer of the Urban Redevelopment Authority, we decided to seek out cities that were best in class, so that Singapore as well as other cities could draw from them the inspiration and ideas to deal with urban challenges. The Lee Kuan Yew World City Prize was borne out of this intent.

## ITS SIGNIFICANCE

Of course, when conceptualising the Prize, we grappled with what the Prize should stand for and what key attributes the winning city should exhibit to merit the award.

What is manifestly clear to us is that a successful city requires a forward-looking, comprehensive, and long-term approach in tackling urban challenges. The urban solutions it adopts has to be innovative, sustainable and scalable. Strong leadership, good urban governance and effective administrative structures helmed by competent people are equally critical to survive changes in political leadership and other vicissitudes. Urban initiatives must be sustainable over time to achieve lasting success.

As the Prize continues to evolve and having studied the submissions from many cities over the years, the Nominating Committee is convinced that the Prize should be given to cities as a whole, rather than to individuals or specific organisations.

This is because city development is a highly complex process. It requires the cooperation of many stakeholders. A city's success cannot be attributed to a single person or organisation alone. The winning city must also demonstrate that the lives of its citizens and inhabitants have improved over time. While physical improvements to a city are indeed important, the human dimension is what matters most at the end of the day.

Recognising that cities differ in scale and stage of development, the Nominating Committee takes the wider perspective to consider also the level of effort put in and the resulting impacts of the improvements relative to resources available, given its current level of economic development.

These convictions in their entirety have established the reputation of the Prize as one that provides a holistic assessment of a city, and one that inspires cities of distinction.

## ITS RIGOUR

The evaluation process is expectedly a rigorous one, given the lofty aims of the Prize. The nomination of a city must come from a credible third party. The submission requirements are meticulous and detailed, and the scrutiny of the applications is thorough and intensely debated. Site visits to the shortlisted cities as well as interviews with top leadership and stakeholders of the city form part of the careful validation process. The Nominating Committee then submits its recommendations to a Prize Council, comprising eminent persons, for endorsement.

To a certain extent, our objective in requiring a comprehensive and detailed submission is to nudge a city to provide an 'audit' of itself and to come to the realisation of its strengths and shortcomings – a process that hopefully would

“Through the collective efforts of all cities around the world, we can aspire to learn from one another and truly make an impact in creating a better place for ourselves, and our future generations.”

—Dr Cheong Koon Hean

help the city to strive to continue to improve itself. Despite the rigour of the submission, we are very encouraged that over the past ten years and through six submission cycles, the Prize has attracted keen participation from many good cities. They comprise both big and small cities at various stages of development, including highly established ones with high global standing.

All the six Laureates we have honoured thus far have an inspiring transformation story to tell, each with its own powerful learning points. Bilbao and New York City for example, demonstrate how cities, regardless of their size, can continually reinvent themselves despite hardships and setbacks. Suzhou tells the story of a delicate balance between progress and preservation, while Medellín inspires us in how it has transformed violence into innovation. Seoul shows us the way to improve people-government relations. The latest Laureate, Vienna, exemplifies environmental responsibility and the development of the highest quality of life for its people in every possible way.

### ITS EVOLUTION

The wide spectrum of urban solutions, many of which are unique to the cities' own context, are all responding to a similar set of urban challenges confronting the world today. For example, the onset of climate change and technology disruptors will change the life we are accustomed to, and not necessarily for the better. The more developed economies also face policy conundrums arising from an ageing population and massive immigration waves prompted by environmental, political, social, and economic reasons.

As the Chair of the Nominating Committee, I believe that the Prize should be cognisant of the pressing issues of the day, be it climate change, ensuring sustainable and resilient development for a better living environment or the reduction of social stresses and inequities. As we advance into the next decade, the Prize will play an increasingly important role in focusing global attention on these mounting issues and drawing out the innovative and effective solutions already adopted to address these problems. Through the collective efforts of all cities around the world, we can aspire to learn from one another and truly make an impact in creating a better place for ourselves, and our future generations.

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DR CHEONG KOON HEAN is Chair of Centre for Liveable Cities and Lee Kuan Yew Centre for Innovative Cities. She was formerly CEO of the Housing and Development Board (2010–2020), overseeing the development and management of over one million public housing flats. Dr Cheong was also CEO of Urban Redevelopment Authority from (2004–2010) and has extensive experience in land use planning, conservation of built heritage and the real estate market.





# Message from the Prize Sponsor

by Mr Loh Chin Hua

Since the Lee Kuan Yew World City Prize's inauguration, Keppel is honoured to have been associated with this prestigious award. As cities grow, so do their needs. Sustainable urban development and management are critical to support the world's growing and increasingly urbanised populations and confront the challenges posed by climate change that can be exacerbated by uncontrolled urban growth.

The Prize provides a valuable platform to advance sustainable urban solutions through showcasing of success stories and exchange of experiences and best practices. We hope that many new ideas and partnerships will be borne out of these exchanges.

Over the past decade, we have witnessed the innovation and creativity of many cities in resolving urban issues and building sustainable communities. Besides the six Laureate cities, there are also many cities which received Special Mention, each of which is exemplary and provides valuable case studies for city leaders.

Keppel's support for the Prize reflects what our company stands for. Keppel is committed to sustainability, and our mission is to provide solutions for sustainable urbanisation, whether it is to help cities meet the growing demand for energy, clean environments, water, quality real estate or connectivity.

Keppel has a strong track record in the master development of large-scale integrated urban developments. We developed the iconic waterfront Keppel Bay precinct in Singapore, led the Singapore Consortiums in the development of the first two Singapore-China government-to-government projects, namely the China-Singapore Suzhou Industrial Park and Sino-Singapore Tianjin Eco-City in China, and also developed several other integrated projects in Indonesia and Vietnam.

Building on our experience and track record, we established Keppel Urban Solutions in 2017 to bring together the Group's diverse capabilities to work together with city governments to create highly liveable, smart, and sustainable communities. In November 2019, we broke ground for Saigon Sports City, which we will be developing into a vibrant, integrated township in Ho Chi Minh City. We are also exploring opportunities to contribute to sustainable urbanisation in other cities in the Asia-Pacific.

At Keppel, we are committed to building a brighter, better tomorrow. We support the achievement of the United Nations' Sustainable Development Goals and are delighted to partner the Prize to recognise vibrant and sustainable cities, and the foresight, innovation and strong governance of city leaders that made them possible.

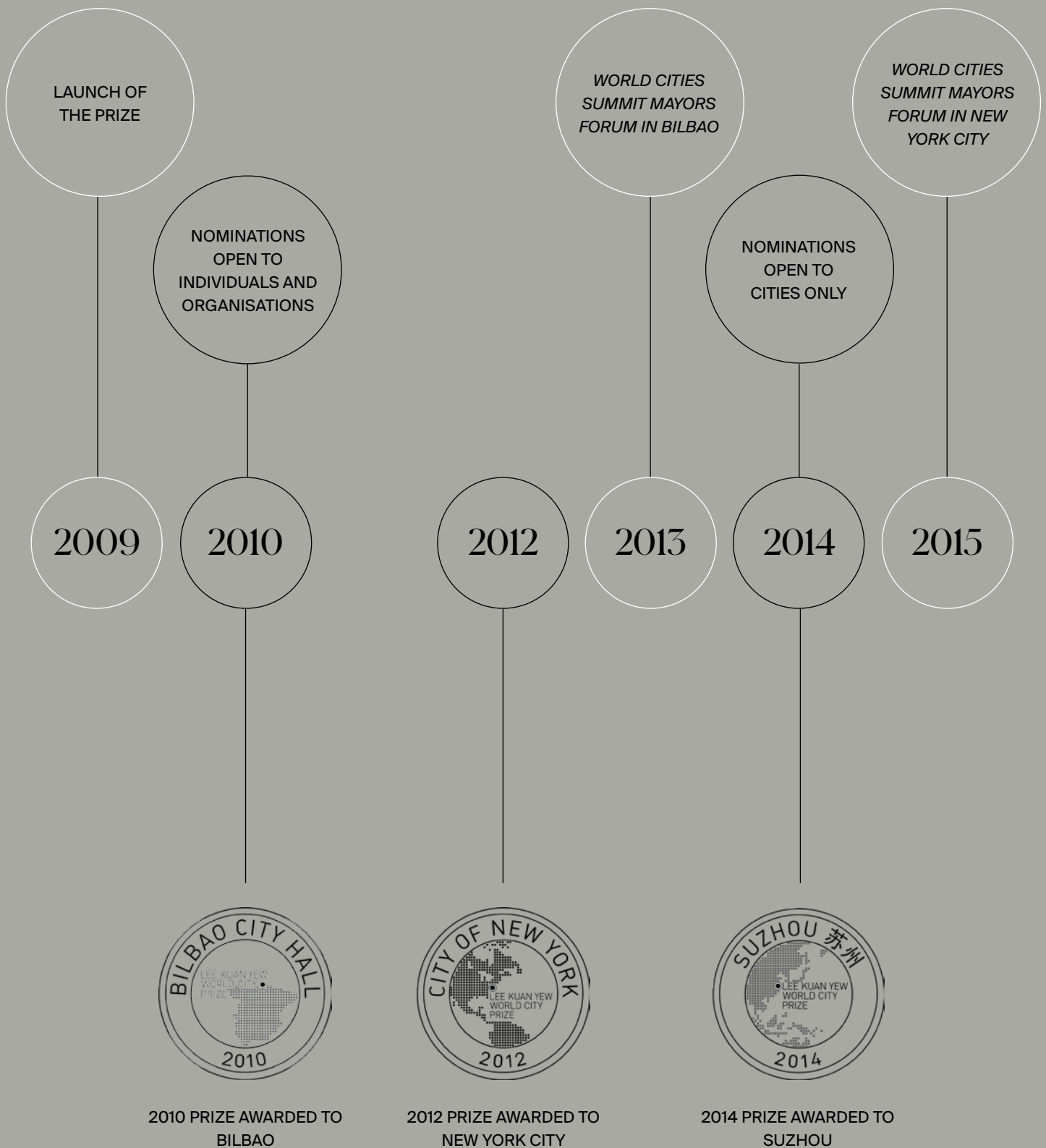
I wish the Prize even greater success in the years to come in honouring and promoting successful urban communities around the world.

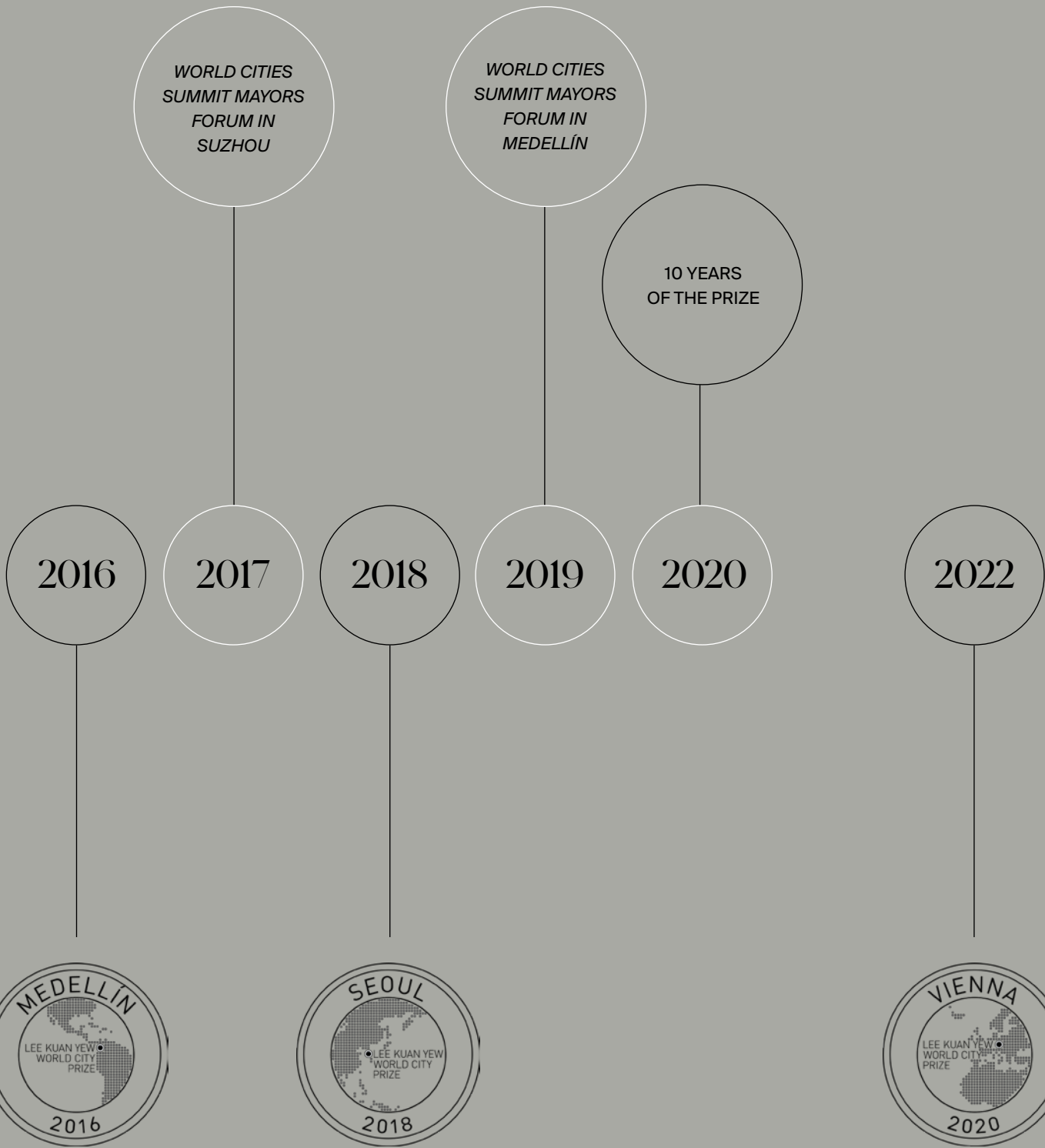
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MR LOH CHIN HUA is the Chief Executive Officer and Executive Director of Keppel Corporation. He is also Chairman of several companies within the Keppel Group. Mr Loh joined the Keppel Group in 2002 and founded Alpha Investment Partners, the Group's private fund management arm, where he served as Managing Director for ten years. Before this, he was the Managing Director at Prudential Investment Inc.



# A VISUAL TIMELINE OF THE PRIZE





WORLD CITIES  
SUMMIT MAYORS  
FORUM IN  
SUZHOU

WORLD CITIES  
SUMMIT MAYORS  
FORUM IN  
MEDELLÍN

10 YEARS  
OF THE PRIZE

2016

2017

2018

2019

2020

2022



2016 PRIZE AWARDED TO  
MEDELLÍN

2018 PRIZE AWARDED TO  
SEOUL

2020 PRIZE AWARDED TO  
VIENNA

# PRIZE LAUREATES 2010–2020 AN OVERVIEW

## PRIZE LAUREATE 2010

### Bilbao



Centred on the lowermost course of the Nervión River, Bilbao's 25-year systematic transformation is exemplified by its Abandoibarra waterfront rejuvenation anchored by the Guggenheim Museum. [go.gov.sg/bilbao](http://go.gov.sg/bilbao)

<b>REGION</b>	Europe
<b>AREA</b>	41.6km <sup>2</sup>
<b>POPULATION</b>	346,332
<b>DENSITY</b>	8,446/km <sup>2</sup>

#### NOTABLE PROJECTS

- Abandoibarra waterfront regeneration
- Bilbao Ria 2000
- Zorrotzaurre Knowledge Island

## PRIZE LAUREATE 2012

### New York City



New York City bounced back over the past two decades with a strong vision and blueprint for the future, one that is more equal, inclusive and resilient, and encourages ground-up ideas to take root. [go.gov.sg/nyc](http://go.gov.sg/nyc)

<b>REGION</b>	North America
<b>AREA</b>	783.8km <sup>2</sup>
<b>POPULATION</b>	8,398,748
<b>DENSITY</b>	10,714/km <sup>2</sup>

#### NOTABLE PROJECTS

- Times Square pedestrianisation
- West Chelsea/High Line Plan
- Brooklyn Bridge Park

## PRIZE LAUREATE 2014

### Suzhou



Suzhou preserved its historic districts such as Pingjiang and built its new city towards the Jinji Lake with the new Central Business District. It also sensitively rehabilitated its scenic Stone Lake. [go.gov.sg/suzhou](http://go.gov.sg/suzhou)

<b>REGION</b>	Asia Pacific
<b>AREA</b>	8,657.3km <sup>2</sup>
<b>POPULATION</b>	10,700,000
<b>DENSITY</b>	1,238/km <sup>2</sup>

#### NOTABLE PROJECTS

- Jinji Lake Central Business District
- Pingjiang Historic District
- Stone Lake Scenic District

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**PRIZE LAUREATE 2016**

## Medellín

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Lying in the Aburrá Valley, a central region of the Andes Mountains, Medellín has taken positive steps over the years to reconcile its social stratification along the valley's cross-section.

[go.gov.sg/medellin](http://go.gov.sg/medellin)

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<b>REGION</b>	South America
<b>AREA</b>	382.0km <sup>2</sup>
<b>POPULATION</b>	2,376,337
<b>DENSITY</b>	6,220/km <sup>2</sup>

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### NOTABLE PROJECTS

- MetroCable
- Life Articulated Units
- Circumvent Garden
- Escalators for vertical mobility at Comuna 13 San Javier

**PRIZE LAUREATE 2018**

## Seoul

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Seoul transitioned from rapid top-down development to a more inclusive and considered urban regeneration, and signalled a paradigm shift towards favouring people spaces over cars.

[go.gov.sg/seoul](http://go.gov.sg/seoul)

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<b>REGION</b>	Asia Pacific
<b>AREA</b>	605.2km <sup>2</sup>
<b>POPULATION</b>	10,041,574
<b>DENSITY</b>	16,591/km <sup>2</sup>

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### NOTABLE PROJECTS

- Cheonggyecheon
- Dongdaemun
- Seoullo 7017
- Yonsei-ro Transit Mall
- Mapo Culture Depot
- Sewoon Makercity

**PRIZE LAUREATE 2020**

## Vienna

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A quality of life leader, Vienna is also an environmental steward with its vision and responsibility to protect the Danube River not just for itself but also the many cities downstream.

[go.gov.sg/vienna](http://go.gov.sg/vienna)

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<b>REGION</b>	Europe
<b>AREA</b>	414.9km <sup>2</sup>
<b>POPULATION</b>	1,888,766
<b>DENSITY</b>	4,553/km <sup>2</sup>

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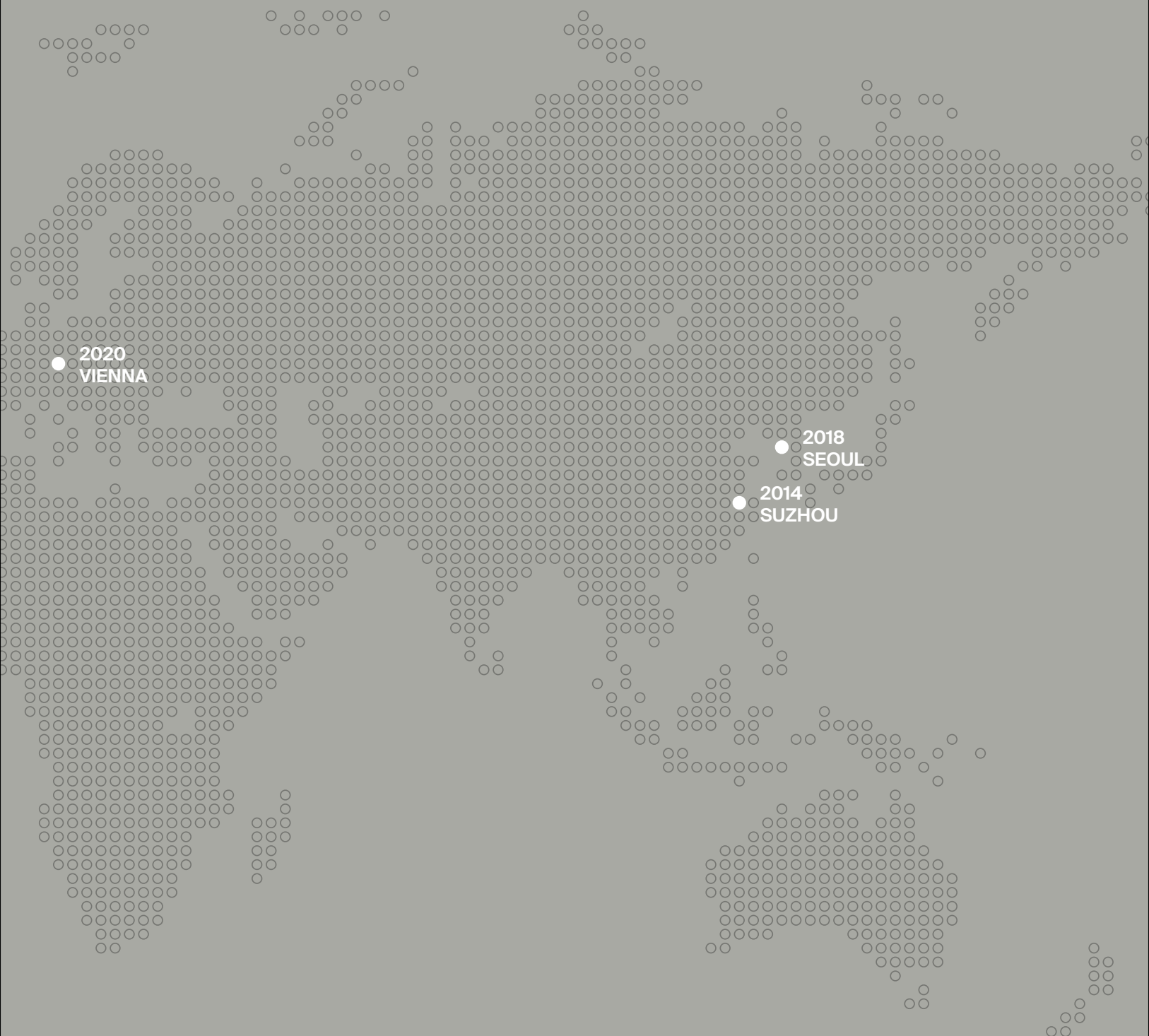
### NOTABLE PROJECTS

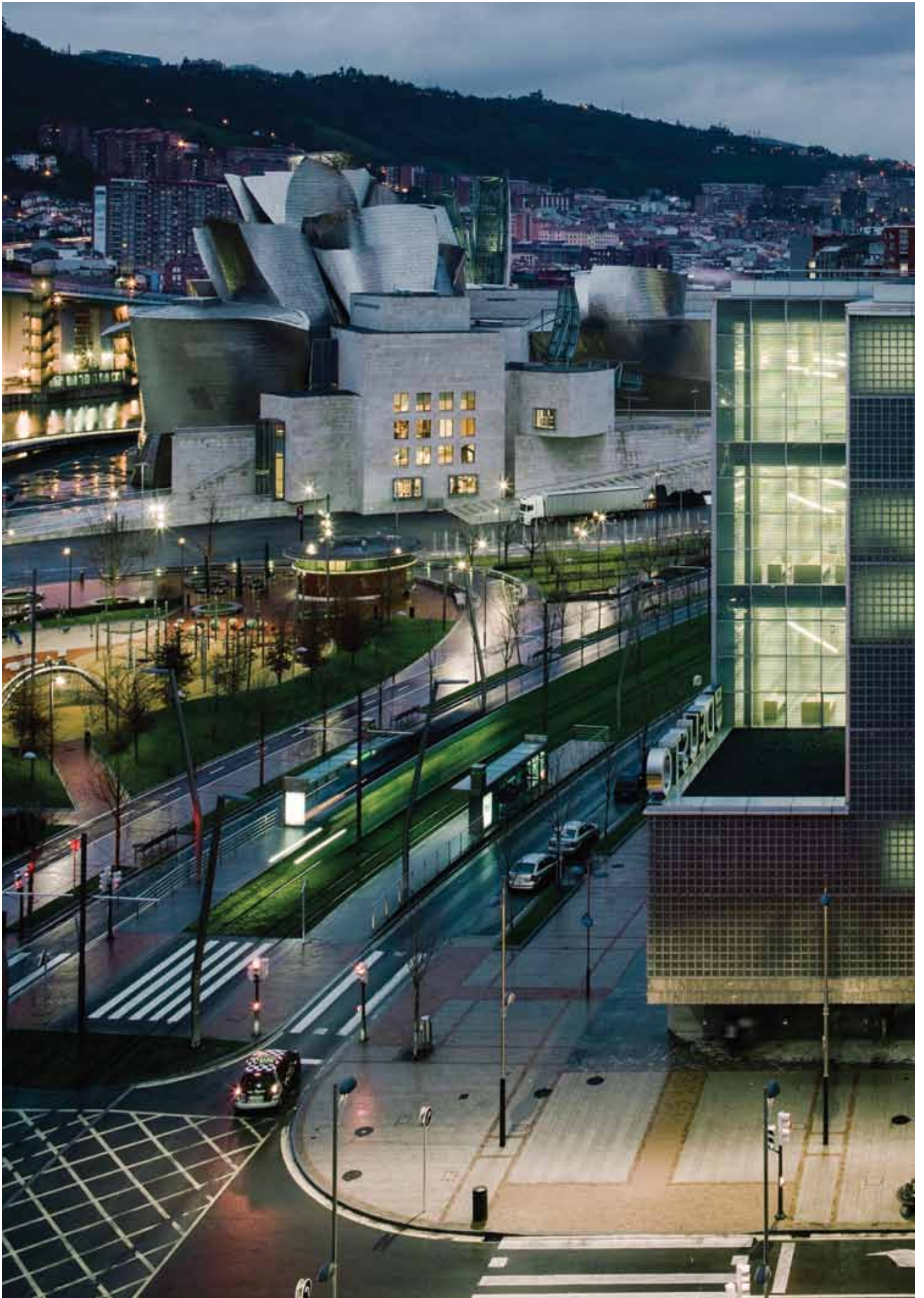
- New Danube/Danube Island
- Aspern Seestadt
- Nordbahnhof
- Smart City Wien Framework Strategy

# Prize Laureates



# 2010 – 2020





1



# Bilbao

## THE JURY'S CITATION

Bilbao is recognised for its integrated and holistic approach in urban transformation. Bilbao has demonstrated that urban regeneration can be a powerful social and economic driver to catalyse change, strengthen the urban fabric, inject vibrancy and improve the quality of life for its citizens.

Bilbao has been instrumental in regenerating and transforming the city from an obsolete and dilapidated industrial city into a knowledge-based economy. The success of Bilbao is largely attributed to its integrated and holistic approach to achieve economic, social and physical transformations. Its emphasis on environmental cleanup, use of culture, internationalisation and design, major improvements to its infrastructure, as well as the restoration of its historic areas over some 25 years have successfully rejuvenated the city.

More significantly, the city was able to connect investment in infrastructure with social integration. The river, which was once a physical and social barrier, is now a hub for social and cultural integration and a centre for innovation and creativity.

1 The iconic Guggenheim Museum in Bilbao's rejuvenated waterfront district

## BILBAO RIA 2000

The jury is particularly impressed with the establishment of Bilbao Ria 2000 as an effective framework to align government, business and the community towards a shared vision for the city. Bilbao Ria 2000 is a testimony to the importance of strong leadership and institutionalised processes in key decision-making and sustained implementation.

More significantly, the success of Bilbao lies in its ability to achieve alignment of objectives and vision amongst government, businesses and the community. The formation of the Bilbao Ria 2000 was an effective demonstration of strong public-private partnership to ensure the successful implementation of the city's plans and projects.

## 25 PROJECTS OVER 25 YEARS

Bilbao is also an exemplary city that continually reinvents and evolves itself amidst dynamic changes, and will serve as an inspiration to cities worldwide. The experience of Bilbao as a comprehensive 'city project', incrementally executed through 25 urban projects over 25 years, has achieved a profound transformation of the city. The city has improved its environment and quality of life significantly, strengthened its social cohesiveness and cultural vibrancy and also increased its economic competitiveness.

It is noted that the key factors underlying the success of Bilbao's transformation is more than the Guggenheim Effect. It is not about achieving urban transformation and economic and social vibrancy through a few iconic buildings. Rather, Bilbao has shown that strong leadership and a commitment to a systematic and long-term plan, based on solid processes and supporting infrastructure, are key factors to the success of a city's transformation.

A total of 25 significant and broad-based urban interventions have been successively implemented/ planned over the past 25 years. The systematic order of development demonstrates a visionary and long-term approach to planning, which is well-integrated and successfully executed.

- 1980s – 1990s: Restructuring of the city and economy.
- 1990s – 2000s: Consolidation of regeneration efforts and diversification of economies.
- 2000s onwards: Re-invention; focus on innovation, research and knowledge-based economy.



Scan to watch the commemorative video of Bilbao.  
[go.gov.sg/bilbao](http://go.gov.sg/bilbao)

# BILBAO KEY STATISTICS

**AREA**  
2019

**41.6** km<sup>2</sup>

**POPULATION**  
2019

**346,332** people

**DENSITY**  
2019

**8,446** per km<sup>2</sup>

**GROSS DOMESTIC PRODUCT**  
2016

**12.4** million Euro

**UNEMPLOYMENT RATE**  
2019

**12.9%**

**PER CAPITA INCOME**  
2016

**20,526** Euro

**HOME OWNERSHIP**  
2014

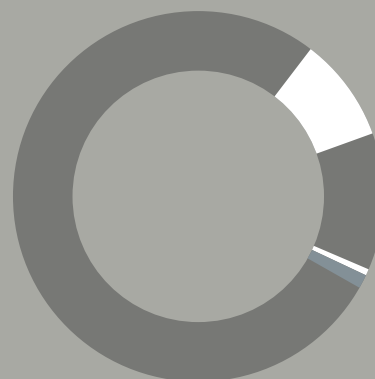
**84.9%**

**LITERACY RATE**  
2017

**99.6%**

**TOTAL PARKING PROVISION**  
2017

77.3% Cars



9.0% Motorcycles

11.9% Vans & Trucks

0.5% Buses

1.2% Others

**LIFE EXPECTANCY**  
2019

**83.1** years

**CARBON EMISSION**  
2018

**8.7** tonnes / person

**GREEN SPACE**  
2019

**24.5** m<sup>2</sup> / person



# Bilbao–Guggenheim++

by Dr Alfonso Vegara

Dr Alfonso Vegara was a member of the Prize Nominating Committee from 2012 – 2016. In this insightful essay, he examines the relationship between Bilbao the city and Guggenheim Museum the building that helped put the city on the world map. He reinforces the idea that the success of Bilbao cannot simply be replicated by an iconic building, but rather through long-term, complex and visionary processes.

“The ‘Guggenheim effect’ symbolises society’s will for change, the trust and determination that it was possible to reinvent and rebuild 21st century Bilbao over the ruins of an exhausted territory and its productive system.”

–Dr Alfonso Vegara

## THERE IS NO ‘GUGGENHEIM EFFECT’

Although Bilbao’s Guggenheim Museum can be considered the image that represents the urban transformation which took place in Bilbao, there is no ‘Guggenheim effect’ as such, but instead, there has been a long-term urban action plan capable of combining a wide range of goals and strategies, led by the city government and widely agreed upon. Such an ‘effect’ happened neither by chance nor fate, but was the result of a well-conceived, long-term city project for Bilbao in the territorial context of ‘Euskal Hiria’, the Basque Policentric City Region (Bilbao, San Sebastian, Vitoria).

Bilbao’s Casco Viejo (Old Town) coincides with the original area of the Villa de Bilbao, and we can easily trace it today. In the 20th century, the Casco Viejo was a popular space; a city neighbourhood that, despite its heritage, would deteriorate when central functions were relocated to other sites around the city. Rehabilitation was effectively approached during the 1980s, after the floods suffered by the city in 1983, with the destruction of buildings and commercial spaces, sparking urban transformation. The

2 Guggenheim Museum



Casco Viejo was declared an Integrated Rehabilitation Area and a special rehabilitation plan was drafted. A public company (SURBISA) was created in 1985 to direct the plan. Public investment prevailed in the intervention, maintaining the popular condition of the space, linked mainly to commerce, but also to tourism, hospitality, and culture. Transformations were carried out in significant buildings such as churches, palaces, museums, the market, and ending at the Arriaga theatre. Simultaneously, a parallel process of improvements in public spaces and subsidised rehabilitation of private buildings was developed. As in other successful historic centre rejuvenation programmes in Europe and elsewhere, the public transport strategy of improving the Casco Viejo's connectivity with the whole metropolitan region through metro, tram, train, and bus, has proven essential.

It is true that architecture plays a role in urban renaissance and is being used to lead it. In that sense, Bilbao is an exceptional case, with the Guggenheim Museum masterfully placed by Frank Gehry in one of the most difficult and dilapidated areas beside the Nervión River. The re-industrialisation process posed great challenges and the social and economic problems needed long-term strategies that society could embrace with enthusiasm. This is the function of the great projects developed in Bilbao; serving the existing urbanised spaces, concentrated in the backbone of the metropolitan area defined by the river, and being at the heart of the former industrial space faced with the impossibility of peripheral expansion due to topography. As

**“Educating, retaining, and attracting talent within an innovative environment around certain emerging economic clusters will allow Bilbao to continue being a reference.”**

—Dr Alfonso Vegara

noted earlier, Bilbao's Casco Viejo was the subject of the first large-scale urban action rooted in the concepts of refurbishment and rehabilitation.

Bilbao's Ensanche, the directional centre par excellence, also experimented with large-scale functional adaptation, especially the recovery of the Nervión riverfront, the Abandoibarra space where the Guggenheim Museum and the Euskalduna Auditorium were built, and recently a new centrality around the Iberdrola tower over the former railway, warehouse, customs, and shipyard sites.

Some claim that the encounter between Bilbao and Guggenheim happened by chance, but it was because Bilbao had an open mind towards innovation. From an urban planning viewpoint, Bilbao was exemplary in deploying all available urban planning tools: The DOT, Directrices de Ordenación Territorial (Regional Planning Land Use Guidelines) that received the European Award of Planning, The Plan General de Bilbao (Master Plan for the whole city), Special Plans for Historic or unique spaces, a Society for the Rehabilitation of Bilbao, and the Bilbao Ria 2000 (a public company responsible for the urban regeneration of Metropolitan Bilbao). Even forums such as Bilbao Metropoli 30, have played an interesting role in defining the strategic vision for the city and its global repercussions. The transformation of Bilbao emerged from a joint effort by the city council, Bizkaia council, the Basque and central governments, and the civil society, although the press and the public have focused the transformation of Bilbao on architecture and specifically, the Guggenheim.

#### **NOT JUST AN ICONIC BUILDING**

Bilbao's 'Guggenheim effect' cannot be translated to other cities with the mere construction of an iconic building. The 'Guggenheim effect' symbolises society's will for change, the trust and determination that it was possible to reinvent and rebuild 21st century Bilbao over the ruins of an exhausted territory and its productive system. It is important to acknowledge what has happened in Bilbao since the mid-1980s. This began with important urban transformation projects in the old town and urban centre, and gradually across the whole city: the Metro designed by Sir Norman Foster, the expansion of Bilbao's Port (Superport) freed space in the river for the main urban renewal projects, the airport designed by Santiago Calatrava, the Bilbao Exhibition Centre in Barakaldo, Euskalduna Palace, La Alhondiga Cultural Centre, the new football stadium inaugurated in 2014, and the new access to Bilbao that eliminated Sabino Arana Avenue's elevated section.

The Abandoibarra project designed by Cesar Pelli has been key in the recovery of Bilbao's central areas where the Guggenheim Museum and the Euskalduna Conference Centre and Auditorium stand out. Abandoibarra today is an integrated space that includes housing, hotels, shopping centres, and university facilities around a landmark tower hosting Iberdrola's headquarters. However, the radical transformation of urban transport, adjusting railway stations, eliminating barriers, burying urban sections of railways, developing the metro and introducing the tram, has allowed for coherence in an exemplary urban renovation process. The large infrastructure projects set the foundations for Bilbao's urban transformation and have fostered a multitude of smaller-scale projects and general improvements in public spaces. This has been a well-conceived and co-ordinated regeneration process. In this context, the environmental recovery of the river and the purification of its waters have been critical to make Bilbao's urban renewal, environmental improvement, and economic revitalisation, possible.

To a large extent, Bilbao's urban transformation has been possible thanks to the management work carried out by the publicly-funded venture Bilbao Ria 2000. This is a joint venture, with 50 percent of the funding from the central government and 50 percent from Basque institutions, the Basque government, Bizkaia regional council, Bilbao city council and Barakaldo city council. Bilbao Ria 2000 was designed to lead Bilbao's urban transformation management and discover an appropriate purpose for the large amount of public land released surrounding the Nervión River. The institutions involved were represented at the highest level in the venture's board of directors, guaranteeing its credibility and efficiency. The access to strategic land in Bilbao's centre owned by its partners and the ability to reach agreements, have made possible the realisation of complex projects and obtaining important funds to develop large-scale infrastructure.

What we see today in Bilbao is the result of a great transformation, boosted by the reuse of the immense abandoned areas of the port, railway, and industry, with key structural actions and other projects activated by the different stakeholders involved. This rebirth, beginning with the model recovery of Nervión's shore bordering the Casco Viejo and the Ensanche, is a world-class urban adventure that has awakened tremendous interest.

## A REFERENCE FOR THE FUTURE

Almost all medium and large European cities have been subject to relevant transformation processes. In that context, the Bilbao experience has become a valuable example. Bilbao was selected in 2010 to present its transformation experience at Shanghai's World Expo, showcasing its 25 main transformation landmarks under the motto 'Bilbao-Guggenheim++', highlighting that it is still an open project; the city refuses self-indulgence and keeps thinking about its future from an innovative point of view. A future that Bilbao keeps rethinking in a changing context, integrating new projects in different districts such as Zorrotzaurre Island and BAD (Bilbao Art District) between Gran Via and the Nervión River, but also, developing projects for the city as a whole such as 'Neighbourhood Hearts' project, which is destined to achieve a more integrated city beyond the traditional centre-periphery schemes.

This exemplary transformation was recognised by the Lee Kuan Yew World City Prize, which was awarded to Bilbao in 2010. Physical transformation and strengthening the knowledge economy will be key for the future. Educating, retaining, and attracting talent within an innovative environment around certain emerging economic clusters will allow Bilbao to continue being a reference.

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DR ALFONSO VEGARA has a PhD in City and Regional Planning and degrees in Architecture, Economics, and Sociology. He was President of ISOCARP, the International Society of City and Regional Planners, which has members in over 70 countries. He is a Fellow and Trustee of the Eisenhower Fellowships, and since 2005, he is Honorary Consul General of Singapore in Madrid.



# Bilbao is Reinventing Itself

3 The rejuvenated Abandoibarra promenade

by Feng Zengkun





# Yet Again

Bilbao is continuing to set an example by implementing a comprehensive flood protection plan to guard against climate change, a 'green ring' project to boost residents' access to nature, a high-speed rail network, and converting a derelict peninsula into a showcase for smart, sustainable, and socially equitable living.



“The crisis of our traditional industry and flooding was the beginning of the new Bilbao we relish today, the Bilbao of the Guggenheim Museum, and the Bilbao of the 21st century: a model of urban development based on sustainability, social justice and a focus on education, talent and innovation.”

—Mayor Juan María Aburto

When the Lee Kuan Yew World City Prize was inaugurated in 2010, the city of Bilbao in Spain was a compelling first winner. In the 1970s and 1980s, the city was struck by twin disasters: a worldwide economic crisis devastated its heavy industry economy, causing it to lose nearly half of its industrial jobs and more than one-tenth of its population, while a major flood destroyed large parts of it. Undeterred, its government drew up an ambitious plan to bring the city back from the brink, and successfully executed it over the next few decades.

Among the government's crowning achievements was the development of a publicly owned organisation called Bilbao Ria 2000 to oversee the plan's implementation. To ensure that the city's rehabilitation would not stall for lack of financing, Bilbao Ria 2000 upgraded plots of public land, sold parts of them to private developers, and used the proceeds to revitalise other areas, creating a virtuous circle. In this way, the organisation also provided an effective way for the government, businesses, and community to work in concert to rebuild the city.

The government's fiscal discipline for Bilbao Ria 2000 was also matched by a far-reaching vision for the city's transformation. Over the years, for example, the Abandoibarra waterfront district, which consisted of unused and polluted land once occupied by shipyards and associated industries, was cleaned up and converted into the new heart of the city. The Port of Bilbao was relocated to free up more space, and a series of landmarks, including the world-renowned Guggenheim Museum, Bilbao Maritime Museum and Euskalduna Conference Centre and Concert Hall, was erected to create a cultural mecca to attract tourists.

At the same time, the government invested in critical infrastructure to modernise the city, including a new metro system and water sanitation system.

## THE ISLAND OF TOMORROW

Since then, Bilbao has continued to look to the future. The city's ongoing redevelopment of its Zorrotzaurre peninsula could serve as a blueprint to others on how to revive a brownfield site. After the 1970s economic crisis, the 840,000-square-metre peninsula declined from a hive of industrial activity into a neglected ghost-town inhabited by fewer than 500 people at its nadir. The government is rebuilding it as a progressive residential and leisure hub.

About two-thirds of the peninsula will be devoted to public spaces and buildings for education, healthcare, sports, and cultural uses. Nearly 5,500 new homes will also be built, with about half of them set aside as social and subsidised housing for lower-income families. The owners of the peninsula's existing homes will receive assistance from the government to either improve their properties or relocate to other parts of Bilbao. These measures will make sure that the new island is affordable to most residents and serves a greater public purpose.

In line with the global movement towards smart and environmentally friendly cities, the peninsula will also have zero-emissions buildings, facilities for electric cars and an entirely electric public transport system comprising a tramway, electric buses, and shared bicycles. Additionally, two longitudinal axes across the peninsula will enable pedestrians and cyclists to travel around it quickly and safely. Even the public lighting system will use energy-efficient LED bulbs and have presence detectors and photocells so that the lights are switched off automatically when there is enough natural light or if there is no one in the area.

## AN ECONOMY FIT FOR FUTURE

The peninsula's regeneration will also play a key part in the city's plan to future-proof its economy. In 2014, the government identified the city's three most promising sectors, namely advanced business services, creative and cultural industries, and the digital economy, and pledged to support their growth to generate more high-quality jobs.

The peninsula will have two 'innovation districts' focused on creating and refining new technologies, products and services in those sectors. The North Innovation Urban District will have 11 buildings spanning 50,000 square metres for creative and cultural disciplines, while the South Innovation Urban District will have eight buildings with 90,000 square metres in total for advanced business services and digital technologies. Several of the peninsula's public buildings will also be used for training courses for entrepreneurs, and to house business incubators and innovation and technology associations.

The government also announced an Integrated Action Plan to further align the city's efforts in those three sectors. As part of this plan, it has rolled out several flagship initiatives, including a new organisation called AS Fabrik that aims to prepare Bilbao's manufacturing companies for the worldwide shift towards Industry 4.0, where automation, machine learning and other Internet-connected and digital technologies are used to improve plant processes. AS Fabrik is developing educational programmes for the city's university students, entrepreneurs and professionals to help them acquire relevant skills, hosting networking events for policymakers, academics and business leaders, and setting up test labs for the validation of new products and services.

BasqueGameLab, another one of the initiatives, is a collaborative workspace where companies brainstorm on ways to apply gaming principles and technologies, such as virtual and augmented realities, to other industries to improve them. This includes producing simulations to train employees in the healthcare, aeronautics, automotive and other sectors.

## A VISION FOR THE 21ST CENTURY

Three ongoing major infrastructure projects will also stand the city in good stead as it tackles the longer-term challenges of climate change and urbanisation. A research project between the government and a consortium of urban climate adaptation scientists had found that the city's Nervión river will pose increasing flood risks due to climate change. By 2050, the city could experience ten percent more downpours, and the river could be 22 percent higher at its peak flow compared to its current levels.

To protect the city, the government is carrying out a comprehensive anti-flood plan. Part of the Zorrotzaurre renewal project will involve removing the small land mass that connects the peninsula to the city's mainland, turning the former into an island and allowing the river to flow through on both sides of it. This will lower the river's height by one metre, significantly reducing the risk of flooding. Furthermore, the government will build flood protection walls on both sides of the river, as well as three stormwater tanks across the city to hold rainwater temporarily and prevent downpours from overwhelming the drainage system. The completed first tank, in the district of Etxebarri, has a capacity of 75,000 cubic metres.

As the city becomes more built-up, the government is also taking steps to give residents more and better green spaces to improve their physical and mental wellbeing. Its current Green Ring project will connect the forest parks on the city's outskirts with urban parks and other green spaces in the city, to produce a 99.3-kilometre green loop signposted with information about each area and interesting places in the vicinity. The city centre will also have 11 routes that reach various points in the green ring. When the project is completed, Bilbao will have 24 square metres of green space per resident, up from six square metres per resident in 1999.

To boost the city's connectivity with others, the government will also build part of a high-speed rail network that will link it to the Basque region's two other major cities, Vitoria-Gasteiz and Donostia-San Sebastian, and to Madrid, Paris and other cities. By burying its existing train track in preparation for the new network, it will free up about 100,000 square metres of space in the city centre, part of which will be used for a new large park with sports areas. The high-speed rail network's terminal in Bilbao is slated to be operational in 2023.

Looking back on Bilbao's history, its current Mayor Juan María Aburto said: "The crisis of our traditional industry and flooding was the beginning of the new Bilbao we relish today, the Bilbao of the Guggenheim Museum, and the Bilbao of the 21st century: a model of urban development based on sustainability, social justice and a focus on education, talent and innovation."

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This article was first published on the Prize website in July 2019. For more useful city resources, visit [go.gov.sg/cities](http://go.gov.sg/cities)

# Bilbao, Small but Impactful

4 Zubizuri Bridge

4



© By Arnaud Martinez/Shutterstock

5



© Zorrotzaurre Management



5 Zorrotzaurre Knowledge Island

6 Azkuna Zentroa Cultural Centre



6





8

© Bilbao City Council

7 Bilbao la Vieja

8 Puente de la Merced

9 Bilbao tramway



9

© Noradoa/Shutterstock

# MAYOR JUAN MARÍA ABURTO



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## IN OFFICE 2015 – PRESENT

MR JUAN MARÍA ABURTO was elected Mayor of Bilbao in 2015. He received his Bachelor's degree in Law at Deusto University and holds a Diploma in Economic Law and Evaluation of Public Policies. Due to his social commitment, his professional career has always focused on the public sector in the fields of social affairs and public policy. He served as the Director of Services at the Department of Home Affairs in the Basque Government. He also held various positions in the Government of Biscay.

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### How has winning the Prize impacted Bilbao?

First of all, I would like to say that the Lee Kuan Yew World City Prize has been the most important prize we have received, and we are very proud of it, as it is a recognition of our efforts at urban transformation. Winning the Prize has been an enormous opportunity for us to put Bilbao on the map of the world's most important, dynamic, and attractive cities.

But I would like to add as well that our job is not finished yet. We congratulated ourselves but we have not stood still. Instead, we continued working to improve the city and tackle new projects and challenges.

### Tell us more about the new projects that Bilbao has been developing since winning the Prize.

One of our main objectives is to consolidate our position as an attractive city for quality tourism. One of Bilbao's main attractions is our cultural offering, and it is in this area that we offer a unique combination of modernity and tradition.

As you know, our most important cultural icon is the Guggenheim Museum for modern and contemporary art, which opened in 1998 and welcomes more than one million visitors each year.

But you must remember that in Bilbao, we have not only modernity and innovation, but also the rich cultural

traditions of the Basque Country – one of the most ancient cultures in Europe. It is very important for us to show who we are, our identity and history, and how the Basque Country is like.

For instance, one of our most renowned features is our cuisine and gastronomy: there are only two million people in the Basque Country, but we have 30 Michelin-starred restaurants.

The opening of the Azkuna Zentroa, named after the former Mayor of Bilbao, the late Iñaki Azkuna (1943 – 2014) is the latest development on our cultural front. This is a major cultural and sports facility for both our population and the more than one million guests we receive every year.

From both the urban and economic perspectives, the most important project we have is the Zorrotzaurre Island – an area of 800,000 square metres that was formerly a peninsula by the Nervión River. This long peninsula is being transformed into an island on the river and will become a 'Knowledge Island' or an 'Island of Talent'.

In 2020, the peninsula will become an island and we are going to build more than 5,000 buildings on it. Transforming the entire island will be a long-term project that will take some 15-20 years. Zorrotzaurre Island will be a mix of residential and commercial developments, including an urban scientific park. These activities will be crucial for the development of a new digital economy in Bilbao.



“Our job is not finished yet. We congratulated ourselves but we have not stood still. Instead, we continued working to improve the city and tackle new projects and challenges.”

—Mayor Juan María Aburto

### **What are the ongoing challenges faced by Bilbao?**

The biggest challenge we face remains the development of the economy, which is as important to us as developing our culture. We used to be a highly industrialised city, but these industries are no longer based in Bilbao. This means that we have to develop and sustain new services, talents, universities and knowledge in the coming years.

One way we are doing this is by tapping on our experience in urban transformation. For instance, many local enterprises that have been known for their work in Bilbao are now taking part in the urban transformation of other cities around the world.

Attracting people with knowledge and talent will be another key challenge. We want to be a smart city. In a way we are already a smart city due to our strong culture of innovation, which is not only technology but also the strong collaboration between agencies, institutions, and enterprises. As a result of these public-private partnerships, we have achieved good results in our urban transformation, and we want to continue to improve on this.

### **How has Bilbao continued to invest in your people and urban communities?**

We have had an urban transformation, but what we want is also a transformation of our people, and this has to come from our people's knowledge and talent as well as from the universities.

We will intensify our commitment to attract new investments and skills, as well as the best entrepreneurial and college talents. We also want to

become a renowned university city; Bilbao already has three universities and there are plans for a fourth university.

Social cohesion is very important to us. To maintain our social fabric, we are investing in affordable housing via rental housing programmes for young people. Because if our people have a job and home, which are two very important things in life, they will be able to pursue their personal projects, plan for a family and look forward to a brighter future. And if our young people have a future, so will our city.

We are also trying to develop entrepreneurship, which is closely linked to innovation and most developed in dense, urban areas. Bilbao is a city with many small neighbourhoods. Thus, we are building spaces in these neighbourhoods to give opportunities and places for people to develop their own business projects, start-ups and incubation centres.

### **What have you learned from the other Prize Laureates?**

Medellín showed us that while urban transformation and long term planning are important, social cohesion is also vital to ensure that a city is successful and sustainable.

We need to address not just physical renewal but also important social questions that matter to people. We have learnt from Medellín how important it is for people to have a future, and for this we need education, employment, and security – three very important areas in developing a city and to have a city which has a future.

# Case Study: Institutionalising Processes

BILBAO RIA 2000 AS INNOVATIVE GOVERNANCE MODEL

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## PROJECT NAME

Bilbao  
Ria 2000

## PROJECT TYPE

Urban  
governance

## PROJECT COMPLETION

Ongoing  
since 1992

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### ABOUT THE PROJECT

- Bilbao Ria 2000 is a publicly-funded private company comprising several public shareholders, i.e. the government, ministries, several public agencies and private enterprises.
- It coordinates and executes projects related to town planning, transportation and the environment, focusing on the urban directives drawn up by the planning authorities.
- The non-profit entity takes a lead role in redeveloping the metropolitan region, and continues to support current and new city initiatives.

### ISSUES BEFORE THE PROJECT

- Decline of mining, steel and shipbuilding industries, which conditioned the urban structure along the Nervión River.
- Rising unemployment of about 22.5% in the 1970s and 80s due to deindustrialisation and disinvestment both from abroad and within Spain.
- Negative environmental impact on the river from industries and port activities.

### LEADERSHIP & GOVERNANCE

- Successive mayors of Bilbao continued the urban initiatives that transformed the city.
- Bilbao Ria 2000 was initiated by then-Ministry of Public Works and Transport and the Environment, and the late-Dr Iñaki Azkuna (mayor from 1999–2014) in 1992.
- High-level board members represent the stakeholders of Bilbao Ria 2000.
- The agreement by consensus is institutionalised as a process to mandate land development, which will be affected less by political inclinations, and ensure long-term plans.
- For development process, Bilbao Ria 2000 consolidates land, transfers the stakeholders' developmental rights, prepares the land, lays out the infrastructure, and sells the land for development.

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**PROJECT  
SIZE/SCALE****NA****PUBLIC TRANSPORT USAGE  
1997 - 2007****10%  
increase****AVERAGE INCOME INCREASE  
1997 - 2008****8,500 Euros**

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**CREATIVITY & INNOVATION**

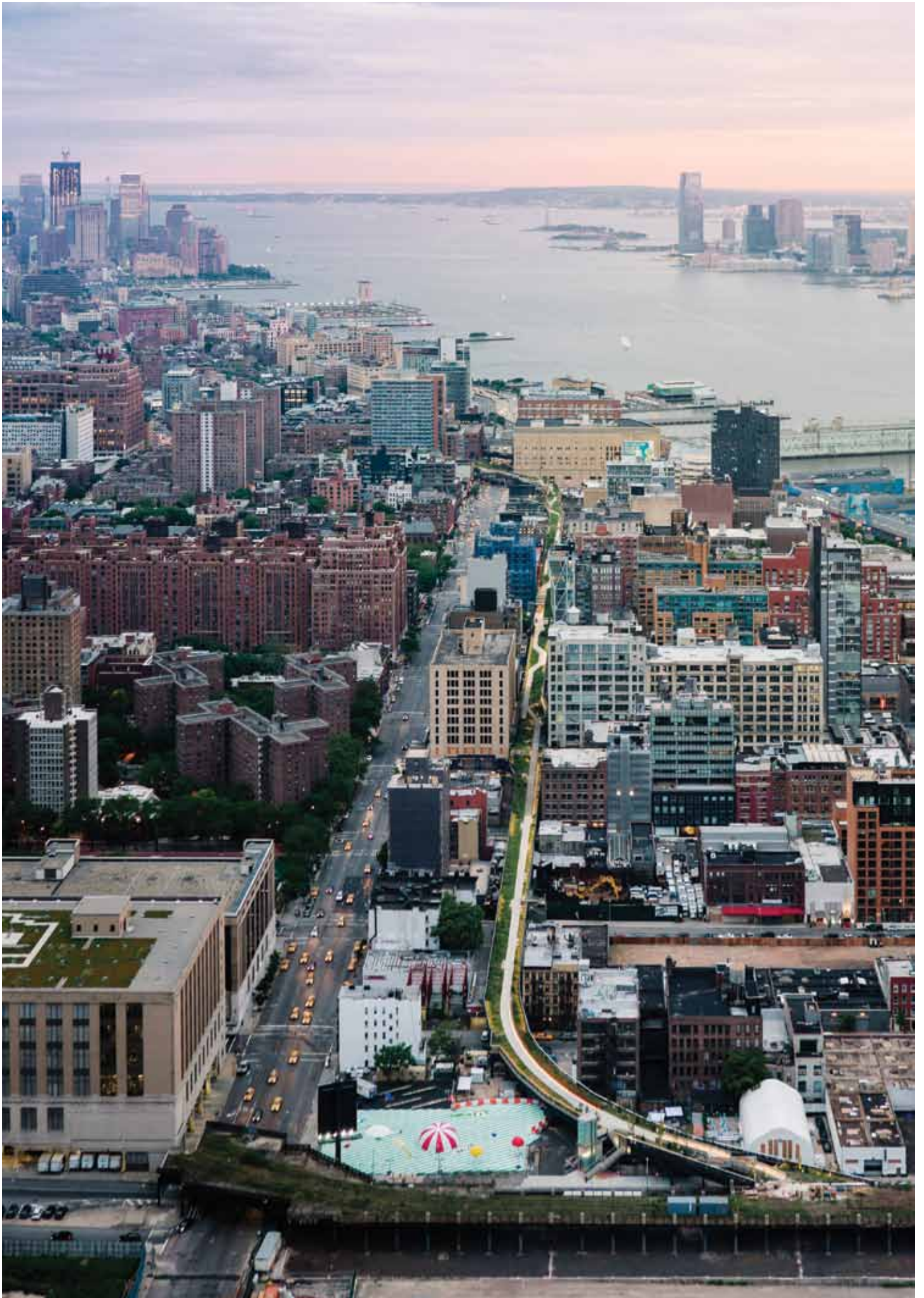
- The city and metropolitan area are transformed by cooperation between institutions, creativity and excellence in urban planning and architecture.
- Bilbao's urban transformation is closely tied to its funding mechanism and Bilbao Ria 2000.
- Financial gains through land sales are reinvested in recovered areas or on strategic urban initiatives, such as new port and industrial areas, railway lines, rehabilitating the historic district, Abandoibarra (waterfront promenade) and new urban parks.
- The railway tracks were re-routed around the city to allow development of the waterfront.
- Major arterial roads were downgraded and buried underground to create a more pedestrian-friendly urban environment.

**IMPACTS OF THE PROJECT**

- Bilbao extended its influence to a wider population of 2-3 million within 200-300km radius.
- The manufacturing workforce decreased from 46% to 22% in 1975, shifting towards service sector.
- The average income has increased from €10,500 in 1997 to €19,000 in 2008.
- The unemployment rate halved from 22.5% in 1983 to 11.5% in 2010.
- The Gross National Product per capita rose from €15,000 in 1996 to €27,000 in 2009.
- Public transport usage increased from 23% in 1997 to 33% in 2007.
- Green and public spaces increased from 6m<sup>2</sup> in 1999 to 24.5m<sup>2</sup> in 2008 per resident. Bicycle lanes increased from 9.7km to over 16km.
- The Nervión River is now bridged across both sides, improving quality of life.

**REPLICABLE IDEAS**

- A strong public-private partnership can allow for alignment and conflict resolution for land development.
- Successful urban development and regeneration require integration of strategic visioning with systematic implementation of key infrastructure projects at various levels.
- There is a need for effective institutions and processes that bring on board the right stakeholders to ensure alignment with sustainable funding mechanisms, so that the long-term vision can be sustained and implemented.



1

# New York City

## THE JURY'S CITATION

New York City is recognised for strategically orchestrating its remarkable transformation over the decade of the 2000s. 2001 was a traumatic point in which the city suffered a sense of loss and uncertainty. Under the city's visionary leadership, New York City faced that adversity by defining a bold vision for its future, such that within years the city had not only recovered but had grown better than before. Embracing its complexity, density and diversity, the city witnessed a marked increase in the quality of life in a short span of time. Building on the foundation of crime reduction and other urban initiatives of earlier administrations, the city leaders have altered the landscape and notably renewed confidence and optimism among New Yorkers for their city's future.

1 The world-renowned High Line dramatically catalysed the transformation of the West Chelsea district.

## BLUEPRINT FOR A GREATER AND GREENER CITY

New York City's successful reinvention and rejuvenation is framed by the effective and efficient implementation of the actions set out in PlaNYC (since updated to OneNYC in 2015 and OneNYC 2050 in 2019) – a holistic and interdisciplinary blueprint for a greater and greener New York City. This forward-looking set of interdependent strategies charts the city's future to 2030 by integrating disciplines such as land use planning, transportation investment, environmental stewardship, and public health in one document. It addresses the challenges of accommodating another one million residents and new 21st century jobs to the city's population and workforce, renewing the city's physical infrastructure, and preparing for climate change.

PlaNYC's comprehensive set of strategies, while focused on outcomes for the year 2030, also sets specific short-term milestones for intended progress on a variety of metrics ranging from numbers of trees planted to hectares of contaminated land remediated to benchmarking for energy efficiency to improvements in air and water quality. Many of these initiatives cumulatively contribute toward the overarching goal of reducing greenhouse gas emissions by 30 percent below 2005 levels by 2030. Progress on all initiatives including this overall goal is measured and publicly published each year.

## STRATEGIC CAPITAL INVESTMENT FOR PUBLIC INFRASTRUCTURE

Recognising the importance of improving existing urban systems and creating new public infrastructure at the city-wide level to secure its future, the city takes the lead in strategic capital investment as an imperative to generate catalytic benefits for the city. Today more than 700 acres (283 hectares) of parks and 450 kilometres of bicycles lanes have been installed. Specific examples include the reuse and repurposing of the city's industrial waterfront into a dynamic and sustainable park as embodied in Brooklyn Bridge Park. By demonstrating a high level of commitment and capital investment, business confidence has been boosted and has in turn restored citizens' faith in their city.

## INSTITUTIONALISATION

The decision to legislate PlaNYC for review every four years to chart the city's future further displays exemplary foresight. Institutionalising key processes and mandating their continual measurement ensures longevity of the plan and that strategic objectives will be met over the long run.

## DIALOGUE BETWEEN GOVERNMENT AND CIVIC GROUPS

The city is highly commended for its strong political will that spearheaded change in the city and in the mindset of its residents. The capacity for dialogue between government and civic groups also synergises efforts and allows creative ideas to take root. This is exemplified in bottom-up, high-impact initiatives such as the High Line, where neighbourhoods are renewed, and beneficial effects stimulate the city's economy. Under-utilised spaces and roads have also been carefully transformed with limited funds into plazas for the public's enjoyment. Partnerships with community and business groups not only help to maintain the spaces but foster a sense of ownership. This has significantly lifted the quality of life in an urban environment.

The city's transformation is a testament to the dynamic partnership between its city leaders, government agencies, and stakeholders to implement a shared vision for the city. It serves as an inspiring model for other mature, high-density global cities to reframe their future in terms of sustainability and offers many innovative and replicable solutions for cities around the world.



Scan to watch the commemorative video of New York City.  
[go.gov.sg/nyc](http://go.gov.sg/nyc)

# NEW YORK CITY KEY STATISTICS

**AREA**  
2010

**783.8** km<sup>2</sup>

**POPULATION**  
2018

**8,398,748** people

**DENSITY**  
2018

**10,714** per km<sup>2</sup>

**GROSS DOMESTIC PRODUCT**  
2017

**882.9** billion USD

**UNEMPLOYMENT RATE**  
2018

**4.1%**

**PER CAPITA INCOME**  
2017

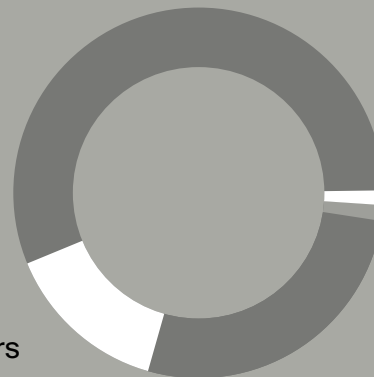
**37,447** USD

**HOME OWNERSHIP**  
2017

**32.7%**

**MODAL SPLIT**  
2017

55.5%  
Public Transport



**LITERACY RATE**  
2017

**77.1%**

**LIFE EXPECTANCY**  
2016

**81.2** years

**CARBON EMISSION**  
2015

**6.1** tonnes / person

**GREEN SPACE**  
2019

**14.5** m<sup>2</sup> / person



# An Evergreen Renaissance City

by Professor Kishore Mahbubani

Professor Kishore Mahbubani, Chair of the Nominating Committee from 2010 – 2018, reminisces his time in New York City, a city that he is very familiar with, having lived there for over ten years. He shares his personal thoughts and intimate stories of the ups and downs of this dynamic city.

“The comprehensive planning that New York City has put in to deal with the long-term challenges of climate change will serve as a source of inspiration for many cities around the world.”

—Professor Kishore Mahbubani

## LIVING IN AND LOVING THE CITY

I have lived in New York City for over ten years, when I served as Singapore’s Ambassador from 1984 to 1989 and from 1998 to 2004. As a result, I have gotten to know, and love, the city well. However, its charms are not always self-evident.

Mr Lee Kuan Yew visited me in New York City several times. He admired and respected the strong men he met in New York City, including Henry Kissinger, David Rockefeller, and Paul Volcker. Yet, the grimy infrastructure troubled him. The FDR Highway, along East River, is one of Manhattan’s main arteries. Once, when we were driving on it, Mr Lee turned to me and asked, “With such pervasive graffiti and grime, how can you call New York City a great city?” His question stunned me. After a minute of reflection, I replied that it was a great city as it attracted ambitious young people with big dreams from all around the world.

If I had had more time to reflect, I would have given Mr Lee a more thoughtful answer. My answer would be that New York City has demonstrated that it is a great city because it is resilient, cosmopolitan, and optimistic. It has demonstrated



all these qualities in recent years. When I lived there from 1984 to 1989, the city was clearly declining. Crime kept rising. The homeless population on the streets kept growing. I left in 1989 feeling pessimistic for the city. Yet, when I returned a decade later in 1998, the city's fortunes had changed. Crime had gone down. The homeless were less visible. And the city kept improving in subsequent decades, especially under the dynamic leadership of Michael Bloomberg. When I led the Nominating Committee members to meet him and his team in New York City, we were truly impressed how ingenious his team of planners had been in improving the city through various surgical incisions: bicycle lanes, the High Line, the Brooklyn Beach, the new developments on the long dormant West side. The city I knew well was clearly experiencing a renaissance, both in human and physical terms.

### **YELLOW CAB DISCUSSIONS**

Few cities are as cosmopolitan as New York City. Getting in a New York City yellow cab is always an interesting experience. You can never predict where the taxi driver is going to come from – from Somalia or Ethiopia, from Pakistan or Bangladesh, from India or Sweden. Their accents were incredibly different. Yet, each time you got into the cab with them, you could feel that you were getting into a cab with someone who had big dreams. And some of them were already carrying out their big dreams. One taxi driver from India made a big impression on my three young children. He told us how he had used his earnings as a cab driver in New York City to set up and fund a school for several hundred young girls in his village in India. My youngest son was inspired by his story and asked me to tip him well. The taxi driver from Sweden was pursuing a different dream. He was busy studying the great European philosophers. Since I had majored in philosophy as an undergraduate, we had an interesting discussion. Only in New York City do you get cab drivers who want to discuss philosophy with you. With its remarkable diversity, New York City is clearly one of the most interesting human laboratories in the world. The ability of such a diverse population to live and work together comfortably gives hope that humanity as a whole will also learn to live together as one harmonious community in the ever-shrinking global village that the world has become.

### **CONFIDENCE AND OPTIMISM**

New York City is also remarkable for another reason. Much of America has become depressed and pessimistic. Some of this is understandable as the bottom 50 percent of America's

population has seen its average income decline over a thirty-year period. In theory, as New York City is the number one American city, it should be infected by this pessimism. Instead, the city remains as confident and optimistic as ever. Some of this is due to the constant surge of new dreamers who come to the city. Yet, a lot of this is due to the ethos and culture that the city has built up over centuries. In its two centuries of growth and development, New York City has overcome many major challenges.

I was personally present in New York City on 9/11, when the two World Trade Center towers, which I had visited frequently, had come crashing down. Few cities have experienced a shock as traumatic as this. Yet, the city took this shock in its stride and kept on going. Today, a new gleaming tower called One World Trade Center stands on the site, surrounded by a calm and dignified memorial to remember the victims of 9/11. Similarly, New York City also experienced a shock when Hurricane Sandy hit it in 2012 and the strong storm surge created massive flooding. In response, New York City has announced a massive investment in infrastructure to deal with the long-term consequences of climate change for the city. As the Columbia University Earth Institute reports, "In 2008, New York City's Mayor Bloomberg brought together leading climate scientists, academics and members of the private sector to advise the city on adapting to the impacts of climate change. This group, called the New York City Panel on Climate Change (NPCC), released its 2019 report in March. [...] The NPCC's 2015 projections were used to produce the city's Climate Resiliency Design Guidelines, released in 2018."

The comprehensive planning that New York City has put in to deal with the long-term challenges of climate change will serve as a source of inspiration for many cities around the world. Lee Kuan Yew will be remembered for many things. One thing he will always be remembered for is his capacity to rise to any new challenge, no matter how daunting. Hence, he must have been pleased to see New York City win the Prize named after him. It was the metaphorical coming together of two dauntless spirits.

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PROFESSOR KISHORE MAHBUBANI is a Distinguished Fellow at the Asia Research Institute (ARI), National University of Singapore (NUS). He has been privileged to enjoy two distinct careers, in diplomacy (1971 to 2004) and in academia (2004 to 2019). He is a prolific writer who has spoken in many corners of the world. He was the Chair of the Prize Nominating Committee from 2010–2018.



# A World Icon Looks Ahead

2 Aerial view of Lower Manhattan



# to 2050

by Feng Zengkun

In New York City, emerging technologies, and trends such as digitalisation is helping the city execute an ambitious vision to adapt and grow sustainably to the year 2050 and beyond.



2

# “New York City has been a beacon to the world, and we hope this plan will serve as an antidote to the challenges facing our city, our nation and the globe.”

—Former Mayor Bill de Blasio

Few cities have been as consistently visionary as New York City (NYC) in the United States. In the early 1800s, the city’s urban planners designed a street grid that would accommodate homes and businesses for one million residents when its population was just 100,000 people. After the city’s devastating experience in 2001, its government responded by not only rebuilding the damaged areas but also unveiling an ambitious new plan, called PlaNYC, in 2007 to make it an even greener and greater hub of the world.

Under the plan, the city planted one million more trees to reduce its ambient temperature and slash its greenhouse gas emissions, converted disused and dilapidated sites such as the Hudson Yards and Greenpoint-Williamsburg waterfront into residential and commercial districts, and upgraded its energy infrastructure, including its power plants. The authorities’ efforts addressed how the city would cater for an additional one million residents, renew its ageing physical infrastructure, and mitigate climate change and its impact.

Since then, the city has gone further to take advantage of emerging technologies and trends, such as the digitalisation of industries, and to limit their potential side effects, such as growing income inequality. In 2015, then-Mayor Bill de Blasio introduced the OneNYC 2050 plan, which builds on PlaNYC to shape the city up to 2050. He said: “We are pushing ourselves to fight global warming on every front, achieve equity, and build a city where everyone is welcomed in civic life. New York has been a beacon to the world, and we hope this plan will serve as an antidote to the challenges facing our city, our nation and the globe.”

## **WEATHERING WEATHER CHANGES**

Over the past four years, the government has worked with private partners to boost the resilience of the city’s power and water supply in the face of intensifying storms, and their methods could be useful for other cities facing similar weather changes.

Consolidated Edison, the largest of New York’s six electric utilities, spent one billion USD to upgrade its power infrastructure, including by installing stronger, tree-branch-

resistant aerial cables and utility poles that can withstand wind speeds of up to 110 miles per hour (177 kilometres per hour). It also redesigned the power lines so that they detach from the poles more easily when heavy tree limbs fall on them, to prevent damage to the poles and enable faster restoration of power after storms.

The company also reconfigured its underground networks to minimise outages during floods. It divided two especially vulnerable networks, in Lower Manhattan’s Fulton and Bowling Green, into smaller networks, and installed isolation switches in others so that it can disconnect equipment that may endanger the electric grid if flooded. It expects these and other measures to shrink the extent of outages by 15 to 20 percent during major storms.

The government is also investing nearly 900 million USD over the next decade in bio-swales, wetlands, green roofs, permeable pavements, and other green and rainwater-collecting infrastructure. These will help it to make use of the deluges to increase its water supply. In addition, it is upgrading the city’s century-old Ashokan Reservoir – which stores rainwater and melting snow to supply about 40 percent of the city’s drinking water needs – so that the facility can continue to serve future generations of residents.

Beyond safeguarding the power and water supply, the government has embarked on innovative projects to defend the districts close to the city’s southern coastline against a projected sea level rise of more than six feet (1.8 metres) by 2100. By then, storm surges could damage nearly half of the properties in Lower Manhattan, and one in five streets in the area would be exposed to daily tidal inundation.

The government is tailoring its anti-flood measures to individual areas, an approach that could help other cities. In the Two Bridges residential neighbourhood, it will build flood walls and underground flip-up barriers that are hidden until they are deployed. In Battery Park, it will elevate the waterfront esplanade and integrate a grassy berm to maintain the park’s look while improving its flood resilience. In the highly built-up Seaport and Financial District, where there is little space for land-based measures, it will extend the shoreline into the river and create a barrier of land higher than the current coast.

## CRAFTING A CITY FOR ALL

While these initiatives will maximise the city's odds of surviving catastrophic events in the future, others are aimed at ensuring that it thrives too.

The government has implemented measures to keep the city affordable and offer all residents a high quality of life. Apart from constructing homes for lower-income households, it has introduced regulations such as Mandatory Inclusionary Housing (MIH), which requires property firms to provide a substantial proportion of affordable accommodation if they build in areas rezoned for housing development.

Several easily replicable programmes also help vulnerable groups such as the elderly and low-income families with housing needs. Under the Seniors First programme, the government conserves the city's affordable senior-friendly homes and builds new ones on underused sites and modifies homes to make them more suitable for the elderly. The Open Door programme finances the construction of co-ops and condominiums that are marketed to lower-income families buying their first home, and the Home Fix programme helps low-and-moderate income homeowners pay for home repairs. As of March 2019, the government has built and preserved 123,466 affordable homes, and is on track to have 300,000 such homes by 2026.

Significant investments in public transportation have also created a more environmentally friendly and equitable transport system. Since the NYC Ferry was launched in 2017, it has served about eight million customers across its existing six routes. The government will complete five more routes by 2021 to serve all five of the city's boroughs and will spend 12 million USD to build a new home port for the vessels, 94 million USD for additional ferries, and 45 million USD for the ferry landings' capital infrastructure needs. "The ferry service relieves the impact on other public transit and provides new options for neighbourhoods in transit deserts. We also matched the metro system's pricing at 2.75 USD per ride to create equity for all riders," it said.

Furthermore, an ongoing, 'once-in-a-century' project will change the city for the better. The government is planning to create a sprawling new neighbourhood on top of a 180-acre (730,000-square-metre) railyard called the Sunnyside Yard in the Queens borough. The site is significantly larger than other major development sites in the city's history, and with land

becoming increasingly scarce, "it is one of our last great opportunities to solve many challenges in one place", it said.

A 2017 feasibility study found that it would be possible to build a deck over most of the railyard and proposed three different uses of the new land. These included a 'mostly residential' option that would have up to 24,000 homes, 19 schools and 52 acres (210,000 square metres) of open space. Nearly a third of the homes would be affordable ones according to the MIH guidelines. The government is now working with railway operator Amtrak, which owns most of the site's land, and other partners to solicit ideas and feedback from residents and other stakeholders to create a masterplan for the site.

## CLOSING THE DIGITAL DIVIDE

As digital technologies revolutionise industries and become an integral part of education and professional training, the city is also taking steps to ensure that no one is left behind.

Over the past four years, the city has loaned or given away more than 15,000 free connected devices through partnership with libraries and other organisations. It has also worked with a consortium of technology companies to set up nearly 1,800 high-speed public WiFi access points with connected and secure tablets and free device charging. Moreover, public computer centres at over 500 locations collectively offer more than 11,000 free computer workstations and more than 2,500 hours of digital literacy training per week, as well as other digital tools and resources.

In 2019, the city will issue the country's first Internet Master Plan, detailing the state of the city's broadband infrastructure, including fixed connections, mobile service, free public WiFi and public computer centres, and establishing clear metrics for what it needs to do to achieve universal, equitable service. The document will also set out measurable benchmarks and strategies specific to every neighbourhood in the city.

Summarising its initiatives, the government noted: "We can secure our city's future against the challenges of today and tomorrow. With bold actions to confront our climate crisis, achieve equity and strengthen our democracy, we are building a strong and fair city. Join us."



# New York City: A Renaissance



4

© NYC Department of Parks & Recreation

3 Aerial view of Central Park

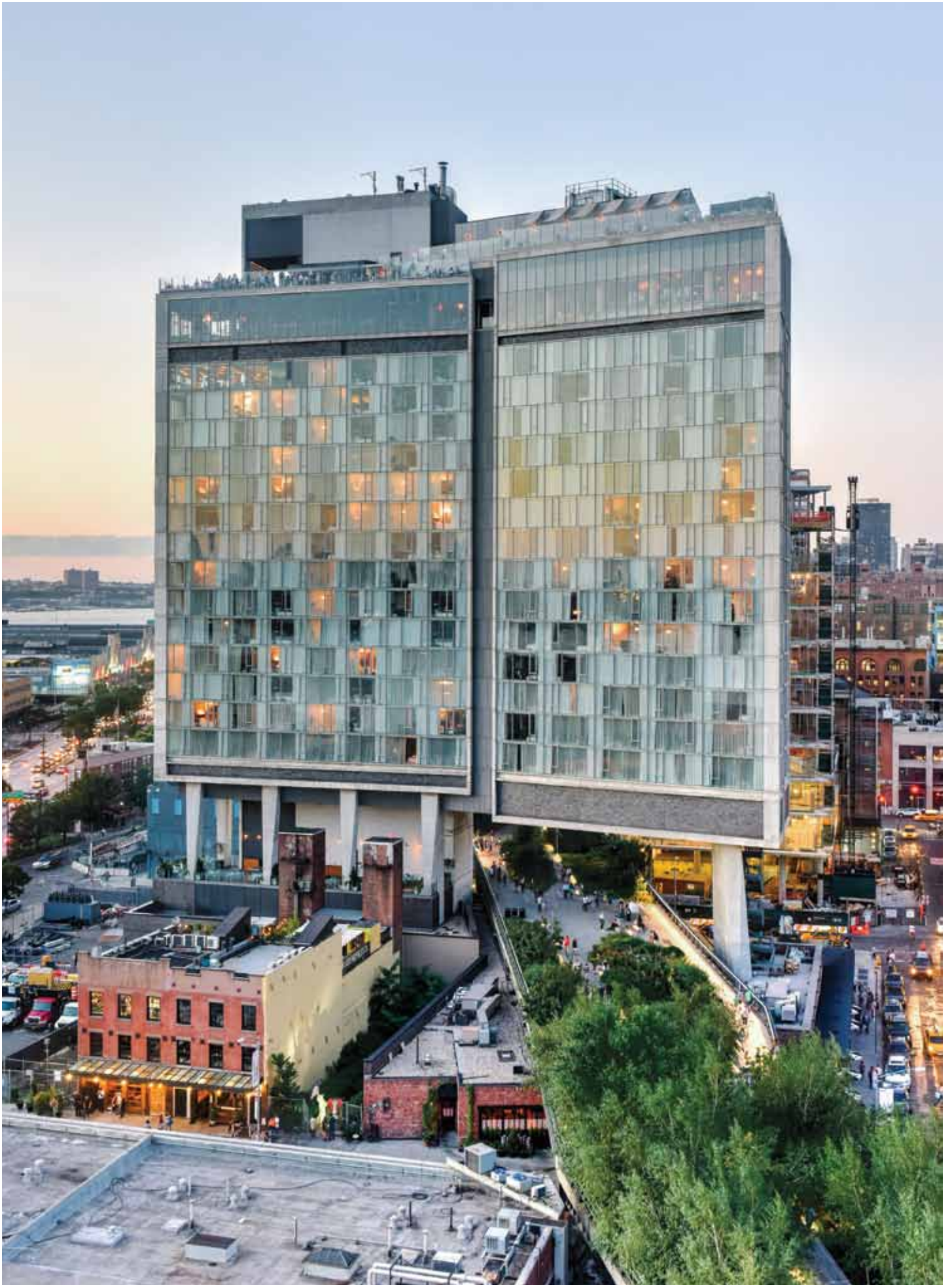
4 Brooklyn Bridge Park

5 Mass yoga session at Times Square



5

© Life in Pixels/Shutterstock





6 The Standard Hotel above the High Line

7 Protected bike lane

8 Plaza at 14th Street reclaimed from car spaces



8

9



9 People enjoying the public spaces at the High Line

# FORMER MAYOR BILL DE BLASIO



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IN OFFICE 2014 – 2021

MR BILL DE BLASIO was the 109th Mayor of New York City. From his early days as a young City Hall staffer, to serving on his local school board, to his most recent position as Public Advocate for the City of New York, Bill de Blasio has spent his life fighting to ensure that every New Yorker – in every neighbourhood throughout our five boroughs – gets a fair shot.

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## **Tell us about New York City’s plans to reduce economic and social inequalities.**

Tackling the inequality crisis means getting to the heart of the single greatest burden for millions of New Yorkers: housing. In a city where half of New Yorkers are rent-burdened and families are being priced out of their own neighbourhoods, we need to intervene on a bigger scale than ever before.

Housing New York – our plan to build and preserve enough affordable housing for a half-million New Yorkers in the coming decade (up to 2026) – is the blueprint for how we will get this done. We are creating new tools and reforming existing ones to make sure that neighbourhoods across the boroughs can increase the amount of affordable housing New Yorkers need, while protecting the affordability of existing housing.

We are also implementing free, full-day pre-kindergarten for every child, implementing paid sick leave worker protection, raising and expanding our living wage, and creating new career pathways so more New Yorkers can acquire the skills they need to secure quality jobs in a growing 21st century economy.

## **What are some innovative solutions that cities can explore to address inequality?**

In 2015, we launched the most ambitious, dynamic and useful municipal ID card programme (IDNYC) in the United States, empowering all New Yorkers regardless of their immigration status. IDNYC is not only a card for all New Yorkers, it is the gateway to the city’s services.

It is the key to opening a bank account, or getting a library card, and the ticket to many of our city’s finest cultural institutions. More than that, this card represents who we are: New Yorkers who value equality, opportunity and diversity.

We must also remember that access to affordable transportation is central to fighting inequality and making our cities more resilient. For years, the conventional wisdom has been that certain neighbourhoods are doomed to isolation because of their geography. That is a phenomenon that has been true in New York and cities across the globe. Even people who can see Manhattan’s skyline from their home face more than an hour of commuting. We are going to change that.

In 2015, we also announced that we are launching a new citywide ferry service that opened for business in 2017. New ferry rides are priced the same as subway fares, so ferries will be as affordable to New Yorkers as our subways and buses.

Residents in long-isolated communities like the Rockaways, Red Hook and Soundview will be closer to the opportunities they need. And beyond connecting residents to jobs in the central business district, our new citywide ferry system will spur the development of new commercial corridors throughout the outer boroughs.

We have also expanded the Bus Rapid Transit (BRT) serving 400,000 New Yorkers by completing a network of 20 routes. BRT will cut transit time on existing routes by 15 to 25 percent. This means New Yorkers will spend less time in transit and more time living their lives.

# “Resilient cities do not just weather proverbial storms but are prepared for them and put measures in place to minimise their impact and protect their people.”

—Former Mayor Bill de Blasio

## **How would narrowing the rich-poor divide make a city more resilient?**

Since the great recession, New York City has, in many ways, bounced back. We have grown to 8.4 million people with a record 3.5 million private sector jobs and more Fortune 500 companies than anywhere else in the world. But progress has been uneven. While the number of jobs is up, many of these jobs are in lower paying sectors with fewer opportunities for wage growth and career advancement. Restoring upward mobility to people at every rung of the economic ladder is critical to making cities resilient for the long-term.

We live in a world where cities and regions compete for talent, investment and jobs, and where economic turbulence and crises caused by climate change are becoming more and more common. Forward-thinking cities need to invest in their people to prepare for those uncertainties. A better-educated and trained workforce helps a city compete for good jobs in the global economy.

## **What role can the individual and the community play in urban resilience?**

In 2012, 44 New Yorkers lost their lives and tens of thousands were displaced by Hurricane Sandy. In the face of incredible hardship, New Yorkers, especially our first responders, showed extraordinary courage, generosity, and determination. We saw ordinary New Yorkers providing assistance, care, and temporary housing for their neighbours in distress.

Community-based organisations played a critical role in the city’s first line of communication with New Yorkers in all five boroughs, and they have since been

integrated more deeply into our broader emergency response plans to harness the goodwill of New Yorkers in every neighbourhood.

One thing we learnt during Sandy is that there is no substitute for person-to-person contact in crises. From evacuation to emergency provisioning, to delivering medical aid, bringing help to New Yorkers’ doorsteps is the most effective way to reach people – not waiting for them to come to the government.

## **What are the challenges balancing the need to rebuild and invest in resiliency?**

The need to rebuild and invest in resiliency are not at odds. They go hand-in-hand. We are building back post-Sandy in a way that will better protect us from future disasters. We are making sure that the work facilitates raising foundations, fortifying homes and protecting vital infrastructure from future storms. This is all part of a massive, comprehensive, and multi-layered resiliency plan being implemented around the city.

Today, we are working to build back the most affected communities and to strengthen them for whatever may come our way. That includes strengthening coastal defences, upgrading buildings, protecting infrastructure and critical services, and making homes, businesses, and neighbourhoods safer and more vibrant.

We are also confronting climate change at its source, becoming the largest city in the world to commit to reducing our carbon emissions by 80 percent by the year 2050. Doing this is not just smart environmental policy, or even an existential imperative to protect New Yorkers – taking on climate change is good economics too.

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This is an edited version of the interview from the June 2015 issue of *Urban Solutions* magazine published by the Centre for Liveable Cities.

# Case Study: Catalysing Transformation

INNOVATIVE ZONING TOOLS IN NEW YORK CITY'S LANDMARK PROJECT

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## PROJECT NAME

West Chelsea  
& High Line

## PROJECT TYPE

Urban  
regeneration

## PROJECT COMPLETION

2013

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### ABOUT THE PROJECT

- West Chelsea/High Line Plan is a Special Zoning District with innovative regulatory/urban design framework for new and affordable housing and preserving NYC's premier art gallery district.
- Centred on the 2.4km High Line, an elevated park transformed from an abandoned elevated rail line, property owners can transfer their development rights to designated receiving sites.
- Repurposing of the High Line began in 2007, and progressively opened since 2009.
- The High Line features a mix of landscaping elements: plantings, 'peel-up' benches, water fountains, public areas, children's areas, recreational pathways, and viewing decks. The project uses inventive design to encourage stair climbing, walking and relaxation.

### ISSUES BEFORE THE PROJECT

- West Chelsea was dominated by under-utilised buildings and parking lots, due to the area's light manufacturing zoning. This puts a limit to the extent of the vibrant residential core of Chelsea westwards.
- There is a critical need for new and affordable housing in West Chelsea.
- There is also a need to protect and encourage continued growth of the area's dynamic art gallery district.
- Pressure from private property owners to demolish the abandoned rail line for new development, despite it being deemed a landmark in the neighbourhood.

### LEADERSHIP & GOVERNANCE

- The planning and design of the High Line was through a partnership between public partners and city agencies, including: NYC Department of City Planning (DCP), Department of Parks & Recreation, The Friends of the High Line, and the NYC Economic Development Corporation.
- The proposal to restore the High Line was supported by the Bloomberg administration (2002-2013).
- DCP played a key role in the High Line, and worked with the community to create the Special Zoning District and the floor-area transfer mechanism, to balance the preservation of the neighbourhood identity, unlocking of development potential and safeguarding of light, air and views around the open space.

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**PROJECT  
SIZE/SCALE**

2.33 km

**PRIVATE INVESTMENT  
ATTRACTED**

2 billion USD

**NUMBER OF VISITORS  
ANNUALLY**

8 million

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**CREATIVITY & INNOVATION**

- The Plan shows that innovative zoning tools can be powerful for unlocking development potential and creating new public assets that benefit the entire city.
- The zoning changes preserved the art gallery district and incentivised new housing for all income groups, turning the once desolated area into a thriving 24/7 community.
- At prominent locations, floor area bonuses allows for restoration of the structure, provision of new open space, and vertical access.
- The High Line is framed as an economic revitalisation project rather than a conservation one, serving as the heart for new residential and commercial developments influencing the success of its implementation.

**IMPACTS OF THE PROJECT**

- West Chelsea has transformed from an under-utilised industrial area into a premier neighbourhood, with improved quality of life.
- The revitalised district attracted over 2 billion USD private investment and created 43 new buildings in the area in the first six years.
- West Chelsea/High Line became an international draw, with distinguished architects around the world clamouring to build in the neighbourhood.
- The High Line inspired many US cities to redevelop obsolete infrastructure as public space.
- The High Line now hosts over 450 programmes and activities and attracted an estimated 8 million annual visitors.

**REPLICABLE IDEAS**

- The transfer corridor concept can serve as an important tool for elevated rails-to-trails conversions in urban settings throughout the world.
- The High Line demonstrates that using innovative policies to repurpose derelict infrastructure can dramatically transform cities.



1

# Suzhou

## THE JURY'S CITATION

Suzhou is recognised for its remarkable transformation over the past two decades (up to 2014). The significance of its transformation lies in the city's success in meeting the multiple challenges of achieving economic growth in order to create jobs and a better standard of living for its people; balancing rapid urban growth with the need to protect its cultural and built heritage; and coping with a large influx of migrant workers while maintaining social stability.

Suzhou initially benefitted from Singapore's experience and contributions in the 1990s when it set up its first industrial estate and prepared a master plan of the industrial township and city centre. Since then, Suzhou has independently put in place many initiatives that propelled the city forward.

## INNOVATIVE, HIGH-VALUE, SERVICE-ORIENTED ECONOMY

Firstly, it successfully transitioned from an agricultural, manufacturing, export-oriented economy to an innovative, high-value, service-oriented one. The city carried out proper planning and made deliberate efforts to invest in physical infrastructure to support its economic objectives. Coupled with a combination of innovative incentives and international marketing, Suzhou attracted key international businesses in the Suzhou Industrial Park and Jinji Lake Central Business District (CBD). The city continues to invest in infrastructure as the city expands, such as a new metro system serving the city and linking key industrial zones and other new development areas.

## CULTURAL CONSERVATION

Secondly, Suzhou recognised the importance of cultural conservation, even as the drive for modernisation gained momentum. In order to maintain and preserve the old city comprising its historical and cultural core, Suzhou redirected urban growth to a new mixed-use CBD for the 21st century. At the same time, investments in its rich heritage allow it to come alive for residents, small businesses, and tourists. The UNESCO-designated regions, such as Pingjiang Historic District, are preserved while continuing to serve as attractive neighbourhoods for its residents.

## ENHANCEMENT OF THE LIVING ENVIRONMENT

Suzhou is commended for its continuous enhancement of the living environment, such as the Stone Lake Scenic District project. This district demonstrated Suzhou's innovative social policies in the re-settlement of rural farmers to urban areas due to pig farming activities contaminating the existing lake. The farmers were resettled in just four months under the innovative '1-for-3' relocation housing policy, where they were offered three units of urban housing in exchange of one unit of farm residence.

The first unit was meant for the farmers themselves, while the second unit was for family members, and the third as income property. The city protected and made more accessible their water-rich landscape which is consistent with the Chinese value of 'water' forming linkages and connections with settlements.

## AN INCLUSIVE SOCIETY

Thirdly, Suzhou's inclusionary policies lies in its treatment of migrant workers. Faced with a surge of migrant workers flocking to the city for jobs, Suzhou's economic growth is complemented by innovative social policies that advance community integration. Migrant workers are given equal opportunities to access health and education benefits as the local residents. These policies have facilitated the integration of workers into the city and brought about greater social stability.

Throughout the period of continuing rapid growth, Suzhou has maintained its specific and distinctive local identity and culture, creating a high quality of life for its residents and workers, and attracting tourists to share in its past and future. With rapid development, more attention to the urban design quality of the city, quality architecture and human scale design should be encouraged.

## STRONG LEADERSHIP

On the whole, the city leaders of Suzhou have demonstrated strong leadership and commitment to develop the city, guided by good governance and structured processes. The clearly articulated long-term vision and planning approach that Suzhou has put in place, combined with competent leadership and strong political support, enabled the city to tackle urban challenges effectively. Suzhou provides many good lessons for the many rapidly urbanising cities in China as well as in other developing nations.



Scan to watch the commemorative video of Suzhou.

[go.gov.sg/suzhou](http://go.gov.sg/suzhou)



# SUZHOU KEY STATISTICS

**AREA**  
2019

**8,657.3** km<sup>2</sup>

**POPULATION**  
2019

**10,700,000** people



**DENSITY**  
2019

**1,238** per km<sup>2</sup>

**GROSS DOMESTIC PRODUCT**  
2019

**281** billion USD

**UNEMPLOYMENT RATE**  
2019

**1.8%**

**PER CAPITA INCOME**  
2019

**8,383** USD

**HOME OWNERSHIP**

**NA**

**MODAL SPLIT**  
2019

31.0%  
Private Vehicles



69.0%  
Details of  
other modes  
unavailable

**LITERACY RATE**  
2019

**100%**

**LIFE EXPECTANCY**  
2019

**83.5** years

**CARBON EMISSION**

**NA**

**GREEN SPACE**  
2019

**13.7** m<sup>2</sup> / person

\* All information correct as of 2019.

# A Delicate Balance

by Dr Cheong Koon Hean

Dr Cheong Koon Hean was a member of the Nominating Committee since the Prize's inauguration and is the Chair of the Nominating Committee since the 2020 Prize. She is one of the key persons behind the establishment of the Prize. In this essay, she talks about why Suzhou's win in 2014 was an important milestone for the Prize.

“Suzhou’s win gave us an opportunity to send out a clear message and hope to the world that achieving holistic and well-balanced development while tackling urban challenges is possible.”

—Dr Cheong Koon Hean

## THE ‘PARADISE ON EARTH’

Picture the Chinese city of Suzhou and the image of picturesque and quaint classical gardens with winding canals lined with soft willows comes to mind. As a cultural city with over 2,500 years of history, Suzhou is an epitome of a ‘paradise on earth.’ On the other hand, visitors to Suzhou today would be astonished at the rapid growth of the city into a thriving metropolis in the short span of two decades. The skyline is changing with high-rise towers in the fast-growing Jinji Lake Central Business District and Suzhou Industrial Park. Such rapid development presents incredible challenges for this historic city. Yet Suzhou has successfully preserved its cultural and natural heritage, especially its UNESCO World Heritage classical gardens, with great authenticity. Against the backdrop of China’s rapid industrialisation and urbanisation, Suzhou stands out as having achieved a delicate balance of the old and the new.

## LEADERSHIP AND GOVERNANCE

I recalled my first encounter with then-Mayor Zhou Naixiang in 2013. He came across as a determined man, passionate about his administration’s dedication to develop not just the new parts of the city, but also to preserve Suzhou’s centuries-old culture and character. I also met Mr Yang Baojun, the then-Deputy Director of the China Academy of Urban Planning and Design. He attested to the excellent planning practices of Suzhou, which set it apart from many other Chinese cities. Having known Mr Yang over the years as a highly respected urban planner and one who is refreshingly forthright, his views on Suzhou certainly carried weight for us. Since winning the Prize in 2014, subsequent Suzhou Mayors Qu Futian and Li Yaping continued to provide strong and dedicated leadership, ensuring that Suzhou remains true to its plans even with changes of leadership. Up to this day, Suzhou receives many visits from officials of other Chinese cities, eager to learn from its successes.



## WHY SUZHOU'S WIN IS IMPORTANT

Suzhou's win in 2014 gave us an opportunity to send out a clear message and hope to the world that achieving holistic and well-balanced development while tackling urban challenges is possible. The first two winners of the Prize, Bilbao and New York City, each told how a small and large city were able to reinvent themselves in their own unique ways in order to stay abreast of urban challenges. Suzhou added a different dimension to the story – one that spoke of deliberate strategies to conserve and continue to invest in its heritage, while enabling the city to grow and meet future demands. With increasing and accelerated urbanisation around the world, it is easy for city leaders to sacrifice and forgo the old to make way for the new. Suzhou's transformation story tells us otherwise, and it was this important message that led to the award of the Prize to Suzhou.

## THE VALUE OF DEVELOPING A COMPREHENSIVE PLAN

A city's transformation cannot happen overnight: it needs to be guided by sound development principles and a strong and comprehensive plan. Since the early 2000s, Suzhou had already laid the foundation for a smart growth strategy by developing a visionary and long-term master plan aimed at increasing the city's liveability, promoting business vibrancy while protecting its cultural heritage. The plan safeguarded the historic districts of Suzhou while channelling developments to new designated areas. Detailed sub-plans were prepared for industrial development, eco-environment conservation, water protection, and heritage preservation and restoration. The Ministry of Housing and Urban-Rural Development has identified Suzhou as a demonstration area for the protection of history and culture in China. Suzhou therefore has long adopted the principles of 'repair the old, retain the old, in workable steps'. It preserved the original layout of the ancient city, protected it and restored it progressively.

Guided by the Pingjiang Historic District Feature Protection and Environmental Restoration Plan and the Pingjiang Road and Streetscape Protection and Restoration Plan, the Pingjiang Historic District still maintains the traditional urban layout with its beautiful traditional elements of water, land, river, and neighbourly streets. The local architectural styles of 'small bridge, flowing water, whitewashed walls and black tiles' remain to this day. As I explored this ancient city, what I liked very much was that a real-life community still resides here. Small tea houses enlivened with opera performances and a new museum by renowned architect I.M. Pei, who drew inspiration from Suzhou's garden villas, blended in quite naturally amidst the community's everyday bustle.

Beyond the historic district, located in the outskirts of Suzhou is Shihu, or the Stone Lake Scenic District, home to numerous ancient heritage structures and a popular tourist destination today. On first seeing it, I was quite surprised that Stone Lake was actually beautiful, given that just some ten years ago, the Stone Lake and its surrounding areas were heavily polluted due to industrial and agricultural activities following China's reform. The master plan identified Stone Lake as one of its flagship park developments. The pollutive farmlands and construction sites were redeveloped through a series of lakeside landscape construction that restored the water quality and the lake's surrounds.

The remarkable transformation of the lake in such a short time was in large part due to the city's innovative '1-for-3' housing policy. Some of the ex-farmers were even re-employed as gardeners and caretakers in the new Stone Lake Park. The scheme was highly successful in not only achieving a record relocation period over a mere four months, but also demonstrated social innovation in meeting the farmers' needs.

In addition to the new Jinji Lake Central Business District, Suzhou established 12 economic development zones to boost its industrialisation efforts, comprising industrial parks, innovation parks and demonstration zones for intellectual property rights protection. Of these, Suzhou Industrial Park (SIP), first developed with Singapore's assistance in 1994, was one of the best examples.

In addition to cultural sensitivity, we were pleasantly surprised to know that Suzhou had adopted inclusive policies for its migrant workers. Unlike many other Chinese cities that restricted the entry of migrant workers and social benefits to them, Suzhou implemented a residence permit for the non-native population. The city increased the number of social benefits to both its residents as well as the non-native groups, including free compulsory education, equal employment opportunities for all, and subsidised medical care and housing.

## CONTINUOUS TRANSFORMATION

The 2014 Prize is a milestone for Suzhou and affirms the city's progress and achievements since the launch of their master plan. Then-Mayor Zhou Naixiang said, "We are honoured to receive this award. This is an affirmation of our effort in striving for excellence in urban planning and development. Winning this award is an enormous encouragement for us to push for more innovative solutions for Suzhou to develop in a sustainable way while preserving our treasured historic and natural heritage."

Indeed, the city has since gone on further to hone its unique identity while opening up new areas for development. The various industrial parks and demonstration zones have transformed into multifunctional new urban districts. The SIP now hosts high-tech and modern service industries. New developments such as the Suzhou High-Speed Railway New

City, the new Suzhou Centre and the Suzhou International Financial Centre, are examples of how the city forges ahead in its development.

At the same time, the city developed a new 16-kilometre fitness trail along the ancient city moat that helps to bring its people closer to the heritage. For its preservation efforts of its intangible and built cultural heritage, Suzhou was named a World Heritage Model City by the Organisation of World Heritage Cities in 2018.

## THE DELICATE BALANCE

The danger of rapid growth can lead to the loss of identity and social memories that create distinctiveness and pride for a city's citizenry. Many cities compete for attention by building tall gleaming towers and kitsch architecture but do not pay sufficient attention to its history or adopt good urban design and appropriate scale. Successful cities must harness a combination of strategies wrapped around culture, heritage, good design, placemaking and programming to add depth to the city's image and brand, and to prioritise the needs of its citizens.

I wish Suzhou all the best in its progress and encourage it to strengthen its identity and its cultural roots as it continues to improve the lives of its residents. As the city that embodies a slice of 'paradise on earth', it is a touchstone example for other cities to follow in embracing tradition and modernity.

**"I wish Suzhou all the best in its progress, and encourage it to strengthen its identity and its cultural roots as it continues to improve the lives of its residents."**

—Dr Cheong Koon Hean

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DR CHEONG KOON HEAN is Chair of the Centre for Liveable Cities and Lee Kuan Yew Centre for Innovative Cities. She was formerly CEO of the Housing and Development Board (2010–2020), overseeing the development and management of over one million public housing flats. She was also CEO of Urban Redevelopment Authority from (2004–2010) and has extensive experience in land use planning, conservation of built heritage and the real estate market.



3 The Gate of the Orient in the background - a landmark of the Jinji Lake Central Business District.

# A Marriage of Culture

by Feng Zengkun

3



© KeepWatch/Shutterstock

# and Commerce

Suzhou has mastered the art of building a future out of traditions. It has harnessed its historical and cultural assets in urban development projects to boost its tourism and economy, and announced plans to revitalise its traditional industries even as it invests in emerging and established ones. Its union of old and new, and art and commerce, could be a model for other cities.

“Suzhou has become a hub for trade and business, and is one of the most popular destinations for global professionals to turn their dream into reality.”

—Former Mayor Li Yaping

## WHERE HERITAGE MEETS PROGRESS

Suzhou's deft balancing act since winning the 2014 Lee Kuan Yew World City Prize continues to serve it well. In recent years, the government has created districts to encourage the growth of both established and promising industries and tapped on the city's heritage more to distinguish it from others. In the northern part of the city, it built the Suzhou High-Speed Railway New City, which houses companies and organisations in three major sectors, namely research and development, cultural creative arts, and fin-tech. The New City, with a planned area of 28.9 square kilometres, recorded an annual gross domestic product growth of 48 percent in 2018.

The Wujiang Taihu Lake New City in the southern part of the city is another incubator for the financial and other industries. The New City's Financial Town has attracted over 250 financial institutes and organisations, including venture capitalist, investment and wealth management firms. The burgeoning financial centres in the north and south of Suzhou are also supported by the new Suzhou International Financial Square, a 450-metre-high skyscraper in the Suzhou Industrial Park (SIP).

The Qipao Town in the Taihu Lake New City is another example of how Suzhou is utilising its unique history for the city's future. Highlighting the city's longstanding expertise in silk and silk products, the town has a Qipao Museum, Qipao Research Institute and Qipao Outdoor Performance Plaza to showcase the traditional Chinese costume, which is also called the cheongsam. With luxury qipao and silk brands also putting down roots in the town, it is now a nexus of culture, business and tourism that is helping Suzhou flourish by spotlighting its past.

For protecting and preserving its intangible and built cultural heritage, which also includes its Dragon Boat Festival customs and Song brocades, a type of cloth produced by the city that is renowned for its vibrant colours, patterns and softness, Suzhou was named a World Heritage Model City by the Organisation of World Heritage Cities in 2018. In the same year, the city announced plans that will further capitalise on its history.

Suzhou is designing a section of the Grand Canal National Cultural Park, China's monumental undertaking to build a 690-kilometre cultural belt along part of the country's Grand Canal, one of the world's oldest and longest. The park, when opened, will span 11 cities, including Suzhou, and the world's largest national park.

Mr Zhou Naixiang, Suzhou's Communist Party Secretary and former Mayor, said: “Along the Suzhou section of the Grand Canal, there are not only a large number of tangible cultural heritages, but also a large number of intangible cultural heritages. We will systematically promote the work with a cultural vision.” On the horizon are projects such as a museum cluster, and revitalisation of traditional handicrafts and industries, including embroidery, jade carving, and mahogany furniture, along the canal.

## AN ALL-SYSTEMS UPGRADE

The canal is also a focal point of Suzhou's wide-ranging efforts to upgrade its municipal systems to prepare for the future. In coordination with the works for the cultural park, the government will reinforce the canal's flood-banks that extend across various districts, as a precaution against climate

change. It will also demolish illegal buildings and plantations along the canal and build a forest and wetlands which will protect the area's ecology and act as additional flood prevention measures.

In 2015, the city completed a 16-kilometre-long fitness trail along its ancient moat that similarly blends nature, recreation, and flood protection. The trail connects eight historical city gates, several famous bridges, and the Classical Gardens, and has dozens of sports squares along the way for residents to exercise while enjoying the beautiful scenery along the moat. Permeable concrete was used to absorb rainfall and reduce the risks of floods in the city.

Other concluded, ongoing, and upcoming projects will safeguard the city's traffic, power, water and telecommunications networks. In 2015, Suzhou was designated as one of China's first pilot cities for underground pipe galleries, tunnels that carry pipes and cables including those for electricity, water, natural gas, heat, communications, cable television and circulation of reclaimed water. These advanced tunnels are equipped with monitoring systems and access points for maintenance to minimise road works. Suzhou currently has three pipe galleries and plans to expand its length from 34 kilometres in 2017 to 193 kilometres by 2030.

An expansion of the city's metro is also underway. By 2023, it will complete a 41-kilometre line linking to Shanghai's metro, facilitating travel between the two cities. The 27-station line is expected to cost 27.4 billion yuan (3.9 billion USD) with a terminus at SIP. In the longer term, the city plans for 15 metro lines totalling 768 kilometres, up from its current three lines.

Furthermore, intelligent transport systems to improve the city's traffic are already in place. At the Suzhou Public Transport Command Centre, such technologies provide officers with a real-time overview of the city's public bus service, which comprises about 370 routes and nearly 4,700 buses that ferry 1.5 million passengers daily. Data collected from surveillance cameras and payment machines on the buses, as well as from cameras at bus stops, aids operators in monitoring passenger flows so that they can adjust bus schedules, frequencies and speeds as needed. With the intelligent systems, the city can now predict its traffic flow within the next hour to an accuracy of more than 94 percent.

Such technological advancements, combined with a careful tending of traditions, will continue to be the Suzhou way. In May 2019, then-Mayor Li Yaping noted that the city's development projects have helped it to prosper. He said: "Suzhou has become a hub for trade and business and is one of the most popular destinations for global professionals to turn their dream into reality."

## 5 The new High-speed Railway New City



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This article was first published on the Prize website in September 2019.  
For more useful city resources, visit [go.gov.sg/cities](http://go.gov.sg/cities)

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4 Pingjiang Historic District



© Jin Liming

4



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6



6 Suzhou Metro

7 Fitness track along ancient moat

7



© City of Suzhou

8 Pingjiang Historic District



8

9 Stone Lake District



9

# FORMER MAYOR LI YAPING



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IN OFFICE 2017 – 2021

MR LI YAPING was the Deputy Secretary of Suzhou Municipal Party Committee and Mayor of Suzhou. He presided over all functions of the city government, as well as financial management, audit and institutional establishment work. He also oversaw the local judicial and procuratorate institutions. Prior to this, he worked for the city of Zhenjiang from 1998–2002 as Director General of Zhenjiang Water Conservancy Bureau and Zhenjiang Technology Bureau. He was then appointed as Mayor of Jurong city from 2002–2004, and Vice Mayor of Zhenjiang city from 2006–2007.

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## How has winning the Prize impacted Suzhou?

The Prize is both an affirmation of Suzhou and a spur for our future. It inspires us to plan our development with higher ambitions and a broader vision.

Since winning the Prize, Suzhou has been keener on its new development concept, where we have reinforced the city's advantages and made breakthroughs in innovation.

Suzhou is committed to its vision of a modernised industrial city with international competitiveness, an open and inclusive city for entrepreneurship and innovation, a beautiful and liveable city with prosperity and civic-mindedness, and a historic and cultural city that is both traditional and modern.

Firstly, we have emphasised the role of reform and innovation in urban transformation and development. In 2018, Suzhou's Gross Domestic Product (GDP) registered 1.86 trillion RMB (approximately 267 billion USD), seventh among cities in China.

The Sino-Singapore Suzhou Industrial Park has been ranked first among national economic and technological development zones for two consecutive years. As a result, Suzhou has attracted many talents and enterprises to the city, while the four leading industries – information technology, biomedicine, nanotechnology, and artificial intelligence are booming.

Secondly, we have devoted to the protection of the ancient city by balancing heritage and development, so that its beauty and charm are conserved. In 2018, Suzhou attracted over 1.88 million overseas and 127 million domestic tourists, becoming one of China's first demonstration cities for tourism and leisure.

Thirdly, we have achieved better urban-rural integration through the construction of infrastructure and basic public services. The income ratio between urban and rural residents has stabilised to around 2:1 for many years, leading to the city being one of China's regions with the smallest urban-rural gap.

Finally, we have conscientiously protected the environment, emphasising on areas such as 'blue sky', 'clear water' and 'clean soil'. Suzhou has received accolades such as 'National Environmental Protection Model City' and 'National Ecological Garden City', and was ranked first in China in the global liveable cities selection by Economist Intelligence Unit for three consecutive years.

## Tell us more about the new projects that Suzhou has been developing since winning the Prize.

In recent years, we have implemented many new plans and made progress to enhance the city's image, optimise its functions and better serve our citizens.

The High-speed Railway New City and the Taihu Lake New City are gaining prominence, in addition to the existing business city and ecological science and technology city. The Gate of the Orient is a new city icon, while the Suzhou Centre houses the city's largest ecological sky garden. Meanwhile, the 450-metre Wharf International Financial Square – the tallest in Jiangsu Province – redefined the city skyline.

For infrastructure, the recently completed railway transit and intercity high-speed rail projects are already in operation, while the traffic system is being improved. Currently, Suzhou's urban railway transit

# “Suzhou pursues a people-centred development, and strives to provide our citizens with a secured and sustainable environment that allows personal growth, happiness and safety.”

–Former Mayor Li Yaping

network totals 121 kilometres, with lines 3, 5, 6 and S under construction. By 2024, there will be a total of nine metro lines in Suzhou.

We are balancing the protection of the ancient city with urban renewal and enhancing our unique culture and its influence. In 2018, Suzhou joined the World Heritage City Organisation – the only Chinese member, and won the World Heritage Model City.

## What are the ongoing challenges faced by Suzhou?

Firstly, technological advancements have affected both international trade as well as resources and the environment. Therefore, Suzhou is committed to an innovation-driven, green, and sharing development, and new growth engines to shift our economy from manufacturing to innovation.

Secondly, Suzhou is actively taking measures to improve citizens' satisfaction and sense of belonging, to meet the increasing need to balance development with quality of life, especially in the Chinese society today.

Thirdly, Suzhou is aspiring towards the world's top cities in terms of resources, facilities, and city impacts. For example, Suzhou is aiming to strengthen its comprehensive transport hub infrastructure and its international cultural exchanges, and is committed to make the city a truly international metropolis.

## How has Suzhou continued to invest in your people and urban communities?

Suzhou pursues a people-centred development and strives to provide our citizens with a secured and sustainable environment that allows for personal growth, happiness, and safety.

We have invested in a balanced and high-quality education. Since 2014, Suzhou has built, renovated, and expanded 342 kindergartens, primary schools, and secondary schools, and accommodated an additional 270,000 students.

Suzhou has also invested in improving health. We have built fitness tracks, an Olympic Sports Centre and other sports facilities for our citizens. The fitness tracks connect the city moat and eight ancient city gates and walls and are well-received by the citizens. We have also expanded the Health Suzhou programme to offer better medical care and elderly care services in wider areas. To date, Suzhou has built 12 new hospitals and added another 11,000 beds in senior care facilities. The life expectancy in Suzhou has reached 83.5 years, exceeding the average of developed countries and regions.

## What have you learned from the other Prize Laureates?

As Confucian said: “When three are walking together, I am sure to find teachers among them.” The other Prize Laureates have inspired us in areas such as urban renewal and sustainable development.

For example, we have seen how Seoul moderated its pace of urban development, improved its traffic issues, and created wonderful urban spaces with unique characteristics. Seoul's commitment to a people-centric approach in its urban development has set a great example for Suzhou.

New York City has made unprecedented efforts in promoting low-carbon lifestyles and green development. Their cycling movement has effectively alleviated traffic jams in the city. Likewise, Suzhou has actively promoted active mobility and other efforts to conserve energy.

Bilbao is highly innovative in urban regeneration and creating unique urban spaces. Its waterfront regeneration anchored by the Guggenheim Museum is one-of-a-kind. Suzhou also aspires to preserve and promote its unique city features, such as its classical gardens and other cultural heritage.

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All information are correct as of March 2020.

# Case Study: Displacing without Disrupting

INNOVATIVE HOUSING POLICY AT SUZHOU'S STONE LAKE SCENIC DISTRICT

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## PROJECT NAME

Stone Lake  
Scenic District

## PROJECT TYPE

Urban  
regeneration

## PROJECT COMPLETION

2013

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### ABOUT THE PROJECT

- Located in southwest Suzhou, the Stone Lake Scenic District project is first identified as one of four green elements in the city's 1986 Master Plan.
- It is then regarded as a flagship project that aims to improve the city's environmental quality under the city's 2003 Master Plan.
- It is envisioned as a city country park with traditional Chinese garden elements and historical features, catering to residents and visitors.
- It aims to restore ecology, protect heritage, provide infrastructure, landscaping and an attractive design.

### ISSUES BEFORE THE PROJECT

- The lake and its surroundings were polluted as a result of rapid economic development.
- There was severe damage to its ecology and natural environment from quarrying and cemetery construction.
- The impervious cemetery grounds reached 245ha at one point.
- Pig farming activities and excessive fish farming critically deteriorated the lake's water quality and reduced its surface area.
- Over-clustering of industrial enterprises and crowding of squatter settlements adversely impacted the surrounding environment.

### LEADERSHIP & GOVERNANCE

- Suzhou initiated a series of planning actions focused on development and transformation to address issues related to rapid industrialisation and urbanisation, culminating in the 2003 Master Plan.
- The city established an efficient organisational structure, with the project team led by the municipal government, thus helping to eliminate red tape, optimise resources and realise planning goals.
- Additional investments such as Tiger Hill Front Entrance Comprehensive Renovation Project and Jianfengzhou Park Project as fixed assets helped to increase the capital required for the project.

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**PROJECT  
SIZE/SCALE**

564 hectares

**LAKE SURFACE AREA  
REINSTATED**

> 200 hectares

**NUMBER OF VISITORS  
WITHIN FIRST 4 MONTHS**

600,000 visitors

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**CREATIVITY & INNOVATION**

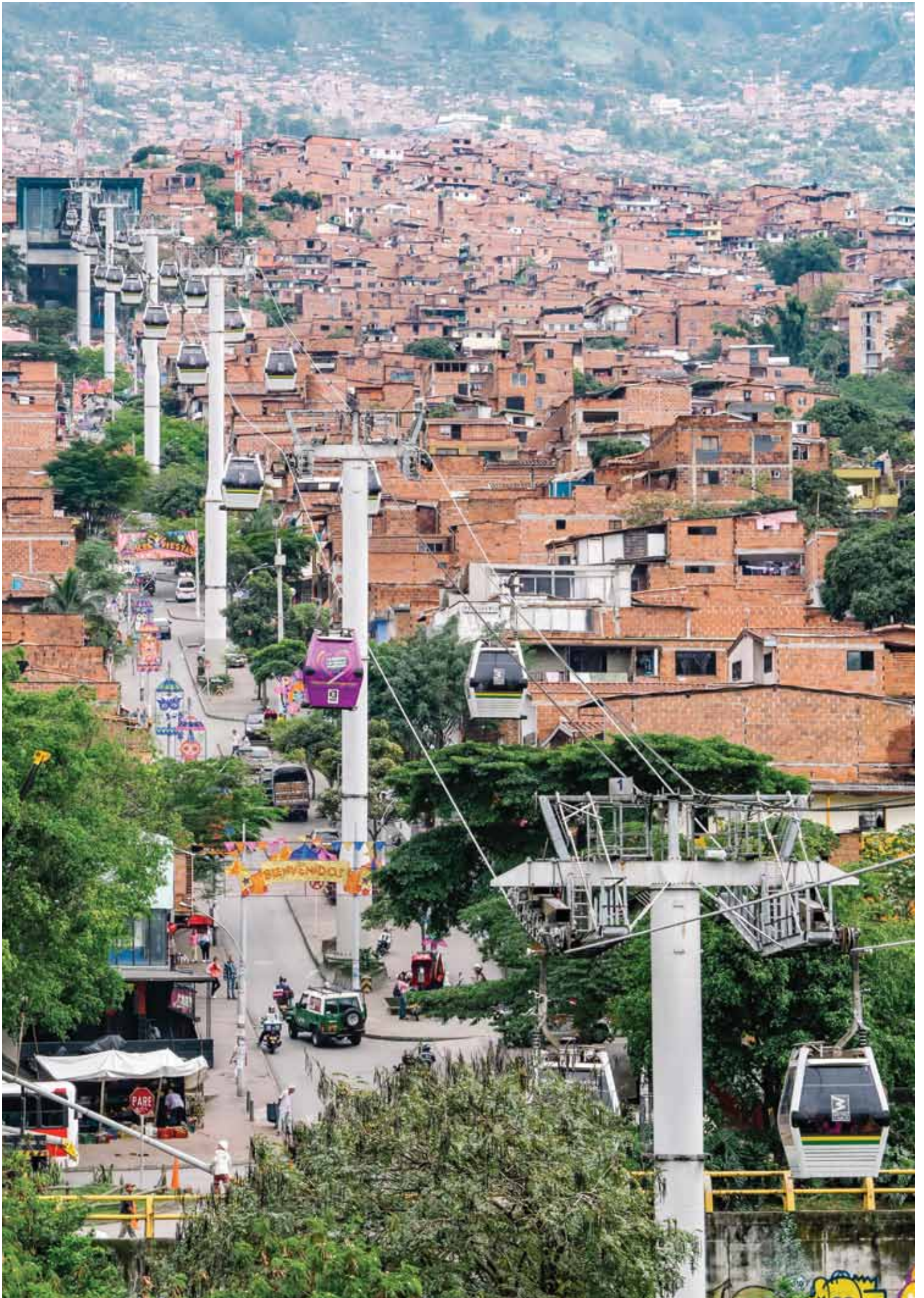
- While restoring and improving the water quality, the city controlled the number of residents within the scenic site.
- Rural farmers were relocated to urban areas as pig farming activities contaminated the lake.
- An innovative '1-for-3' relocation housing policy offers the displaced farmers three units of urban housing in exchange of one unit of farm residence, where they could use the first unit for themselves, the second for family members, and the third for rental income.
- The policy's success facilitated the resettlement in a short span of just four months.
- As a result, the city was able to protect and make more accessible their water-rich landscape.

**IMPACTS OF THE PROJECT**

- Over 200ha of enclosed aquaculture facilities on the lake surface were dismantled, and land designated for cemeteries reduced. This expanded the lake surface area and improved the water quality and ecology.
- Over 30,000 trees planted in 11,000ha of land, forming a 6.6km scenic belt around the lake.
- Historic attractions such as Xingchun Bridge, Zhiping Temple, Lanka Tower Yard, Fishing Garden and Yue City Ruins are preserved and restored.
- The 5.7km Wuyue Road and 8km of embankment are restored, and over 10km new scenic parkway and over 20 scenic bridges constructed.
- 600,000 visitors received within four months of its opening.
- The project is a showcase of environmental protection and utilisation of resources.

**REPLICABLE IDEAS**

- Investing in infrastructure helps the city realise its twin goals of achieving economic growth while improving quality of life.
- Planning ahead helps to achieve the co-existence of the ecological site with its surrounding urban communities. For example, ecological protection, planning of suitable facilities, and meeting green building standards can help to minimise environmental impacts.



1



# Medellín

## THE JURY'S CITATION

Medellín is recognised for its success in overcoming challenges of uncontrolled urban expansion and years of violence due to social inequalities and its remarkable transformation over the past two decades. Through bold leadership, long-term plans and social innovation, the city's leaders have tackled its most pressing issues and improved the economy, as well as its citizens' employability and quality of life.

## BOLD AND VISIONARY LEADERSHIP

Uncontrolled urban expansion had resulted in large expanses of informal settlements occupying the hills along the periphery of the urbanised zone. Over a sustained period, a succession of leaders has demonstrated the willingness to recognise and take on deep-rooted problems – the wealth division, lack of equity and opportunities for its citizens – providing the much-needed continuity for efforts to rehabilitate neighbourhoods and improve living conditions in the informal settlements.

1 The MetroCable is an ingenious solution to link inaccessible settlements on steep hillsides to jobs, education, and opportunities.

## CREATIVE SOLUTIONS DESPITE LIMITED RESOURCES

Working with limited resources, Medellín has devised alternative means of generating funds – the publicly-owned utilities company EPM is a profitable entity that has successfully expanded operations beyond Colombian soil and channels about 30 percent of its annual profits to social investment projects. The city has also implemented catalytic projects in strategic areas where they can bring about the greatest impact.

The Circumvent Garden is an intervention along the urban-rural edge of the eastern and western mountain ridges that seeks to control urban expansion and mitigate risks of landslides; improve the conditions of settlements; generate new public spaces; and connect the hillside and the city through multi-modal transport infrastructure, thereby improving accessibility to jobs and education. Local residents are equipped with skills in construction and agriculture to enable the community to be self-sufficient.

The city goes on to take the unusual step to assess and legalise most of the informal housing units that were found to be structurally sound. This removes the need for heavy investments on relocation programmes, while immediately making the settlers feel welcomed and allowing them to start contributing as a valued member of the larger community.

The Unidades de Vida Articulada (UVA – Life Articulated Units) programme is another project where citizens are actively involved in the building of sports, recreational and cultural venues, many of which are adapted from existing utility water tanks that occupied large plots of previously inaccessible land. These venues are translated into communal spaces hosting activities that are decided by the communities themselves.

## SOCIAL INNOVATION

Social integration is a massive challenge for many cities around the world, but Medellín has found the key to effective governance in social innovation. The city aims to empower every member of society, giving them a stake in the city and in the process gaining public trust and confidence. The Good Start programme, which is centred on early childhood education, clearly articulates the city's commitment to invest in the future.

## CO-CREATION

Medellín has put the needs of the people at the forefront of planning and policies and inculcated a culture of open dialogue and cooperation between government, private entities and the people. Proantioquia, a non-profit organisation of private businesses in the Antioquia region, actively serves as a platform for government and private companies to work together to formulate policies and execute initiatives, based upon the principles of social responsibility and fairness.

## ONGOING CHALLENGES

Medellín has come a long way from its past, demonstrating that inclusive and collaborative governance can overturn even the most difficult circumstances. Successive city leaders will have to build upon what had been put in place thus far; urban solutions and creation of jobs must continue to keep pace with growth in order to prevent the reappearance of past problems. As the wave of positive change that has swept Medellín settles, the city will have to manage the evolving expectations of its people. On the whole what the city has achieved is not only an inspiration for cities looking to overcome similar challenges, but also provides many valuable lessons for all cities worldwide.



Scan to watch the commemorative video of Medellín.  
[go.gov.sg/medellin](http://go.gov.sg/medellin)

# MEDELLÍN KEY STATISTICS

**AREA**  
2018

**382.0** km<sup>2</sup>

**POPULATION**  
2018

**2,376,337** people

**DENSITY**  
2018

**6,220** per km<sup>2</sup>

**GROSS DOMESTIC PRODUCT**  
2015

**21,675** million USD

**UNEMPLOYMENT RATE**  
2019

**13.5%**

**PER CAPITA INCOME**  
2015

**8,796** USD

**HOME OWNERSHIP**  
2018

**55.8%**

**MODAL SPLIT**  
2019

20.0% Others

39.0%  
Public Transport

34.0%  
Private Vehicles

1.0% Bicycles /  
Personal  
Mobility Devices

6.0% Taxis

**LITERACY RATE**  
2019

**97.8%**

**LIFE EXPECTANCY**  
2019

**77.8** years

**CARBON EMISSION**

**NA**

**GREEN SPACE**  
2017

**3.6** m<sup>2</sup> / person



# Medellín is Thriving

by Professor Marilyn Jordan Taylor

Professor Marilyn Jordan Taylor, member of the Nominating Committee since 2012, fondly recalls her pleasant encounters of Medellín in this personal essay. She links her positive experiences with the right steps that the city has taken to reach their accomplishments today.

“The children were sharing a multi-party conversation about the characteristics of their village, about how they and their families live together without violence, about how they are growing up in a society that respects life, everyone’s life.”

—Professor Marilyn Jordan Taylor

It was mid-afternoon in Medellín in 2013. As the bus climbed up and rolled down the folds of the mountainous ridges surrounding the city, one could see the children of a small village gathered on the playground of their school. Classes were over for the day, but these children, 30 or so of them, perhaps eight to 12 years in age, were still engaged in activities that spilled out across the tarmac. Together with their teachers, they were learning about the metro culture of Medellín.

We were on the outskirts of the city. There were no guns, no gangs. The children were sharing a multi-party conversation about the characteristics of their village, about how they and their families live together without violence, about how they are growing up in a society that respects life, everyone’s life. There were loud games and songs, and lots of finger-paint in use, for drawing what they see. They also

painted themselves, enjoying the colours and even sharing it with the visitors.

To create ‘metro culture’, Medellín has made social investments in many ways, including multiple forms of community-based educational and extracurricular programmes. These programmes vary by place but occur in most of the communes and villages. Residents within each area help to select the specific local programmes they wish to support with municipal government funding. Parents enrol their children even though many will have a long walk home once the activities are over for the day.

These local educational programmes are a small-scale but important piece of the much-heralded transformation of a city once known globally for drugs and deaths. How has Medellín achieved such thorough, durable, and enviable change?

## **TWO MAYORS IN A LINE OF CONTINUITY**

This first part of the answer lies in the consistency of municipal leadership – despite changes in the political party. Mayors Anibal Gaviria Correa (2012-2015) and Federico Gutiérrez (2016-2019) continued to implement the programmes of their predecessors and implemented new initiatives to raise the quality of life and work for residents of the city. They invested in education and libraries through their profit-sharing relationship with public utilities companies and, working with the state, they worked to stimulate the growth of the technology and innovation sectors. They opened Colombia's first metro system and complemented its reach with the MetroCable and escalators to extend public transport up the steeply rising hillside settlements previously held hostage by gang violence. They created local community open spaces in 'found' locations and promoted the Circumvent Garden to stabilise the vulnerable high slopes by restricting construction there.

## **LEGALISATION AND STABILISATION**

Second among the significant accomplishments is the commitment to legalise housing ownership by helping occupants acquire electricity, water, and sanitary sewer. Their combined efforts have reached nearly 100 percent legalisation. Homeowners can now make additional investments in the properties that they have made their own, and their work is shaping communities where local art is treasured and small businesses are thriving.

## **INVESTING IN GLOBAL CONNECTIVITY WITH A LOCAL FLAIR**

Third, cable cars and Colombia's first metro system have created a sense of continuity and community. The MetroCable was a curious but clever choice of mode. Little land acquisition was necessary, and the lines can climb steep slopes

to link people from their homes to their jobs. High school students were hired to teach new transit riders how to use the metro. Public spaces were established where gangs once clustered. Residents gained the ability to go to work each morning, and return at night, without fear. In recent years, a tram system has been added. Its pneumatic tires allow it to conquer additional steep slopes, connecting more communities to jobs, educational opportunities, and civic life.

## **INCLUSIVELY DEFINING MEDELLÍN'S CULTURE**

Fourth, the addition, reclamation, and renewal of shared open spaces has been a catalyst for engaging communities in the life of the city. These include the new public parks carved out of water management sites (Life Articulated Units), the protection of ridges unsafe for habitation, and the new botanical garden (Jardín Botánico de Medellín), as well as the availability of books made available to borrow at metro stations, Colombian artist Fernando Botero's artworks, and local art. Communities and individuals are creative contributors to the joy of sharing the public realm. A pride of culture is growing.

It was midday in the summer of 2019 along a broad boulevard leading down to the centre of Medellín. Mayors were arriving from across Colombia and around the world to participate in the World Cities Summit Mayors Forum, which would convene shortly in a welcoming and well-cooled pavilion a couple of metro stations away. The boulevard was sun-drenched and very hot, yet there was an earnest cadre of artists at work along the sidewalk. Their work is a collaborative project jointly led by the city and a Singaporean architect-artist team led by Mr Sun Yu-li to guide local artists and volunteers in creating a half-mile-long mural. The theme is abstract, about the continuity of life across time, and the artists were joyfully adding their work, panel by panel. Pedestrians along the street stopped to gawk and even pick up a brush. Then-Mayor Gutiérrez stopped by, painted for a while, and signed his name. Others were signing their names too. "Welcome to Medellín at its best," he said.

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PROFESSOR MARILYN JORDAN TAYLOR is Professor of Architecture & Urban Design at the School of Design, University of Pennsylvania (UPenn). She had a distinguished tenure as Dean of the School of Design at UPenn from 2008–2016, following a 35-year career with Skidmore, Owings & Merrill (SOM) as architect and urban designer as well as partner and chairman of the firm, the first woman to hold this position.



# A Model City Aims for

2 The Circumvent Garden helped put a stop to urban sprawl while solving other social issues

by Feng Zengkun



2

# Greater Heights

Over the past 20 years, Medellín has shed its violent reputation and emerged as a model of social innovation and inclusive growth. Not resting on its laurels, it has launched more initiatives in recent years, such as a unique micro-lending programme and a decade-spanning river revitalisation project, to tackle new challenges and further improve its citizens' lives.



“In many parts of the city, there were rubbish dumps next to ravines. They had become places for drug use because they were abandoned and isolated. After we transformed them into gardens, the children returned, the families returned.”

—Former Mayor Federico Gutiérrez

The metamorphosis of Medellín has put the city on the world map. In 1991, it had 381 murders for every 100,000 inhabitants, making it one of the most dangerous cities in the world. Beginning in the 1990s, successive mayors implemented a series of measures to slash the crime rate, rehabilitate and integrate the city’s widespread informal settlements, and improve its social equity, economic competitiveness, and sustainability.

The government created the world’s first cable car mass transport system and installed outdoor escalators that linked previously unconnected hillside communities to the city’s main metro line and the rest of its neighbourhoods. Investments in social spaces such as playgrounds and sports facilities at the base of the cable car system’s pylons, as well as in education through new schools, library parks and small libraries at metro stations, also encouraged residents to stay out of trouble and become productive citizens. These and other innovative urban interventions earned the city multiple urban planning awards, including the 2016 Lee Kuan Yew World City Prize.

Even with its now sterling reputation, Medellín is not resting on its laurels. It has started new urban planning and social projects that aim to build on the solid foundation of its past work and ready the city for its new challenges, including rising ambient temperatures caused by climate change, how to curb its pollution to enable healthier lives, and the best ways to prepare residents for an increasingly volatile and uncertain job market.

## A CITY IN GREEN

As global temperatures climb due to climate change, cities will suffer the brunt of the consequences due to their tarmac and concrete that absorb the sun’s rays and turn up the heat. To combat this urban heat island effect, Medellín carried out a

‘30 Green Corridors’ project that developed the verges of 18 roads and 12 waterways into greenways that provide natural cooling in addition to beautifying their surroundings, increasing the city’s biodiversity and counteracting its air pollution.

“When we decided to plant the 30 green corridors, we focused on areas which most lacked green spaces,” said Medellín’s then-Mayor Federico Gutiérrez. “With this intervention, we have managed to reduce the temperature by more than two degrees Celsius, and already citizens can feel it.” Along Avenue Oriental, the city centre’s main road, 2.3 kilometres of paving was replaced by gardens, lowering the ambient temperature there by up to three degrees Celsius.

“In many parts of the city, there were rubbish dumps next to ravines. They had become places for drug use because they were abandoned and isolated. After we transformed them into gardens, the children returned, the families returned,” added then-Mayor Gutiérrez. The city has also trained 75 new gardeners to take care of the corridors, offering steady work to vulnerable residents from some of its poorer rural communities.

An even more ambitious project, called Parks of the Medellín River, will further enhance the city, and solve a problem that plagues some other cities too. In the 1950s, the government-built highways on both sides of the river that winds through the city, blocking residents’ access to the river. In 2014, the government launched an international design competition to create a new master plan for the entire length of the river that falls within the city and, in particular, the nine-kilometre stretch that spans the core of the city.

The winning proposal envisioned a revitalised river with almost 20 kilometres of parks, pedestrian walkways, bicycle lanes, community spaces and other amenities alongside it, as well as pedestrian bridges to better connect the two halves of the city on either side of the river. As part of the ongoing works, which will take up to 15 years to complete, a nearly



400-metre section of one highway has already been turned into a tunnel with a public park on top of it. “With the river parks and others like the Green Belt and the parks along our feeder creeks, we will get all the ecological connectivity that the city needs,” said Mr Juan Pablo Lopez, the project’s operating director.

## A FUTURE IN ELECTRIC

Medellín’s award-winning public transport system is getting an eco-conscious upgrade too. In the past, the government invested in the cable car mass transport system, trains and a tram line so that more residents could travel across the city more easily for employment and recreation. Now, it is continuing those expansion efforts but also making the transport system more electric and thus healthier and more environmentally friendly.

The city is progressively replacing its public buses with low-emissions vehicles, such as those that meet Euro IV, V or VI standards or use natural gas or electricity. This will reduce emissions of harmful fine particulate matter and carbon dioxide equivalent gases by 5.4 tonnes and 4.066 tonnes per year respectively. By end-2019, the city will have 64 fully electric buses.

It also plans to substitute its taxis with electric ones, beginning with 200 by the end of 2019 and 1,500 by 2022. To facilitate the transition to electric vehicles, the government and municipal energy company Empresas Públicas de Medellín have built 20 electric charging service stations. The city also has 17 natural gas service stations for vehicles that use the more environmentally friendly fuel.

Encouraging cycling and walking is another key component of Medellín’s sustainable transport plans, with 2,530 bicycle parking spots under construction and the total length of bicycle routes to be increased to 80 kilometres by the end of 2019. Its public bicycle sharing system currently has 1,300 bicycles distributed across 57 stations.

Collaborations with other countries have also resulted in new ideas, funding and technologies to limit congestion in the city. In August 2019, South Korea’s Ministry of Land, Infrastructure and Transportation announced that it will help Medellín set up an intelligent transport system with an Integrated Traffic Information Centre, 159 vehicle detectors, information panels to supply road users with real-time traffic information, and other infrastructure and South Korean technologies to prevent and quickly resolve traffic jams along two sections of a key urban arterial road axis and its connecting roads in the city.

## LIFELINES FOR LIVELIHOODS

Beyond investing in infrastructural projects, the city has introduced more social initiatives to lift more residents out of poverty and prevent them from turning to criminal networks. In 2016, the government established a micro-lending programme called Bancuadra, which means ‘the world’s smallest bank’, to help the nearly 60 percent of the population that make use of illegal loans. The programme’s 0.91 percent interest rate per month is a fraction of the 30 percent that illegitimate moneylenders typically charge, and its loans are not given to individuals but to groups of five to ten people who can be relatives, friends, or acquaintances.

Each member of the group receives 200,000 Colombian pesos (approximately 59 USD) and cannot ask for another loan until all of them have repaid their debt. This unique lending model encourages the group’s members to hold one another accountable and lend a hand if their fellow members cannot meet their repayments. Furthermore, they must attend four classes on topics such as loans, accounting, and conflict resolution before they can receive their loans, and 12 more classes after the money is disbursed.

The programme has made over 12,000 loans to-date, with recipients using the loan to settle previous debts, defray education expenses, pay utility bills and rent, and invest in their businesses. Liliana Galeano, the programme’s director, added that it is enabling the government to collect crucial information about residents’ financial and social needs: “The most valuable legacy is the knowledge, which is essential to develop more social projects.”

The city has also set up enterprise development centres in lower-income neighbourhoods to assist residents in turning their business ideas into viable small and medium enterprises. The centres not only guide the residents in completing a business plan but also provide them with mentorship and access to micro-financing options. As of 2018, the 20 centres citywide have aided nearly 19,500 citizens and led to businesses with sales totalling 3.5 billion Colombian pesos (approximately 1.03 million USD), making them an invaluable employment and economic tool.

Reflecting on Medellín’s long journey to leave its violent history behind, and its path ahead, then-Mayor Gutiérrez said: “Our past is what makes our story worth telling. Medellín is a wonderful city, and a city that has transformed itself. Today, we serve as an example of social innovation and inclusive growth for the rest of the world.”

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This article was first published on the Prize website in November 2019. For more useful city resources, visit [go.gov.sg/cities](http://go.gov.sg/cities)

# Medellín: A Model for

4 Escalators at Comuna 13



3

# Urban Innovation

5 A green corridor

6 A children's workshop in progress



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7



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8



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8 Medellín River Parks

7 The Spanish Library Park



# FORMER MAYOR FEDERICO GUTIÉRREZ

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IN OFFICE 2016 – 2019

MR FEDERICO GUTIÉRREZ was the former Mayor of Medellín. Born in Medellín, he is a civil engineer from the University of Medellín, with graduate studies in Management and Political Science from the Universidad Pontificia Bolivariana. In his late twenties, he was elected councillor of Medellín from 2004 – 2007, where he held the positions of vice president and president of the first commission.

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## How has winning the Prize impacted Medellín?

Medellín has experienced a social and urban transformation that is today an example of a resilient city. We owe this process to the commitment of citizens, public institutions, private companies, universities and good governments.

Since the Prize, we have seen increased interest from other cities in getting to know Medellín and its people. This has not only attracted new tourists but also investments and international cooperation which translate into development for the city.

Thanks to the Prize, we have been granted economic recognition together with EAFIT University with which 390 citizens received training in urban planning, security, public management and citizen participation.

Most importantly, the Prize gave us the motivation and responsibility to continue working towards an increasingly sustainable and environmentally friendly city.

## Tell us more about the new projects that Medellín has been developing since winning the Prize.

We have focused on developing urban projects to transform the city with sustainable mobility, quality of life, and the environment among our priorities.

We have invested 9.9 billion pesos to deliver 1,100 projects, of which 265 were completed, 141 in construction, 124 in design and 46 under contracting.

In Comuna 10 La Candelaria in the city centre, we have invested over 210,000 million pesos (approximately 60 million USD) to upgrade some 40 parks and urban spaces, and built several sections of cycling paths.

Another important project is the '30 Green Corridors',

where we planted trees, shrubs, palms and green covers in a green network that connects streams, hills, parks and roads. This helped to reduce air particulate material, and ambient temperatures by up to two degrees Celsius. At the same time, we have started seeing the increase of biodiversity such as monarch butterflies, parrots, worms, birds and other species. This project won the 'Cooling for People' category by the UK organisation Ashden, which supports city leaders in low carbon emissions.

One of our highest impact programmes is '100 Parks for You', an initiative designed for the people to take over public spaces and turn them into places of encounter with people and nature. There are already 51 fully renovated parks and 592 others with interventions.

Since 2004, the 'Comprehensive Urban Projects' (PUJ) have demonstrated excellent urban concepts in terms of mobility, public space, environment and housing. Approximately 1,300,000 people have benefited from these projects, with more than 79,000 million pesos (approximately 20 million USD) invested.

The MetroCable Picacho will be the most important mobility project for Comunas 5 and 6, Castilla and Doce de Octubre. Totalling 138 cabins, this cable car mass transport system will have a greater capacity than the other five already in operation. The resultant cost and time savings for the people will translate into a better quality of life.

We aim to make Medellín the Latin American capital of electric mobility, and we have the support of organisations such as C40 Climate Leadership Committee to achieve this. We have also acquired

“Medellín is committed to change and we greatly appreciate this vote of confidence from winning the Lee Kuan Yew World City Prize, as it is a guarantee to advance the city that our citizens long for.”

—Former Mayor Federico Gutiérrez

buses and electric taxis, adapted charging stations, constructed more cycling paths, and invested in sustainable mobility.

#### **What are the ongoing challenges faced by Medellín?**

We have many challenges as a city, but the most important is to reduce social gaps. Therefore, we invest most of our budget in education and opportunities for our youth and children.

With regards to security, we have put in place an institutional framework that is increasingly strengthened to help fight crimes. At the same time, we also reach out to all neighbourhoods with social investment and provide opportunities to allow people to fulfil their aspirations.

We consider sustainability as one of our main challenges, as such we align ourselves to the global goals of consolidating sustainable mobility and mitigating climate change.

The future of cities depends on the way we move around the city and, Medellín understands that besides physical infrastructure and the use of clean technologies, public transport systems can help transform the city. Our citizens have the right to breathe cleaner air. As city leaders, we have the responsibility and duty to reduce emissions and pollutants in our territories.

#### **How has Medellín continued to invest in your people and urban communities?**

The strength of our public finances deserves to be highlighted and part of this successful model is the revenues arising from our public utilities company

EPM. Medellín is the only Latin American city that receives transfers from one of its fully public companies. In 2019, EPM transferred about 1.2 billion pesos that are reinvested in the community. Our city has the second-largest public conglomerate in the country by the level of assets valued at 82 trillion pesos. Most of these resources are for social investment and projects to benefit the citizens, about 82 percent of the total general budget. This helped gain trust from citizens.

#### **How can Medellín continue to inspire other cities?**

Medellín is internationally renowned thanks to its public governance model. The city understands that it must work as a team with the private sector, academia, government and citizens. The public sector works for equity and inclusion which means investing in the most vulnerable sectors to create comprehensive policies, programmes and projects.

Regardless of geographical and cultural differences, the concerns of cities are similar: climate change, transport, public infrastructure, waste management, public services, collaborating with citizens and building trust. Events such as the World Cities Summit Mayors Forum which was held in Medellín in 2019, allow us to create spaces for dialogue and exchange of best practices.

We have come a long way but there is still much to do. We want a safe, equitable and sustainable city, and are always willing to learn and share what we have learned. Medellín is committed to change and greatly appreciates this vote of confidence from winning the Prize, as it is a guarantee to advance the city that our citizens long for.

# Case Study: Circumventing Obstacles

HOW MEDELLÍN'S CIRCUMVENT GARDEN SOLVED MULTIPLE CITY CHALLENGES

## PROJECT NAME

Circumvent  
Garden

## PROJECT TYPE

Urban  
planning

## PROJECT COMPLETION

2030

### ABOUT THE PROJECT

- The Circumvent Garden is a green belt along the urban-rural edge of the eastern and western mountain ridges of Medellín to control urban expansion in the hillside communities and create communal spaces.
- The project aims to improve the quality of life of the inhabitants through legalisation of housing, environmental and infrastructural improvements, and jobs sustainability, as well as to protect the fragile ecosystem.

### ISSUES BEFORE THE PROJECT

- Serious socio-spatial segregation, with lowest income population concentrated in the hills and high-income population in the valley.
- Extensive informal settlements in the hilly edges of the city, as a result of rural-urban migration waves caused by armed conflicts in the country in the past 60 years.
- High risk of landslides in the hills due to environmental degradation from increasing sprawl.
- Hillside settlements are isolated and excluded due to steep terrain and inaccessibility.
- Lack of public spaces, basic infrastructure, public transportation, and poor governance and legitimacy in the hillside areas.

### LEADERSHIP & GOVERNANCE

- City leaders recognised the vulnerability of the hillside settlements and the need for a compact and sustainable city model under the city's Land Use Plan.
- The Circumvent Garden is part of a larger green strategy - the Cinturón Verde Metropolitano (Metropolitan Green Belt).
- Citizens' co-responsibility is strengthened by applying the principle of participation to generate a culture of pedagogical urbanism.



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**PROJECT  
SIZE/SCALE**

11,110 hectares

**TREES PLANTED  
SINCE START OF PROJECT**

120,000 trees

**INCREASE IN PUBLIC SPACE  
PER PERSON**

294.7%

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**CREATIVITY & INNOVATION**

- The city took the unusual step of legalising the informal settlements that were structurally sound, rather than evicting illegal settlers at the urban-rural fringe, improving the conditions of settlements.
- The Circumvent Garden helped to control urban expansion and mitigate landslides risks, generated new public spaces such as sports facilities and farming sites, and improved accessibility to jobs and education by connecting the hillside to the city through multi-modal transport.
- Residents are also equipped with agricultural and construction skills which promote economic sustainability, and thus are empowered with a sense of ownership.

**IMPACTS OF THE PROJECT**

- 120,000 new trees planted.
- Public space increased from 3.8m<sup>2</sup> to 15m<sup>2</sup> per person.
- More than 49,000 people mobilised, and 2,847 employed in the project.
- 2,493 people trained in ecology, construction, and maintenance works.
- 41 ha of ecological restoration to protect the Pan de Azúcar hill from creeks.
- 31,000m<sup>2</sup> of gardens benefiting 490 families under a concept of mineralised agro-ecology with self-sufficiency and commercialisation initiatives for surpluses.
- Two eco-parks built and three others under construction that will be connected to a footpath network called Camino de la Vida (Path of Life) with 3,800m already built.
- 520m<sup>2</sup> of Ruta de Campeones (Champions Trail – bike paths) developed.

**REPLICABLE IDEAS**

- The project team is in an advisory role for a similar development in Asuncion, Paraguay (Barrio La Chavarria), with a focus on legalisation and improvement of local habitat.



1

# Seoul

## THE JURY'S CITATION

Seoul is recognised for its successful transformation from a highly bureaucratic top-down city, into one today that is inclusive, socially stable, and highly innovative. As shown in Seoul's impactful high-quality projects to repurpose urban infrastructure, the city has proven itself as an excellent example where a leadership that dares to take bold decisions, commitment to citizen engagement, data-supported problem-solving decisions, and creative designs can transform the built environment, add vibrancy, and improve quality of life.

Like many cities that experienced rapid urbanisation, Seoul faced many urban challenges at its peak. In the 1990s, with an increasing resistance from its people largely left out of development decisions in the past and having to provide for a burgeoning car-based society, the city realised that its pursuit of economic success over a short period of time was at the expense of quality of life.

## STRONG POLITICAL WILL TO OVERCOME CHALLENGES

Seoul overcame this through its election of successive visionary leaders who demonstrated strong political will to take on these challenges and displayed foresight to implement a series of catalytic projects that benefited the city, such as the Dongdaemun Area Regeneration to shift Seoul's focus from manufacturing to design.

1 The former Seoul Station Overpass in Central Seoul is transformed into Seoulo 7017 – an elevated and lushly planted pedestrianised walkway that connects major developments in the surrounding.

Understanding that proper communication under the new circumstances was the way forward to achieve buy-in from both the people and stakeholders, the city formulated a set of conflict management strategies to engage and negotiate with conflicting parties representing various interests. Today, a dedicated team of trained negotiators within the Seoul Metropolitan Government forms the city's 'modus operandi' in urban development projects. These strategies help the city achieve impactful and effective results, and in turn win over even the most reluctant citizens over time and align their aspirations with the city's vision.

## SEOUL PLAN 2030

The Seoul Plan 2030 is a highly remarkable turning point in the city's planning processes. Under the inspiring leadership of former Mayor the late Park Won-soon, the city made the bold move to make citizen participation the norm of all plans. Ground-up processes are incorporated in day-to-day operations where residents are given a say over local issues, and results of the Plan are made transparent through regular monitoring and publishing in the press. As such, the city not only managed to build trust with the citizens, but also assured them that engagement is not merely a token gesture, but one that will truly shape and reshape the future of the city.

## FROM CAR TO PEOPLE SPACES

Seoul demonstrated boldness in shifting away from car-oriented transportation to people-centric spaces, a challenge that many cities are struggling with today. With the notable reclamation of public spaces from cars to people, such as the removal of an elevated highway to restore the former stream at Cheonggyecheon, the pedestrianisation of Yonsei-ro, and

the conversion of the Seoul Station Overpass into Seoulo 7017 – a one-kilometre lushly planted elevated walkway, the city sends a strong signal that its future is one where people come first, not cars.

## CREATIVE URBAN REJUVENATION

As cities continue to mature and age, deterioration of its urban infrastructure is inevitable. Seoul is highly innovative in its rejuvenation of its modern heritage. The projects Makercity Sewoon – a rehabilitation of seven ageing commercial superblocs through the sensitive insertion of new interventions and uses, and Mapo Culture Depot – a conversion of disused oil tanks into a cultural venue and public space, offer new perspectives in repurposing infrastructure while preserving collective memories.

## A MEGACITY WITH A WILL TO CHANGE

As cities become larger and more difficult to manage, achieving social sustainability may be a much bigger challenge than extending economic and environmental sustainability. By turning the people into active participants of the city's development, Seoul demonstrated that a truly bottom-up city is possible and serves as an inspiring role model of a megacity with a will to change.



Scan to watch the commemorative video of Seoul.

[go.gov.sg/seoul](http://go.gov.sg/seoul)

# SEOUL KEY STATISTICS

**AREA**  
2019

**605.2** km<sup>2</sup>

**POPULATION**  
2019

**10,041,574** people

**DENSITY**  
2019

**16,591** per km<sup>2</sup>

**GROSS DOMESTIC PRODUCT**  
2019

**330** billion USD

**UNEMPLOYMENT RATE**  
2019

**4.8%**

**PER CAPITA INCOME**  
2018

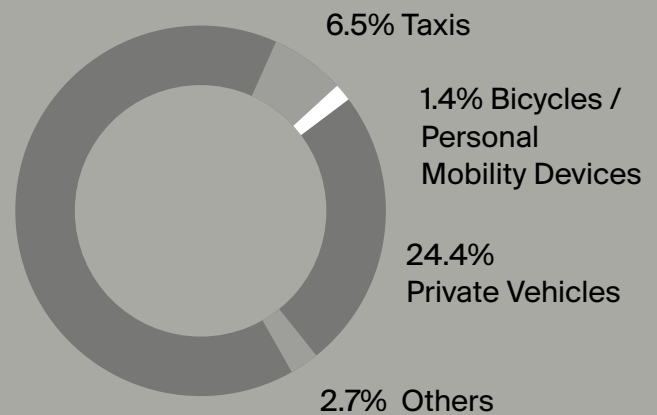
**38,352** USD

**HOME OWNERSHIP**  
2017

**40.0%**

**MODAL SPLIT**  
2017

65.0%  
Public Transport



**LITERACY RATE**  
2008

**97.9%**

**LIFE EXPECTANCY**  
2014

**83.6** years

**CARBON EMISSION**  
2009

**10.6** tonnes / person

**GREEN SPACE**  
2017

**16.6** m<sup>2</sup> / person



# Connections, Conversations & Conversions

by Dr Chris Luebke

Dr Chris Luebke, member of the Nominating Committee 2020, reflects on his personal encounters of Seoul, and what it takes to make cities, especially the growing pool of megacities, tick. He discusses Seoul in three words: connections, conversations and conversion.

“Our world and our cities are becoming more complex. The interaction between the planet which provides the resources for our urban existence has always been complex and the urgency to understand this complexity is high.”

—Dr Chris Luebke

There are few trends which have been more significant in the past century than the emergence of the megacity. These concrete jungles are known to be both a boon and a bane. They can be particular places for their citizens to coalesce, connect and collaborate as they evolve innovative systems for a sustainable future. Yet, they can also be terrible traps for individuals to become lonely, lost and left behind in the burgeoning urban economy.

We can find exquisite examples of places and spaces which make our hearts soar, as well as our souls sour. This is our world today. We do not need to look very hard to find either as they are often right next to each other. Megacities are here to stay. Therefore, it is incredibly important for all of us to look around and learn from those who can share their insights and wisdom with us to emulate, extrapolate or interpret for our own living situations.

Seoul, the 2018 Lee Kuan Yew World City Prize Laureate, is one such megacity for us to look at closely. The city was selected amongst very stiff competition for us to learn how to create and foster an incredible transformation. It is a city that has worked hard to increase its inclusivity, creativity, and sustainability with a commensurate lifting of citizens to a higher quality of life.

There is a leadership model which not only incorporates both top-down and bottom-up interactions, but actually encourages and fosters a continual improvement in them. This is clear in the way in which former Mayor Park Won-soon talked about his obligations to the citizens of the city. He demonstrated such deep concern which exemplifies civil service, and to be in service of the civil society.

I was deeply impressed by the respect, pride and humility of the leadership with whom we spoke. There was a clear

understanding of the important role which empowering governance has on the success of their city. In the Mayor's office for example, an empty seat at the head of the table is reserved for the ordinary citizen – deemed the most important person in the city, while a video wall allows the mayor to zoom into any event happening in the city and with one-click speak directly with those involved.

Seoul's identification of its key issues – common with many other cities – namely ageing, economic growth, competing with neighbouring cities, lack of development land and dilapidated urban areas has served as high level aspiration for the city. In response, flagship projects were created as part of an overall strategy that focused on the reclamation of public space for people rather than leaving it for cars. Each of these projects have a 'people-first' design attitude which is refreshing, and regeneration with nature, people, and economy in harmony. There was also a real appreciation of spaces and places for a liveable city.

This brings to mind three words which I feel exemplify the transformation of Seoul: connections, conversations, and conversions.

## CONNECTIONS

Seoul has implemented several key interventions over the past two decades to connect different aspects of the city, such as neighbourhoods that were cut apart by infrastructure, governmental departments that were segregated by function and citizens who were historically disenfranchised.

## CONVERSATIONS

Conversations were held across the massive metropolis to determine which projects the citizens favoured most. Conversations were, and are being, held to bolster the understanding of the digital transformation not only of the city's functions, but of the entire economy. They are held to discuss the impact that this will have on individuals, families, businesses, and infrastructure.

## CONVERSIONS

The conversions of places and spaces to enhance citizens lives over automobile convenience have been especially inspiring lessons for us all. The conversion of a multi-lane highway to an urban oasis (Cheonggyecheon) enhanced the social and economic value of the precinct and was truly a win-win situation for both the city and its people. The conversion of what was a highly bureaucratic city into the highly innovative, prize-winning city through meaningful conversations to connect all parts of the complex metropolis is admirable as a role model for change.

Our world and our cities are becoming more complex. The interaction between the planet which provides the resources for our urban existence has always been complex and the urgency to understand this complexity is high. As our cities become larger and more difficult to manage, achieving social sustainability may be a much bigger challenge than extending economic and environmental sustainability. The tools are at our fingertips to work towards the harmony we all desire. Now is the time to put the pieces of the immense puzzle together so that we can act to be the best ancestors that we can be.

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DR CHRIS LUEBKEMAN is the leader of the Strategic Foresight Hub in the Office of the President at ETH Zürich – a team which engages a broad range of stakeholders concerning future focused drivers of change. He combines an attitude of pragmatic optimism with curiosity and a deep sense of planetary responsibility to all of his collaborations. His career to date has spanned professions and geographies.



# Seoul Solutions: Tackling Rising





# Urban Challenges

by Feng Zengkun



Seoul is going full speed ahead with new and ongoing urban regeneration initiatives to tackle emerging challenges. From innovative interventions to dampen rising housing prices, to a grand plan for greenery, its efforts could be emulated by other cities facing similar obstacles to a safe and sustainable future.

2

2 Mass citizen engagement session

“We are ready to share our experiences and will continue to cooperate with other cities to address common challenges and create a sustainable future.”

—Former Mayor Park Won-soon

Every city faces evolving challenges and needs. Since the 2000s, Seoul has revolutionised its urban planning to consult citizens more and earlier about development projects, emphasise healthy and sustainable modes of transport, and encourage innovation in business. Its efforts, which have turned it into an inclusive, socially stable and forward-looking city, also led to the city winning the Lee Kuan Yew World City Prize in 2018.

Despite its achievements, however, the city faces new challenges, including rising housing prices that have created anxiety, especially among the young and financially disadvantaged, and threats to its economy caused by growing uncertainty and volatility in global trade.

In response, the government has rolled out further initiatives to entrench the city’s hard-won advances, protect and improve residents’ quality of life, and prepare for the future. These comprehensive measures run the gamut from housing to trade to the environment.

## **A HELPING HAND WITH HOMES**

To provide more affordable housing and boost the economy, the government is turning 6.9 million square metres of unused or underused state-owned land, including a traffic island in the Yeonhui-dong area, into public housing and offices. This project, slated to be completed by 2028, is expected to produce 22,000 homes and 205,000 jobs.

The initiative also dovetails with other government goals. Many of the new housing complexes will be built near public transport lines and hubs, encouraging their residents to use these more sustainable modes of transport instead of private vehicles. When the public land currently occupied by the Jeungsan Rain Pump Station is redeveloped into a public housing complex, for example, the residents will be able to access three nearby subway lines and commute easily to the

three regions of northwest Seoul, Ilsan and Paju.

In another part of the city, two outdoor bus garages will be moved indoors or underground, and their current site will house new public apartments, a park and other amenities. The relocation of the garages into enclosed spaces will contain the noise and smoke generated by the buses, reducing the pollution of residential spaces, while the new homes will exert downward pressure on housing prices.

The infrastructural interventions will also be complemented with policy improvements. In October 2019, then-Mayor Park Won-soon announced that the government will relax eligibility conditions for a housing loan programme, increase the annual supply of new public homes from an average of 12,000 units to 14,500 units, support couples with newborns to move into bigger houses, and launch a website – the Seoul Housing Portal, which married couples can use to identify the best housing support programme that suits their situation and apply for it.

These measures are expected to help about 25,000 couples each year, which means that one in two couples getting married each year will be able to receive benefits from the city in the form of financial aid or a place in a public rental house. Former Mayor Park said: “We will make sure that housing issues do not pose a handicap for newlywed couples who are starting a new chapter of their lives with a dream of a brighter future.”

During then-Mayor Park’s term, the city has supplied 140,000 new public homes. “We will increase the ratio of public houses to over 10 percent to secure a safety net for young people and other citizens. We will increase our housing supply until it has an impact on the housing market. We will do our best so that the new developments are self-sufficient, with houses, recreational facilities and jobs, and lead to further local development,” he said.

## GIVING NEW PURPOSE TO OLD PLACES

Other urban regeneration projects will help the city to replace sunset industries with sunrise ones and strengthen evergreen sectors. When the Yongsan Electronics Shopping Centre opened in 1987, it was South Korea's largest retail complex selling electronic products, with a total floor area of about two million square metres across multiple malls. After a decade as a premier shopping nexus for computers and video games, however, the institution's business was derailed by 1997 Asian financial crisis and the rise of the Internet and e-commerce. Over time, its vacancy rate rose to 22.7 percent.

In 2017, the government announced that it would rejuvenate the complex and its surrounding area as a 'Digital Maker City' that also supports youth education and entrepreneurship in advanced digital technologies. It has partnered 15 institutions, including universities and companies, to bring this vision to life. As a first step, a 'Yongsan Electronics Thinkers Alley' spanning 6,000 square metres has been set up for anyone to design prototypes of their ideas and receive entrepreneurial support and education.

The universities will develop on-site campuses to host education and entrepreneurship programmes for students, while CJ Corporation, a South Korean conglomerate, will provide coding classes for elementary and middle school pupils in the area. LG Uplus, the cellular carrier owned by the LG Corporation, will establish a 5G cellular network technologies testbed, and the Woori Bank will offer low-interest loans to local merchants.

Closer to the city's Han River, the Nodeulseom Island has been upgraded into a music-centred cultural hotspot. The artificial island was originally a manmade sandy plain that extended into the river from one bank to support a bridge across the river. The plain was a popular area for leisure and recreational activities, serving as a beach in the summer and a skating rink in the winter. When further developments in the river turned it into an island, it became inaccessible and disused.

For over three years since 2013, the government mediated discussions with citizens and experts about the island's future. It eventually organised a competition to solicit proposals, which resulted in the decision to build a music-centred cultural complex on the island. Today, the complex is accessible from the bridge, and houses a multipurpose hall for lectures and events, a concert hall, a bookstore that champions independent bookshops and publishers, a restaurant, and more.

## A GRAND PLAN FOR GREENERY

As Seoul continues to reinvent its urban spaces to make better use of them, it has also taken care to expand its greenery to improve its liveability. In the late 1990s and 2000s, the Gyeongchun rail line was realigned, creating spans of defunct railway tracks. In 2013, the government started to convert a six-kilometre stretch, from the Kwangwoon University Station to the city limit, into bicycle and foot paths, and build a 182,000-square-metre park around them.

The new Gyeongchun Line Forest Park was opened in sections from 2015 to 2017 and has gardens as well as rest areas resembling train station waiting rooms. The bicycle and foot paths also connect institutions and tourist attractions such as the Seoul National University of Science and Technology, Seoul Women's University and Taereung Royal Tombs. "By using the original railroad tracks, Gyeongchun Line Forest Park has been reborn as a space filled with memories, encounters, sharing and community," the government said.

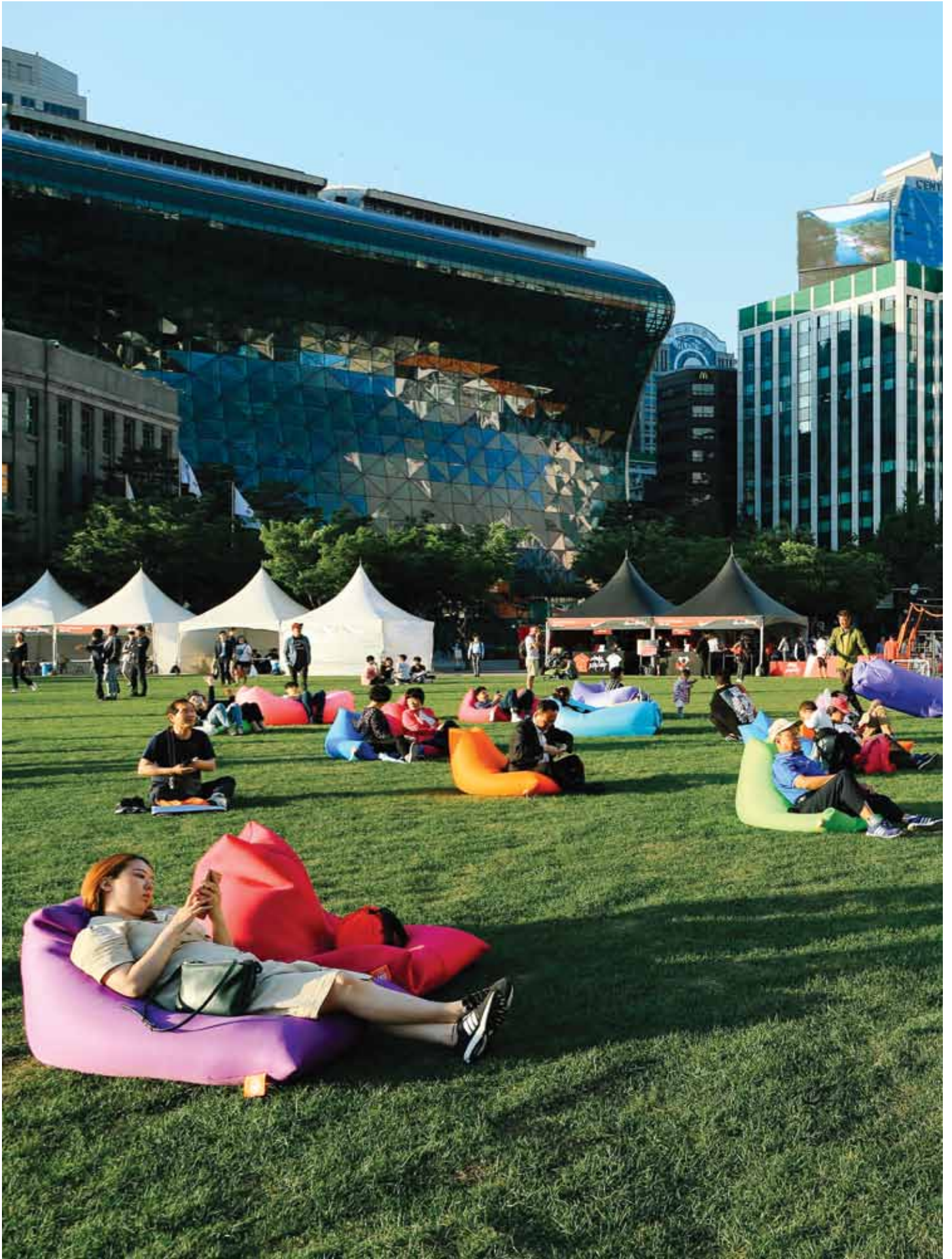
An ongoing project will further and dramatically increase the city's proportion of greenery to combat air pollution and urban heat. The government has planted 15 million trees since 2014 and will add another 15 million more trees by 2022. This includes 2.1 million trees that will line car-only highways such as the Olympic Expressway and Gangbyeon Expressway. Altogether, the trees will be able to absorb particulate pollution equivalent to the amount emitted by 64,000 old diesel cars per year and produce oxygen equivalent to the amount inhaled by 21 million adults annually.

By 2021, the government will also grow two large forests, near Bukhansan in northern Seoul and Gwanaksan in southern Seoul respectively and create smaller forests in 30 school zones so that children in the city can experience nature more easily.

Then-Mayor Park said: "For our future generations, we have broken away from our traditional development methods, and focused on urban regeneration that preserves memories, connects places and creates new value. We are now ready to share our experiences in governance and innovation and will continue to cooperate with other cities to address common challenges and create a sustainable future."

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This article was first published on the Prize website in January 2020. For more useful city resources, visit [go.gov.sg/cities](http://go.gov.sg/cities)



# Focus on People

3 Citizens enjoying the public space in front of the Seoul City Hall

4 Gyeongchun Line Forest Park

5 Cheonggyecheon



4



5

6



6 Sewoon Makercity

7



7 Mapo Culture Depot



8 Yongsan Y-Valley



8

9 Seoulo 7017



9

# FORMER MAYOR PARK WON-SOON

IN OFFICE 2016 – 2019

THE LATE PARK WON-SOON (1955 – 2020) was the longest-serving mayor of Seoul from 2011 until his passing in July 2020. Before that, he was a community and social justice activist, and a member of the Truth and Reconciliation Commission. A noted political donor in Seoul, he contributed to political organisations and think tanks that advocated for grassroots solutions towards social, educational, environmental, and political issues.



## How has winning the Prize impacted Seoul?

Seoul, a city of ten million, decided to take a path never before: reclaiming the rights of citizens left behind during Seoul's rapid development. Reflecting on the past, the city shifted its focus to urban regeneration.

This necessitated new rules often in conflict with existing practices, and as a result we have experienced much confrontation, opposition, and dissent. Despite these difficulties, we pushed on and transitioned from an administration-based to citizen-based leadership.

We have implemented a citizen-participatory style of urban regeneration that adapts our urban heritage to new uses. For example, an aged overpass that was to be demolished has been transformed into a pedestrian walkway (Seoullo 7017), while a former oil depot was turned into a cultural complex (Mapo Culture Depot). Our emphasis on historic preservation has seen various locations in Seoul revived as new cultural attractions.

Seoul's awarding of the Prize is an affirmation of our focus on preservation, and an encouragement of a leadership based on participation. We want to make 'Seoul-style urban regeneration' a world-class urban management model.

## Tell us more about the new projects that Seoul has been developing since winning the Prize.

The Seoul Metropolitan Government (SMG) pursues our belief that the 'true Mayor of Seoul is its citizens' and operates based on innovation that enhances quality of life and participatory governance. Since the Prize, SMG has built a sustainable city that changed citizens' lives and created new values.

The Yongsan Electronics Shopping Centre used to be the busiest electronic goods distribution hub in Seoul but declined due to the prominence of online shopping. The centre is transformed into a 'digital maker city', and reinvents itself through activities such as specialised electronics markets and start-up conferences.

The abandoned Noduseom Island is transformed into a popular cultural attraction, especially for live music. A new plaza connects the island with Hangang Bridge, with plans for performances, exhibitions, cultural activities and commercial facilities.

Another example is the conversion of a large, empty storage facility into Seoul Treasure Den for Books – South Korea's largest used bookstore, offering over 130,000 books for sale.

After the Gyeongchun Line stopped operation in 2010, the railway was abandoned and dilapidated in ensuing years. It has since been restored with greenery to become the six-kilometre Gyeongchun Line Forest Park.

## What are the ongoing key challenges faced by Seoul?

In 2018, Seoul experienced a record-breaking heat wave in 111 years. Experts said that climate change may have already taken a critical turn and that its related issues may threaten humanity faster than our most liberal predictions.

The problems we face are not only related to the environment. We are rapidly becoming a low-birth, fast-aging society. With intensified social polarisation, our youths are in despair over social-economic divisions, while the middle-aged group is trapped



# “We believe that the reason for Seoul as the fifth recipient of the Lee Kuan Yew World City Prize is our process of innovation and citizen participation for the creation of a sustainable city.”

—Former Mayor Park Won-soon

between their ageing issues and responsibility for their elderly parents and adult children.

The design of Seoul Plan 2030 involved discussions with citizens, administrative personnel, experts, and city council members from the start. A team of 100 citizens discussed various issues closely related to everyday life in Seoul, resulting in five key initiatives collectively decided.

SMG is currently exploring the strengthening of welfare per life stage, and the restructuring of Seoul as a ‘city of opportunity’ for future generations.

## **How has Seoul continued to invest in your people and urban communities?**

We recognise that people are the city’s most important aspect, and SMG has reconfigured its governance structure to one that is more inclusive. Increased welfare benefits are a key element of citizens’ happiness, and SMG’s role is to restore this in citizens’ lives.

By changing the welfare policy paradigm from government-led to one with voluntary citizen participation, we aim to minimise blind spots in this sector. We are the first local government in South Korea to establish a ‘Seoul Citizen’s Welfare Standard’ through a combined effort of municipal government and the citizenry.

We are now pro-actively reaching out to citizens, and providing welfare services such as a community responsibility system for childbirth/childcare per life stage, an increased number of public day-care centres, and support policies for both the middle-aged group and young people.

We have also in place a comprehensive visitation system – ‘Seoul Care’, where certified nurses visit homes of applicants, as well as broader medical service programmes and services specialised in society, welfare, children and family.

In addition, through social measures such as ‘Shared City’, ‘Village Community’, and ‘One Less Nuclear Plant’, SMG continues to build an urban environment that is based on coexistence, solidarity and cooperation.

## **What have you learned from the other Prize Laureates?**

We believe that Seoul’s winning of the Prize is, by far, a recognition of SMG’s process of innovation and citizen participation for the creation of a sustainable city.

We are widely acknowledged for successfully systemising governance with citizens’ feedback and deliberations for each step of the policy-making process. While it is inevitable that conflicts and disagreements to occur during these processes, we have created a new administrative position of ‘Director-General of Conflict Management’ to manage them. We believe that policies are largely meaningless without the support from citizens.

We are constantly inspired by the many cities which we have formed new bonds with from winning the Prize. During the World Cities Summit Mayors Forum 2019, we visited Comuna 13 in Medellín, and saw the escalators that were remodelled as a mode of local transportation for residents. We were informed that the latter used to walk a 350-step stairway on foot every day, and can only imagine the relief that the escalators have brought them.

We also learned that the neighbourhood that was rife with drugs and crime underwent incredible changes, and deeply impressed by many of the police personnel on site during our visit were born and raised in Comuna 13. This is perhaps what the ‘virtuous cycle’ of urban regeneration looks like in the flesh.

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All information are correct as of March 2020.

# Case Study: Negotiating for a Better Future

A CLOSER LOOK AT CITIZEN ENGAGEMENT IN SEOUL

## PROJECT NAME

Citizen  
engagement

## PROJECT TYPE

Urban  
governance

## PROJECT COMPLETION

Ongoing  
since 2012

### ABOUT THE PROJECT

- Latent desire among citizens to participate in local matters since mid-90s, and increasing conflict between interest groups, NGOs and the public sector led to difficulties in large-scale urban development.
- Instead of tapering off such projects, Seoul started to engage its citizens.
- Participatory planning efforts culminated in the Seoul Plan 2030, with the vision 'Happy City of Citizens with Communication and Consideration' decided by citizens.
- The city established a Conflict Mediation Division to avert and manage public conflicts, and published a white paper on conflict management on its website.

### ISSUES BEFORE THE PROJECT

- Government-led development in the past brought about fast-paced and large-scale changes to the city, but largely excluded citizens in the process.
- The previous master plan was cumbersome, uncoordinated, and ineffective in coping with the societal changes.
- There was minimal public engagement and little support from citizens.
- An ineffective master plan risk the haphazard development of the city, as well as being inadequate in dealing with rising social issues such as social polarisation, single-person households, and gender inequality.

### LEADERSHIP & GOVERNANCE

- Seoul Plan 2030 forms the basis for all planning processes, with citizen participation as a norm.
- Community plans for sub-regions of Seoul help translate the overall vision and strategies into realities.
- The Participatory Budget System and Community Building Project give citizens a greater and quicker say on local issues.
- Citizen participatory groups are formed at various levels as small as neighbourhoods.
- Educational programmes are provided for citizens to ensure that the processes runs smoothly.

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**PROJECT  
SIZE/SCALE**

Citywide level

**GRDP INCREASE  
2005 – 2013**

22%

**FLOOR AREA OF BUSINESSES  
IN THREE CORE AREAS**

61%

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**CREATIVITY & INNOVATION**

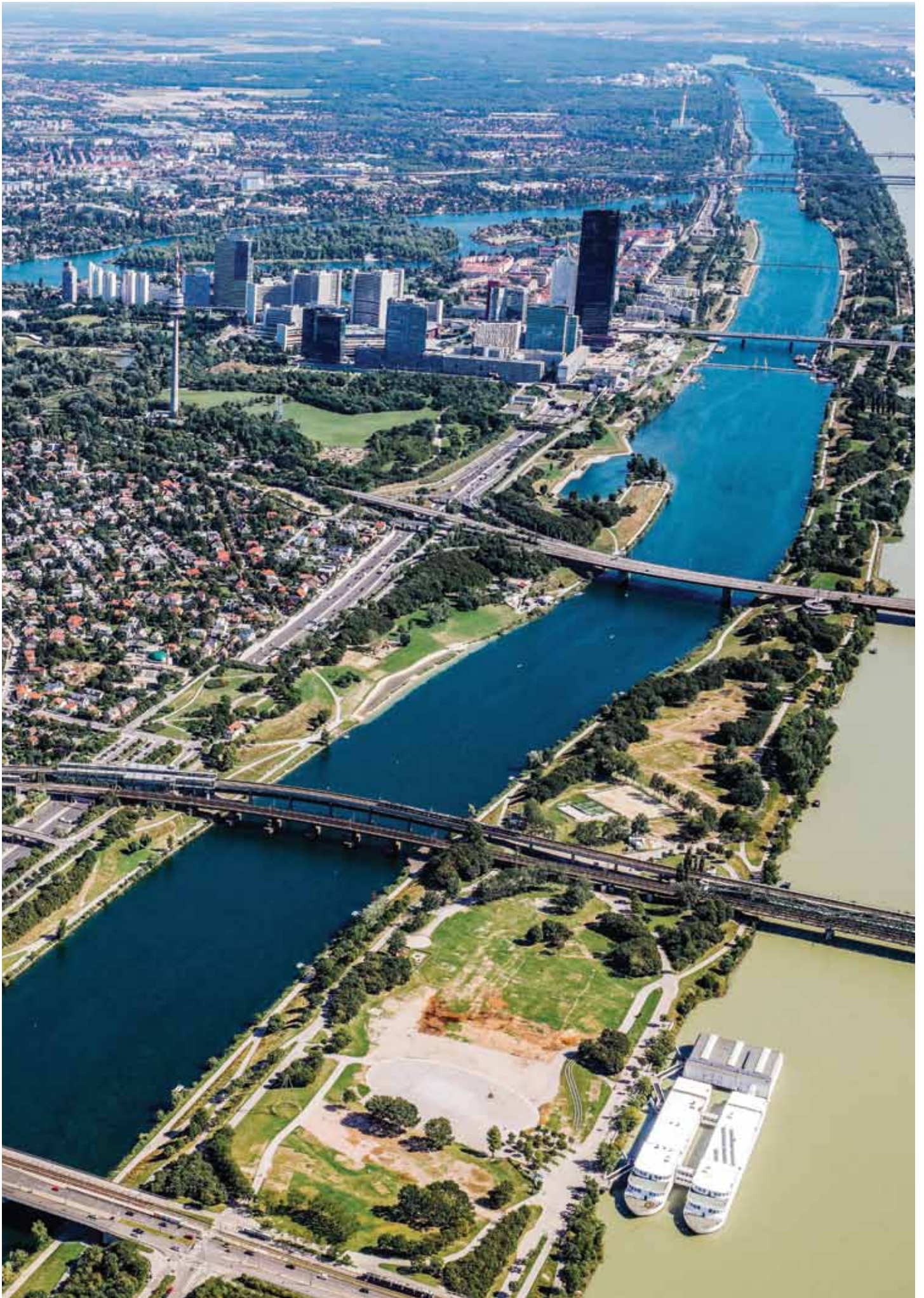
- A 100-member Citizen Participatory Group helps chart the future of Seoul, identify challenges and propose solutions, together with city officials, planning experts and local politicians.
- The Participatory Budget System allows citizens to decide the use of up to five percent of the city's annual budget, where residents, workers and students can vote online on proposed projects.
- The Community Building Project provides training and consulting to residents with ideas to improve their neighbourhoods.

**IMPACTS OF THE PROJECT**

- A focused Seoul Plan 2030 with increased citizen participation led to positive impacts to Seoul's economy, with the Gross Regional Domestic Product (GRDP) increasing by 22% between 2005 and 2013.
- Seoul Plan 2030's strategy to develop three core areas: the CBD, Gangnam and Yeongdeungpo has seen success, accounting for 61% of total floor area of businesses.
- Regular monitoring of projects and publishing of results in the press ensured transparency and gained trust from citizens.
- In the neighbourhood of Seokgwan-dong, residents are assisted in energy-saving ideas, such as LED lights in basement car parks.

**REPLICABLE IDEAS**

- The governance structure created under Seoul Plan 2030 can help reach consensus with citizens on various plans.
- It is important for the city to progress not just in material prosperity but also in a way that the citizens desired.
- By taking bold decisions and devising innovative problem-solving methods, a city can turn itself around into an inclusive, socially stable, and highly innovative city.



1

# Vienna

## THE JURY'S CITATION

Vienna is recognised for reinventing itself for success in the 21st century without losing its distinctive identity as a capital of culture, music, and history. In particular, Vienna has taken on a leading role in addressing the global challenges of climate change. This remarkable success is achieved through steadfast dedication to constant and consistent improvements that are skilfully woven together to sustain the highest quality of life for all its inhabitants now and into the future.

## A HOLISTIC APPROACH

The Austrian capital is the epitome of a holistic planning approach that establishes a clear and shared vision that is succinctly summarised in STEP 2025, the Urban Development Plan of Vienna. Before the framing of this plan, the city had completed a 21-kilometre-long flood protection channel in 1989 that now doubles as a closed water body for recreational activities during non-flood times and a large public park for everyone in the heart of the city. The environmental stewardship improved the flow and water quality of the Danube not only within the city, but also for the surrounding region. This has led to even stronger links among the city and neighbouring areas in meeting environmental goals while also generating a more competitive regional position in international markets.

1 The New Danube, Danube Island and the original Danube River from left to right

## COMMITMENT TO AFFORDABLE HOUSING

Vienna has earned a singular reputation for its commitment to social housing which began in the mid-19th century and continued through to the present day. The city is creating a broad variety of affordable housing choices and new communities as demonstrated in the redevelopment of Aspern Seestadt and Nordbahnhof.

The active promotion of cycling and walking is complemented by an extensive public transit network that presents a wide spectrum of commuting options in the form of metro, trams and buses. By setting the price of an annual public transportation ticket at a very affordable 365 Euros, or 1 Euro per day, more people have chosen to give up their cars. As of 2018, there are more people owning an annual public transport ticket than a car. Today, to get around the city, 28 percent of inhabitants walk, seven percent cycle, 38 percent use public transport, and 27 percent use motorised transport.

## SMART CITY FRAMEWORK

The Smart City Wien Framework Strategy initiated in 2011 is an exceptional, overarching blueprint that guides the sustenance and advancement of Vienna's distinctive high quality of life. The city has taken an enlightened view in integrating emerging technologies within the goals of the Strategy – which emphasises Quality of Life, Resource Efficiency, and Innovation – by harnessing technology as an enabling tool to achieve long term social and environmental objectives.

## SOCIAL INTEGRATION

Vienna recognises the importance of social integration and thus puts the needs of its inhabitants at the forefront of priorities. The substantial efforts of the city to involve citizens and stakeholders in its development process from an early stage is applaudable. Creative ground-up efforts in the form of initiatives such as Grätzloase (Neighbourhood Oasis) provide platforms for citizens to shape public spaces, for example by transforming parking lanes into parklets that serve as communal anchors. The modest scale of these individual projects has considerable impact in helping to establish a durable culture of cooperation at the community level that complements the broad vision for Vienna and its region.

## POISED FOR SUCCESS

Despite its many successes in the past, Vienna continues to build on the strong foundations that have made it an attractive city where businesses and young people from the region are settling in. With a clear vision and well-thought-out strategies for the short, medium and long term, Vienna is poised for many further decades of success and is truly an exemplary role model for cities looking to develop comprehensive and sustainable urban ecosystems.



Scan to watch the commemorative video of Vienna.  
[go.gov.sg/vienna](https://go.gov.sg/vienna)

# VIENNA KEY STATISTICS

**AREA**  
2019

**414.9** km<sup>2</sup>

**POPULATION**  
2019

**1,888,766** people

**DENSITY**  
2019

**4,553** per km<sup>2</sup>

**GROSS DOMESTIC PRODUCT**  
2019

**107.6** billion USD

**UNEMPLOYMENT RATE**  
2019

**10.0%**

**PER CAPITA INCOME**  
2019

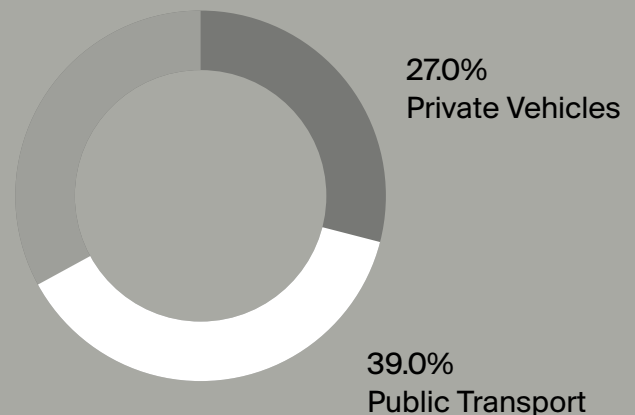
**28,194** USD

**HOME OWNERSHIP**  
2017

**19.1%**

**MODAL SPLIT**  
2019

35.0% Bicycles /  
Personal  
Mobility Devices



**LITERACY RATE**

**NA**

**LIFE EXPECTANCY**  
2019

**81.6** years

**CARBON EMISSION**  
2016

**2.6** tonnes / person

**GREEN SPACE**  
2019

**99.4** m<sup>2</sup> / person



# Looking East and West: Vienna at the Crossroads

by Marcus Ng

Vienna's environmental stewardship is exemplified by the visionary flood management of the Danube River. Mr Walter Kling, Managing Director of Vienna Water shares his experience and challenges facing this historic yet progressive city that straddles Eastern and Western Europe.

“Over the last 30 years we have not faced flooding in Vienna. There was flooding upstream and downstream but never in Vienna, and we are confident that this will continue.”

—Mr Walter Kling

Mention Vienna and the graceful lilt of Johann Strauss Jr's Blue Danube Waltz comes to mind. Indeed, the Danube, which flows through the capital of Austria, has defined Vienna's history and landscape for centuries. The river connects the city to the wider European region and also serves as a scenic and historic waterway that attracts both residents and visitors from all over the world.

Many people may be unaware that the Danube had a darker side. Devastating springtime floods once swept through the city, damaging infrastructure and disrupting lives. Dykes and other structures were erected to stem the floods. But as floods grew in severity after the Second World War, the city saw the need for a long-term solution.

“Vienna is still a growing city”, said Walter Kling, Managing Director of Vienna Water, a municipal department that oversees the city's water supply and water

bodies. The challenge, therefore, was how the city could mitigate flooding and at the same time preserve its greenery and provide recreational spaces for a growing number of residents.

## CREATING A NEW DANUBE

To this end, Vienna embarked on a massive development programme in 1972 to create a bypass channel parallel to the Danube River, which would contain water that would otherwise flood the city.

Named the 'New Danube', this channel took nearly 20 years to build, and the resulting landfill was used to create Danube Island, a 21-km long island between the New and 'Old' Danube. “It changed the city,” Kling declared of the impact of



the New Danube and Danube Island. Previously, Vienna could only grow on areas away from the river to avoid flooding; today, the city can expand right along the riverside. “Vienna now has the chance to have a waterfront,” remarked Kling.

The calm shores of the New Danube offer residents a space for swimming, barbecues, and other fun activities. Parts of Danube Island are linked to the city centre via bridges and a subway line, making it highly accessible and a popular recreational spot. “There are multiple uses of this island, and it’s very well-received by the public,” noted Kling, who adds that there is even a floating high school located on two conjoined ships moored by the island. The island also hosts the Danube Island Festival, Europe’s biggest annual open air music festival, which first began in 1983 and now draws some 2.5 million people.

Kling also observed that ‘nature is coming back’ at more remote sections of Danube Island, where there are wildlife habitats that can be reached via bicycle paths. Above all, the island and channel have performed their designed roles as flood protection systems. “Over the last 30 years we have not faced flooding in Vienna,” said Kling. “There was flooding upstream and downstream but never in Vienna, and we are confident that this will continue.”

## **VIENNA’S ENVIRONMENTAL JOURNEY**

Vienna has long been known as a city of culture that cherishes its heritage; recognising this, UNESCO inscribed its historic centre as a World Heritage Site in 2001 for its ‘urban and architectural qualities’ that illustrate key periods of European cultural development and for being ‘the musical capital of Europe’.

At the same time, the city has also set its sights on environmental leadership and has made considerable progress in this goal. Vienna has set aside 50 percent of municipal land as green spaces, 35 percent as protection zones and 15 percent for species protection. The city has also reduced annual CO<sub>2</sub> emissions by as much as 130,000 tonnes through an integrated waste management system that promotes recycling, waste separation and the generation of district heat from waste incineration.

“Developing a model city for the environment is not a task you can fulfil within a short time,” said Kling, adding

that it has taken Vienna 20 years to reach its present state. To ensure the long-term sustainability of this effort, the city is placing a strong emphasis on environmental education, especially among youth.

For instance, Ulli Sima, the then-City Councillor for the Environment, has been at the forefront in reaching out to school children to instil good environmental habits from an early age. “You cannot build an Environmental Model City by just designing it,” noted Kling. “It is the people in the city that makes this happen, and this starts with the young in schools.”

Kling compared Vienna’s environmental journey to a challenging jigsaw puzzle for which one needs to find bits that fit and know how to fit these pieces together. Simply copying other cities would not work. For instance, vertical gardens would not make sense in a city with long, cold winters. Nonetheless, Vienna has found inspiration in other cities such as Singapore. Kling recalled that a key lesson from Singapore was the importance of education and encouraging people to work together to achieve a clean environment.

## **A RIVER THAT UNITES A REGION**

As a landlocked country, Vienna has for centuries relied on the Danube River for trade and cultural exchanges with its wider region. The Danube, according to Kling, connects Vienna with nine other nations and 15 major cities. This international dimension has resumed following the fall of the Iron Curtain that divided Western Europe from the former communist Eastern European countries. “The river unites cities,” explained Kling, “We share this river, and when it comes to environmental issues, it is the responsibility of the city that whatever water we use in our city is well-treated before it goes back into the river.”

Thanks to Vienna’s efforts to keep the river clean and unobstructed, the Danube now serves as a convenient link to other cities in the region. According to Kling, a fast ferry now runs between Vienna and Bratislava in Slovakia, some 60 kilometres apart, that is almost as fast as a train ride. “The ride is directly from the city centre, so you can take the boat to Bratislava for lunch and dinner, and go back in the evening,” he said, adding that this service has since become highly popular with residents and tourists.

## LOOKING BOTH EAST AND WEST

Vienna's location as a city in the heart of a larger, more open Europe, has proven to be an economic boon. Until the 1990s, Austria formed the eastern frontier of Western Europe. "We felt like the backyard of Europe," recounted Kling. But when the Iron Curtain fell in 1991, Vienna suddenly found itself in the centre of action and had to orientate itself to both Eastern as well as Western Europe.

This reorientation is perhaps best seen in Vienna's new Hauptbahnhof or main train station, which was formerly a terminal station where trains could go no further east. The new Hauptbahnhof opened in 2012 and serves as an international station linking both sides of the continent. In turn, the Hauptbahnhof has stimulated commercial developments in the surrounding district of Favoriten.

"You need to look in both directions: East and West," remarked Kling of Vienna's current geopolitical and economic outlook. "We are very well-located – people took the opportunity to live here, and companies set up branches to service other parts of Europe, so suddenly we found ourselves in completely new circumstances with new opportunities and challenges."

Looking ahead, Kling pointed out that Vienna's rapid population growth will make it increasingly challenging to maintain its high environmental standards. "We cannot be green and build a lot of new houses," he said of this dilemma between growth and environmental sustainability. Finding a balance will be one of the city's 'biggest tasks' in the future, and Kling concluded, "This has to be handled in a way where we still keep the outcomes of an Environmental Model City."

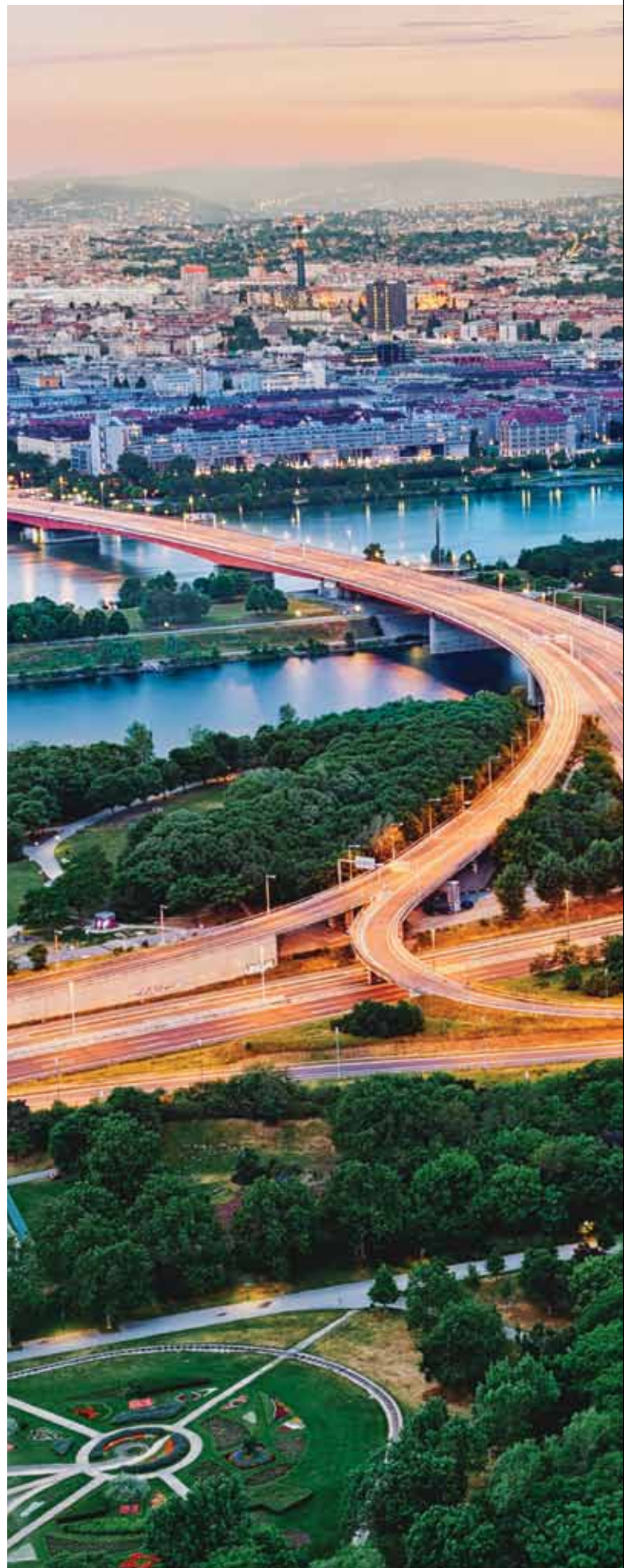
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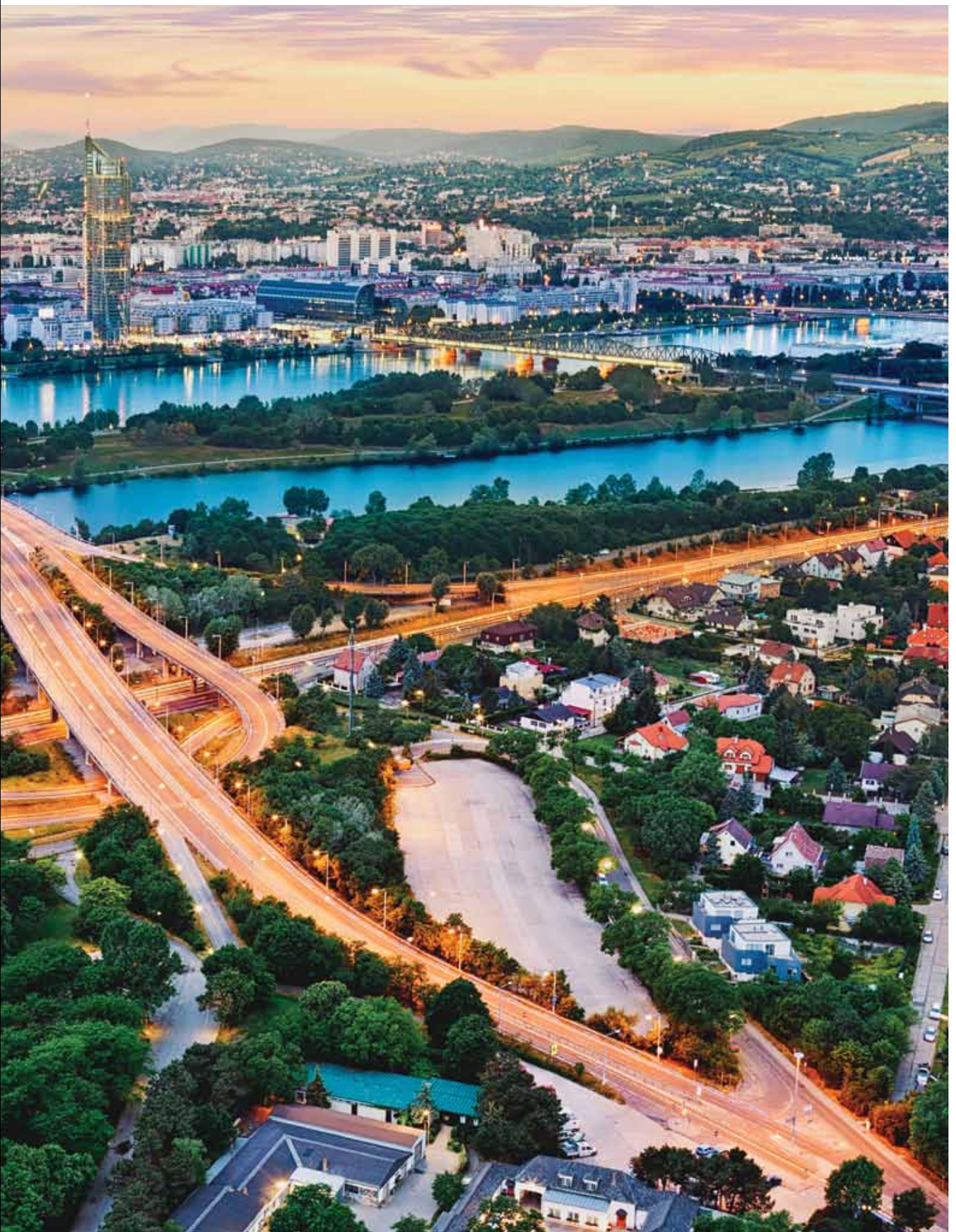
MR WALTER KLING is the Managing Director at the Municipal Department 31 of the city of Vienna, better known as Vienna Waterworks. He was born in Vienna, Austria and studied environmental engineering with a special focus on water-management and later enrolled at the University of Natural Resources and Life Sciences in Vienna.



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This article was first published on the Prize website in January 2017 after Vienna was recognised as a Special Mention of the 2016 Prize. For more useful city resources, visit [go.gov.sg/cities](http://go.gov.sg/cities)





2

# Channelling Efforts Against



3

# Climate Change

by Feng Zengkun

Vienna has been at the forefront of efforts to limit the adverse effects of and adapt to climate change. We look at the groundbreaking initiatives which have slashed its carbon emissions per person and raised the quality of life for residents.

For Vienna, care for the environment has been a core principle of its urban planning for decades. When the city launched its Vienna Climate Roadmap in January 2022, its Mayor Michael Ludwig noted that it adopted its first climate protection programme more than two decades ago, in 1999. Since then, it has reduced its carbon emissions per capita by almost 40 percent while improving its residents' lives. It also aims to be carbon-neutral by 2040.

“We have one of the densest public transport networks, are among the best in Europe when it comes to eco-friendly district heating and have over 50 percent of our land area dedicated to green spaces. We are in a very good position and will continue to intensify our efforts in climate protection in all areas of the city,” said Mayor Ludwig during the roadmap's introduction.

The city's commitment to the environment is one reason that it was awarded the 2020 Lee Kuan Yew World City Prize. The Prize's jurors said: “Even as the world faces a climate emergency, Vienna is an exemplar of responsible environmental stewardship for its region. It holds many lessons for us, as it has met the needs of modern society in a sustainable way while retaining its attractiveness and charm as a city of history and culture.”

3 50 Grüne Hauser – a cost-efficient and modular way to green the city



“We have one of the densest public transport networks, are among the best in Europe when it comes to eco-friendly district heating and have over 50% of our land area dedicated to green spaces. We are in a very good position and will continue to intensify our efforts in climate protection in all areas of the city.”

—Mayor Michael Ludwig

#### CHANNELLING EFFORTS AGAINST FLOODS

Even before the city implemented its first studies and built defences to reduce its flood risks. One ambitious project, which consisted of excavating a flood control channel called the New Danube and using the excavated soil to create a recreational island named the Danube Island, was finished in 1989. The undertaking both raised the city's flood protection and added a centrally located closed water body and large public park for outdoor activities.

The 21-kilometre flood control channel, which runs parallel to the Danube River, can divert 5,200 cubic metres of water per second from it. The city estimates that this will enable it to cope with otherwise catastrophic river flows of 14,000 cubic metres per second, which are statistically expected to occur only every 3,000 to 5,000 years. The channel proved its value in July 2021, when the city recorded more rainfall in three hours than ever before, with the torrential downpour causing only minor damage.

With climate change accelerating since the city constructed the Danube Island, it also started a five-year project in 2018 to further green it. The measures include expanding its green spaces, installing a wind-powered ditch irrigation system, and using a flock of 70 sheep to graze on grassland in lieu of lawnmowers. These will decrease the island's carbon emissions by up to 20 percent and maintenance costs by up to 15 percent.

#### A GREEN CAPITAL OF THE WORLD

Over the years, Vienna has also enacted plans to expand its green and open spaces, boost its affordable and sustainable housing, and reconfigure its transport system to favour public transport, walking, cycling and other environmentally friendly travel modes. Its STEP 2025 urban development plan, adopted in 2014, sets out targets and initiatives in all three areas.

To maintain its remarkable share of greenery, it produced guidance on how to build 12 different kinds of green and open spaces to meet a range of constraints and needs. These include greening streets by investing in grass verges, pavement trees, sidewalk gardens and other vegetation, turning open spaces in schools, kindergartens, sports complexes, and other buildings into community allotments, and making green axes out of walking and cycling paths.

The city also develops local green plans when it embarks on renewal, densification, and other projects to change parts of the city. These plans explain how it will guarantee diverse green and open spaces and must fulfil conditions such as delivering at least 3.5 square metres of such spaces per resident in the neighbourhood. The city currently has an average of 9.3 square metres of green space per person.

It also continues to set aside land plots, and rehabilitate brownfield sites, into parks. By 2025, it will convert its former Nordbahnhof railway station into a 93,000-square-metre park and nature area, called Freie Mitte, with features such as cycling lanes, skate parks, and a wildlife reserve. Freie Mitte will be its largest new park since it built the Kurpark Oberlaa Park in 1974.

## A LEADER IN SUSTAINABLE HOUSING

As Vienna's population grew, it introduced measures to keep housing affordable and sustainable too. Since the city completed its first municipal housing estate in 1925, it has erected about 220,000 low-rent public flats that house about 500,000 people, or a quarter of its population. Successful applicants, who must meet age, income, and other criteria, also do not have to pay deposits, commissions or contract fees, making the flats the least costly form of housing in the city.

Vienna has funded another 200,000 subsidised apartments, run by co-operative housing associations, that are home to another quarter of its residents. "The 420,000 municipal and co-operative flats exert an effect on the entire housing market, and contribute to keeping rents affordable even outside the subsidised sector," the government said.

By taking a larger role in housing, the city has reined in its building sector's impact on the environment. Since 1998, it has mandated low-energy standards for new public and publicly subsidised flats. These standards were also raised in 2007. Electricity for heating, which consumes the most power in its homes, for example, is now limited to 30 kilowatt-hour per square metre per year. The city estimates that its social housing averts about 371,000 tonnes of carbon dioxide emissions annually.

It has gone further in recent years. In June 2020, it designated three areas as its first 'climate protection areas', where new buildings are only permitted if their proposed system to provide heating and hot water is climate-friendly. It intends to create more of such areas, and added: "As a next step, climate protection areas shall be extended to phase out fossil fuel heating and cooling systems in existing buildings."

**"We will continue on our consistent path of high quality of life for everyone through social and technical innovation in all areas, while maximising the conservation of resources and being a reliable partner for others."**

—Mayor Michael Ludwig

## A MODEL FOR ECO-FRIENDLY MOBILITY

Vienna has also made strides in cutting the carbon from its transport system. Today, only a third of the population owns a car. Taking public transport is the most common way of getting around, making up 38 percent of passenger trips. Walking has replaced the car as the second most popular transport mode, at 28 percent and 27 percent respectively. Cycling accounts for the remaining seven percent.

The city facilitated the shift towards sustainable transport by investing in its bus, train, tram and cycling networks, and making it easier and more affordable to use them. It lowered the price of an annual public transportation ticket to 365 Euros (approximately 397 USD), or 1 Euro per day, spurring more residents to give up their cars. It also created WienMobil, an app that combines various mobility providers' offerings, such as bicycle and car-sharing services, so that people can easily plan and pay for greener journeys.

More recent policies have further discouraged private car use and persuaded commuters to switch to public transport. The government eliminated free parking throughout the city in March 2022, and will expand its Park and Ride system, where long-distance drivers leave their vehicles in car parks on the city's outskirts to take public transport, by 3,000 spaces by 2024. It will also complete a new tram line by 2025, and a seven-kilometre-long cycling highway within the next few years.

"With this package of measures, we are taking the right step towards promoting climate-friendly mobility," said Mayor Ludwig. He added of the city's Prize: "I am very proud and grateful that Vienna emerged as the winner among many other wonderful cities. We will continue on our consistent path of high quality of life for everyone through social and technical innovation in all areas, while maximising the conservation of resources and being a reliable partner for others."

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This article was first published on the Prize website in May 2022. For more useful city resources, visit [go.gov.sg/cities](https://go.gov.sg/cities)

# The Viennese Quality of Life

5 Nordbahnhof development

4 Stephansplatz with St Stephan's Cathedral in the background



4



6 Aspern Seestadt



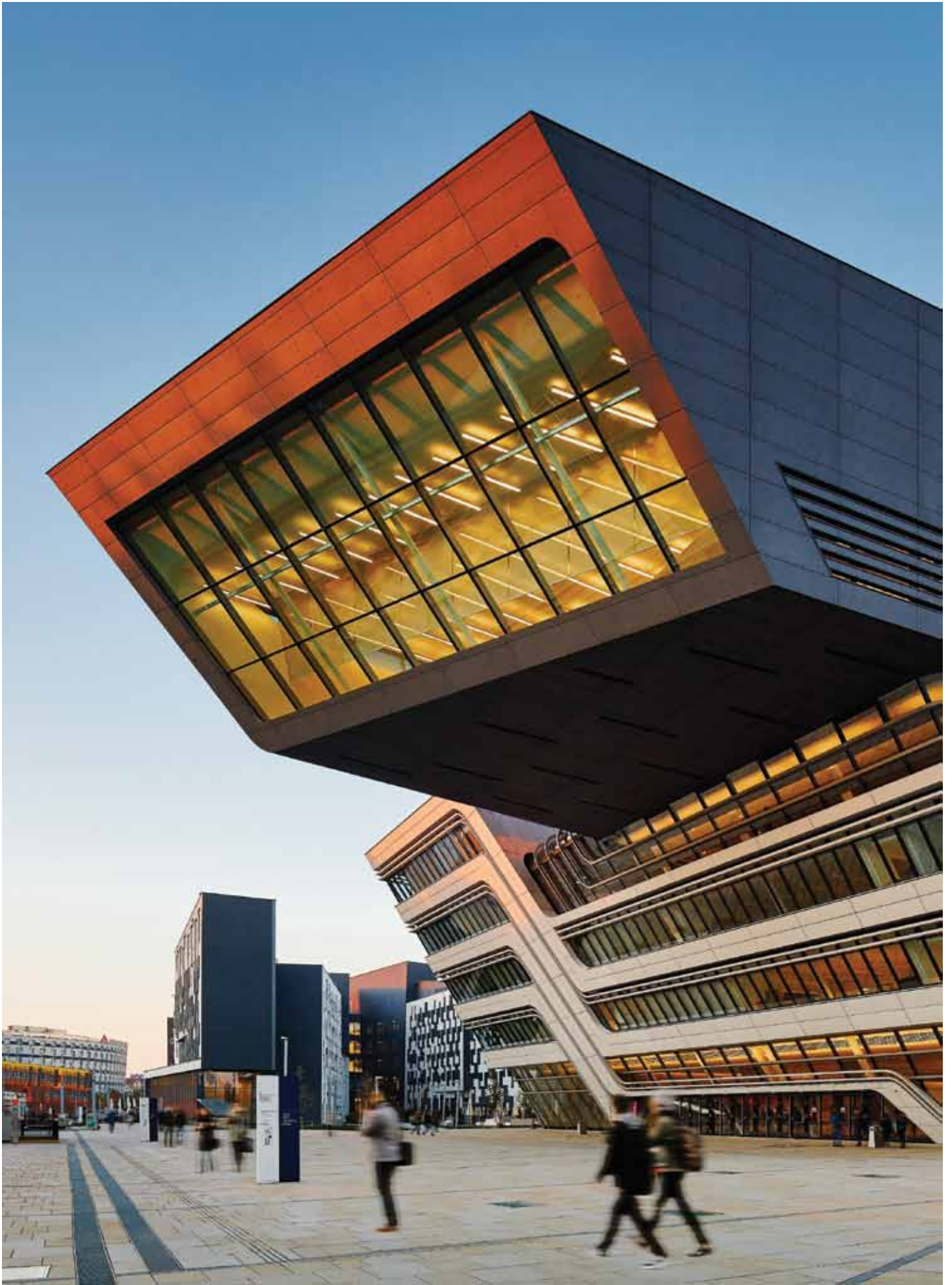
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8

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8 Cycling on the Danube Island

7 Library and Learning Centre at the WU Campus

9 Grätzloase neighbourhood pop-up park



9

© Christian Fürthner

# MAYOR MICHAEL LUDWIG



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IN OFFICE 2018 – PRESENT

MR MICHAEL LUDWIG is the Mayor and Governor of Vienna since May 2018. He was born on 3 April 1961 in Vienna and holds a degree in Political Sciences and History from the University of Vienna. Ludwig also serves as the chairman of the SPO Vienna (the local branch of the Austrian Social Democratic Party). He has served as a City Councillor in Vienna since January 2007 and was second Vice-Mayor and Deputy Governor of Vienna from March 2009 to October 2010.

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## How has winning the Prize impacted Vienna?

It is a particular privilege to receive the Prize. After all, it bears the name of the man behind Singapore's spectacular development into a model metropolis by international standards.

As Mayor of Vienna, I feel very proud and grateful. The fact that Vienna now belongs to this exclusive group gives us all new energy to continue pursuing our ambitious goals in Vienna.

## Tell us more some of the upcoming projects for Vienna.

Vienna is growing and will inhabit more than two million citizens by the end of the decade (2030). Many projects therefore are centred around making Vienna fit for a growing population, while guaranteeing Vienna's high quality of life for all citizens. There are several urban development projects that will ensure the availability of affordable and high-quality housing in the future.

In the area of Vienna's former northern train station, two large-scale projects are being developed. In the first phase, residential units for 20,000 people are being built until 2025. The second project will be developed from 2024 onwards. Both projects will be showcases for Vienna's quality standards in terms of green and open spaces, public transportation, architecture, and urban planning. The areas will live up to the concept of the city of short distances, meaning that citizens will have everything they need within walking distance.

Another large-scale project to make Vienna fit for the future is the continuous expansion of the underground network. In a few years, the sixth underground line of the city will commence operation. This is not only an important measure to further Vienna's sustainability agenda, but the new underground line will also substantially improve accessibility of a certain area of the city and relieve some bus and tram lines. Beyond that, one of the existing lines is being extended at the same time.

I moreover want to highlight the process of developing a 'digital twin' of the city. This project will facilitate numerous processes in the city. On the one hand this digital twin will facilitate planning across various departments by merging the data from those departments. On the other hand, the project will enable the set-up of a one-stop-shop for permits.

By creating a single platform for all enquiries and applications regarding the use of public space, it will be easier for citizens and businesses to contribute to the shaping public space in Vienna, which is essential when building a city for the people.

## What are the ongoing key challenges faced by Vienna?

Climate change and mitigation are substantial challenges that Vienna has to face today and in the near future. For me, this aspect is closely related to social equity, allowing everyone in society to partake in progress. The bill for climate mitigation must not be paid by the most disadvantaged groups in society.

“We have participated in the Lee Kuan Yew World City Prize with the intention of demonstrating to the world our approach to sustainable urban development and the participatory development of open spaces.”

—Mayor Michael Ludwig

This principle is also reflected in Vienna's Smart City strategy. It is about developing a city for the future, an intelligent city with a good functional and social mix. It is about creating a city of short distances that harnesses leading-edge technology, but also makes sure it is not a city of two speeds. We believe that all groups in society must have equal chances to benefit from social and technological progress.

#### **How has Vienna continued to invest in your people and urban communities?**

The vision of Vienna in 2050, as drawn in the Smart City Wien Framework Strategy, will demand a lot of efforts from politics and administration, as well as from citizens, enterprises, and research institutions. I am therefore particularly glad that Vienna can build on a strong foundation.

In contrast to many other cities, Vienna's public services have not been privatised and are still owned and managed by the city. This comprehensive concept of local public services includes waste disposal, public transportation, the provision of energy, the sewer network and the world's best drinking water, which comes to Vienna directly from mountain springs a hundred kilometres away. In this regard, I also want to especially highlight Vienna's affordable housing scheme, where Vienna and Singapore are both international role models.

Being able to build on such a strong basis is a great privilege in making Smart City Wien become reality. Vienna will keep investing in a sustainable future – be it in terms of education, social inclusion, research and technology, the health sector or climate mitigation. Only thus can Vienna guarantee its high quality of life in the long run.

#### **How can Vienna inspire others?**

We consider ourselves to be an ever-learning community. We are always eager to embrace opportunities to exchange knowledge and experiences, as well as to foster networks, partnerships, and fruitful collaborations.

We have participated in the Lee Kuan Yew World City Prize with the intention of demonstrating to the world our approach to sustainable urban development and the participatory development of open spaces.

Vienna's demonstration projects, such as the temporal activation of public spaces in neighbourhoods, digital platforms for public space use application and evaluation, and a cost-effective system to green the city and so on, can be an inspiration for other cities. We are more than willing to share our experiences and thus upscale our impact.

Beyond these projects there are a few aspects of urban life where I would be glad to spread Vienna's approach to other parts of the world. These among others include social housing, public transportation as well as water supply and disposal.

However, I believe that there are other areas where Vienna can learn from other cities. Only through close cooperation and the exchange of knowledge and experiences can cities maximise their impact globally. Events and networks, such as the Prize, the World Cities Summit, and the World Cities Summit Mayors Forum, enable and empower us to do so and collectively advance sustainable urban development.

# Case Study: Safeguarding the Future

HOW VIENNA'S FORESIGHT CONTINUED THE CITY'S SAFE GROWTH

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## PROJECT NAME

# New Danube development

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## PROJECT TYPE

# Environment project

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## PROJECT COMPLETION

# 1989

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### ABOUT THE PROJECT

- Vienna embarked on creating a flood relief channel (New Danube) in 1969 to mitigate potentially devastating floods, especially those exacerbated by climate change.
- The new 21.1km-long, 210m-wide channel runs alongside the existing Danube, with its excavated soil forming a recreational island in between – Danube Island.
- The Danube remains as a main navigation channel, while the New Danube is activated via weirs to absorb excess water volumes during flood events.
- Otherwise, the New Danube and Danube Island are used for leisure purposes for most of the year.

### ISSUES BEFORE THE PROJECT

- The Danube is key to Vienna's urban development as a flood would be detrimental to the city.
- In the 1870s, the city widened and straightened the existing Danube and created a 450m-wide inundation zone and a flood protection dam, catering to a maximum flood water volume of 11,700m<sup>3</sup>/s.
- The 1954 flood highlighted the need to further increase the protection levels to handle larger flood volumes up to 14,000m<sup>3</sup>/s, statistically expected to occur every 3,000 to 5,000 years.

### LEADERSHIP & GOVERNANCE

- The city called for the architectural and landscape design of New Danube and Danube Island via an open competition.
- A team made up of hydraulic engineers, architects and landscape planners worked closely during the planning and implementation phase.
- The processes ensure that the project not only serves its primary function of flood protection, but provides free-of-charge leisure options, water and energy production, and nature and biodiversity protection.

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**PROJECT  
SIZE/SCALE**

21.1 km

**ELECTRICITY GENERATED  
PER YEAR**

1.037 billion kWh

**FLOOD VOLUME  
HANDLING CAPACITY**

14,000 m<sup>3</sup>/s

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**CREATIVITY & INNOVATION**

- Danube Island is raised at least 1m above projected flood levels, offering a 390ha flood-free surface.
- New Danube is designed as a large usable waterbody for water sports, with inlets and basins for docking rowing boats and sailboats.
- Danube Island is designed as a large park with its ends as forested zones and meadows, and integrated old river branches with residues of riparian forest and ancient trees.
- A facility built to absorb the wastewater from the Eastern bank helped prevent the contamination of New Danube.
- A controlled introduction of water to the Lobau floodplains nature reserve helped prevent further depletion of water volumes due to reduction of groundwater levels.

**IMPACTS OF THE PROJECT**

- The farsighted planning allowed the city to continue growing on the banks of the Danube and offer a high quality of life.
- The flood protection system helps the city avert major damages during flood events, such as during a record torrential downpour in July 2021.
- New Danube and Danube Island are popular leisure destinations today, with frequent large-scale cultural and sporting events, such as Danube Island Festival.
- The project with its careful landscaping has seen an increased in biodiversity.
- The Freudenu Power Plant completed in 1998 provides 1.037 billion kWh of electricity per year, sufficient to supply over 280,000 households or half of Vienna's private households.

**REPLICABLE IDEAS**

- Taking the long-term view, a city can turn potential threats into opportunities.
- Vienna's forward-looking plans allowed the city to continue to grow safely and sustainably, even before climate change entered the mainstream vocabulary.
- Creative and integrated approaches allowed the city to look beyond a mere infrastructural solution, but developing multiple uses, especially those that would benefit the people directly.

# Special Mentions





# 2010 – 2020



# Melbourne

SPECIAL MENTION 2010 | ASIA PACIFIC



Melbourne skyline and Southgate pedestrian bridge

© Boyloso/Shutterstock

Melbourne is recognised for its integrated approach and commitment to strategic planning over the last 30 to 40 years (up to 2010). Melbourne's planning processes began with the 1974 Strategy Plan, which culminated in the recent Future Melbourne plans that project Melbourne's urban development into the next 30 years.

Melbourne's success is realised through a succession of influential leaders, such as state ministers and lord mayors, as well as strong processes that helped to institutionalise key strategic planning principles into the system of government, including the state planning department, city council, and so on.

Melbourne is also widely noted for its inclusive planning process that involves the city council, businesses, and residents. The effects of Melbourne's transformation have been enormous within its city centre. Previously, the city centre was virtually lifeless after office hours and during weekends. Today, the city centre is brimming with life, with its resident population increasing from 36,000 people in 1991 to 90,000 people in 2009.

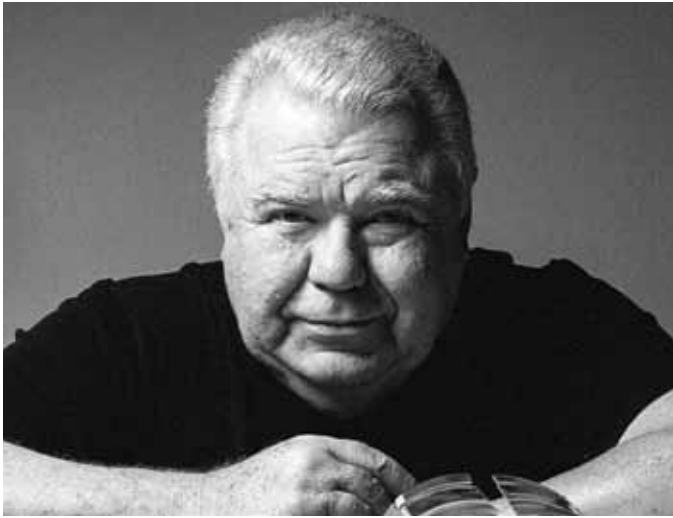
Melbourne's city centre revitalisation made the city vibrant and exciting, and a very attractive destination among both the locals and visitors alike. High profile public projects such as Federation Square and Birrarung Marr have created high quality public spaces for the residents and added value to their surrounding developments.

As one of the fastest growing cities in Australia, Melbourne has in place plans to further increase the population density within the city. At the same time, the city is constantly seeking new and creative ways to maintain its renowned high quality of life and ranking as one of the most liveable cities in the world.

Although Melbourne's urban initiatives are currently more focused within the city boundaries, the city has keen interest to extend the benefits of its initiatives to the wider economic and social hinterland, up to 150 kilometres outwards beyond the greater area of Melbourne. Melbourne's story of success will continue to inspire many other cities around the world seeking to increase their quality of life and become highly liveable cities.

# Dr Jaime Lerner

SPECIAL MENTION 2010



The late Dr Jaime Lerner

© Instituto Jaime Lerner

# Sheila Dikshit

SPECIAL MENTION 2010



The late Mrs Sheila Dikshit

© Wikipedia Commons

The Late Dr Jaime Lerner (1937 - 2021) is recognised for his achievements, particularly as the mayor of Curitiba and as the governor of the State of Paraná.

He was widely credited for pioneering three innovative and impactful urban solutions during his term in office, namely: the Integrated Transit Network (ITN), or the Bus Rapid Transit (BRT); the system of storm-water drainage through the creation of parks as 'flood parking' areas; and the establishment of over 270 rural villages, to improve the livelihood of the lowest income groups.

Dr Lerner's administration was characterised by project-based strategies, employed as 'urban acupuncture'. These are multidimensional, such as the parks, which are not only for leisure, but also for storm-water drainage. They are also catalytic, like the rural villages project, which provided shelter and land to the lowest income group, who are then able to generate their own livelihood.

Most importantly, these strategies deliver tangible benefits to a wide spectrum of the population as illustrated in the examples above. In a world of finite resources, Dr Lerner's approaches to solving urban problems provide good learning points to both developing and developed nations.

The Late Mrs Sheila Dikshit (1938 - 2019) is recognised for her notable implementations in improving the living environment of the National Capital Territory (NCT) of Delhi. In spite of limited resources and limited control over the planning process, Mrs Dikshit had managed to muster the masses to implement several project-based initiatives that led to an improvement in quality of life.

She also managed to increase the green cover in Delhi from 26 square kilometres in 1997 to nearly 300 square kilometres in 2010 and was key in converting public transport to the use of compressed natural gas (CNG) fuel. This led to a marked improvement in the air quality of the city.

In addition, she conceptualised the Bhagidari Citizen-Government Partnership, which involved collaboration with citizens to improve civic services. The Bhagidari now includes 2,300 citizen groups with over five million people. Mrs Dikshit successfully carried out a power sector reform that brought about the positive mindset of consumers and distribution companies after the privatisation of the sector.

The successes of Mrs Sheila Dikshit's plans and implementations are testaments to her strong leadership qualities with great commitment and perseverance.

# Ahmedabad Municipal Corporation

SPECIAL MENTION 2012 | ASIA PACIFIC



Bus Rapid Transit System in Ahmedabad

© Ahmedabad Municipal Corporation

Ahmedabad Municipal Corporation (AMC) is recognised for its early successes in implementing a comprehensive City Development Plan, which aims to transform India's seventh largest city into a more liveable, equitable and sustainable metropolis with a dynamic multi-sector economy and an emerging auto-hub. As it displays the first sign of dramatic physical transformation, Ahmedabad sends a message of hope to cities that are seeking to rise above the proliferating problems of pollution, worsening traffic conditions and inadequate affordable housing.

AMC unveiled its plan in line with the Gujarat State Urban Development Year 2005 after intensive public consultations and with the inspiration and leadership of Mr Narendra Modi, then-Chief Minister of Gujarat. The four key elements of the plan are to unlock land potential through urban reform, invest in environment and infrastructure, ensure inclusive development to address issues of the urban poor beyond basic needs, and capacity building and institutional strengthening.

One early success is the Bus Rapid Transit System (BRTS), which addresses the public transportation needs of a burgeoning population and is the first step in a more

comprehensive transport plan. BRTS has seen public transport usage increase tremendously and has created a catalytic effect along BRT corridors. In addition, all public transport now runs on CNG, thus reducing air pollution significantly.

Equally visible is the 2008 Kankaria Lake redevelopment. This former dilapidated and polluted royal bathing ground is now a vibrant cultural and recreation centre after the implementation of practical solutions to improve the environment, organise traffic movement and rehabilitate the food vendors.

The Sabarmati Riverfront project, will have an even greater impact on the city as it addresses flood, sewage and water pollution issues, relocation and rehabilitation of slums, and the provision of new public and open spaces.

AMC has distinguished itself as a forward-looking organisation and an inspiring model for sustainable development. Its early achievements reaffirm the importance of a clearly articulated and holistic vision combined with strong political will in tackling urban problems.

# AHT Group AG & Sun Development

SPECIAL MENTION 2012 | AFRICA



A community consultation process in Khayelitsha

© SUN Development

AHT Group AG & Sun Development (Khayelitsha) is recognised for exceptional merit in running on a daily basis the comprehensive Violence Prevention through Urban Upgrading (VPUU) programme in the Township of Khayelitsha, Cape Town, South Africa.

The key partners of VPUU are the German Development Bank (KfW) which provided the initial resources; AHT Group AG & Sun Development which provides the technical advisors; and the city of Cape Town which is represented in the project leadership team and provides ongoing funding. While the Prize looks for a more holistic city-level approach, this exemplary initiative offers significant learning points for cities around the world facing similar problems.

The VPUU programme addresses the most basic priority of urban policy – personal safety. It offers a proven solution to this problem where this issue is most acute: the informal and semi-formalised housing areas that are proliferating on the edges of major cities throughout the developing world.

And it does so in a remarkably cost-efficient and effective way through relatively simple and cost-effective urban design measures. The strategic positioning of buildings and

structures that provide visual surveillance and security along open and well-lit pedestrian paths ensures safe routes to and from people's homes. In addition, voluntary community participation provides an effective means of training young people, thereby assisting their entry into the formal economy.

Key to the achievements was the process of intense consultation with the residents of Khayelitsha, which led to an understanding of real needs and the subsequent ownership by residents. This firm support is the single most powerful engine that sustains the programme. Furthermore, the team's commitment and dedication to the cause is impressive and affirms the positive value of good urban design in improving the basic quality of life.

The scheme is already accepted by Cape Town for emulation in comparable areas and will soon be implemented in other South African cities. The potential for its emulation across Africa, the continent with the fastest-growing urban population worldwide, is almost incalculable. This achievement, despite its modest funding, is potentially one of the most important for cities across the developing world, and therefore deserving of exceptional recognition.

# Copenhagen & Malmö

JOINT SPECIAL MENTION 2012 | EUROPE



Copenhagen and Malmö both emphasise on cycling as sustainable transport

© William Perugini/Shutterstock

Copenhagen and Malmö are jointly recognised for their close collaboration at government and business levels, and shared vision of a holistic set of economic, environmental, and socially sustainable goals.

The two metropolitan areas are separated by the Øresund Strait, which has lent its name to the Øresund Region comprising southern Sweden and eastern Denmark and the most densely populated area in Scandinavia with a population of 3.7 million. Since 2000 the cities have been linked by the Øresund Bridge, the longest road and rail bridge in Europe, which embodies their successful collaboration on infrastructure projects.

By pooling resources and sharing public infrastructure, such as the Copenhagen Airport and the Copenhagen-Malmö Port, both cities achieve benefits at multiple scales, generate greater economic vitality in the region and extend their influence beyond national boundaries.

Copenhagen and Malmö are widely recognised as two of the most sustainable cities in the world. Both cities continue to push for even more sustainable developments through active dialogues and with a clear vision and a strong

commitment to integrated and comprehensive strategic long-term planning. Copenhagen is widely recognised for its architecture and urban design excellence and aims to be the world's first carbon neutral city by 2025. Since the 1980s, Copenhagen has embraced the use of bicycles as a form of commuting and an estimated 50 percent of residents cycle on a daily basis.

Malmö, on the other hand, has established itself as Sweden's best city for cycling. Test-bedding pilot projects, such as the development of sustainable districts, has already begun. In both cities, systematic implementation, and rigorous monitoring support the planning for low-carbon development, urban intensification and the continued push for cycling as a model of green mobility.

The remarkable level of collaboration to achieve successful outcomes demonstrates the need for creative re-thinking of the structure of government and cities beyond municipal and national boundaries. The cities of Copenhagen and Malmö are exemplary for their forward-thinking vision and strategies.

# Urban Renewal Brisbane Agency

SPECIAL MENTION 2012 | ASIA PACIFIC



Brisbane River

© Urban Renewal Brisbane Agency

Brisbane City Council's Urban Renewal Brisbane (URB) Agency is recognised for its significant role in transforming what was once a 'country town' blighted by economic stagnation, sprawl, and urban decay into an economically, culturally and physically vibrant metropolis. Over the past 20 years (up to 2012), URB's sustained initiatives have successfully revived local economies and inner-city living by regenerating derelict industrial sites and revitalising the city's neglected riverfront.

The focus of URB's initiatives has been the inner city, an area within a five-kilometre ring around and including the Central Business District (CBD). Former industrial and warehouse areas in the CBD fringe and along the Brisbane River are now highly attractive, lively neighbourhoods of mixed-use that embrace and enhance the area's industrial built heritage.

The river, with its handsomely re-created riverfront, has been embraced as a major connecting spine for public spaces, a popular means of transportation and a catalyst for high-quality residential development. URB has also helped to deliver affordable housing in the areas undergoing urban renewal, thus avoiding the formation of exclusive high-income areas.

A strong vision and a sensitive yet practical approach to development is embedded in URB's modus operandi, which is focused on outcomes rather than regulations. By co-funding exemplary demonstration and catalyst projects, the city has fostered confidence and buy-in from the market and this, in turn, has changed attitudes towards higher-density living, city growth and urban renewal.

Through positive partnering with the private sector and proactive engagement with local communities, URB has gained their interest, understanding and commitment to Brisbane's urban environment. Indeed, the city's quick recovery to the January 2011 floods was aided by scores of volunteers, illustrating a self-help city-wide community spirit that is truly admirable.

URB continues to play a key role in implementing Brisbane's strategic vision of pursuing a realistic alternative to the Australian tradition of suburban sprawl. The city's success in urban renewal as a vanguard for economic transition, inner-city cultural renaissance and the creation of sustainable communities is highly relevant not only to other Australian cities but also to cities worldwide which face similar challenges.

# Vancouver

SPECIAL MENTION 2012 | NORTH AMERICA



Vancouver skyline with the BC Place Stadium in the middle

© City of Vancouver

Vancouver is recognised for being an exemplary demonstration of strong visioning, community values and long-term planning. Over the last 40 years (up to 2012), the city showed foresight and boldness in resisting two of the major North American urban trends – the introduction of freeways into the city centre and the loss of residents to the suburbs. Instead, the city embarked on an inner-city densification process supported by innovative planning, which has contributed to a more liveable and vibrant city life.

Vancouver works hard to prove that it is worthy of its spectacular setting. It is highly commendable that the city has harnessed, rather than taken for granted, its extraordinary natural setting to inform every aspect of city planning.

Today, the city is characterised by exceptional urban design that accentuates the loveliness of its surrounding. For instance, building heights are zealously controlled to maintain a breath-taking view of the mountainous skyline and ocean backdrop. In addition, neighbourhoods are carefully designed such that the barriers between the private, social, and natural spaces are seemingly absent, encouraging the diffusion of vibrancy and appreciation of the outdoors.

Vancouver does not shy away from going against

prevailing trends in order to do what it thinks is right. For example, while other cities relentlessly expanded and improved road networks to reduce congestion, Vancouver halted new car-oriented infrastructure. By counter-intuitively embracing congestion as a friend, private vehicle usage has been effectively discouraged.

Between 1996 and 2011, there has been a 25 percent reduction in the number of vehicles entering the downtown area, while more than 40 percent of the city's labour force travelled to work via public transportation, by bicycle or on foot.

Benefitting from an active citizenry bonded by a strong set of 'Vancouver Values', a succession of capable planning staff and progressive leadership, the city has been able to institutionalise key processes and continue the sustained implementation of their plans across the terms of several mayors.

Vancouver sends a key message on the need for sustained and long-term planning efforts as the foundation for future development, while remaining flexible and adaptable in responding to changing needs and the context of the environment.



# Medellín

SPECIAL MENTION 2014 | SOUTH AMERICA



Downtown Medellín with its Botero sculptures

© ACI Medellín

Medellín is recognised for its outstanding urban transformation over the past 20 years (up to 2014), notably its significant reduction of homicide rates from 380.6 per 100,000 inhabitants in 1991 to 52.3 per 100,000 inhabitants in 2012, or 86.2 percent reduction. This is achieved through a bold and visionary leadership, as well as social innovation through a series of small-scale but high-impact urban acupuncture projects to help tackle some of the city's most critical issues, namely drug-related crimes, territorial gang conflicts, unemployment, and social inequity.

With a clear vision for the future, the government is commendable for taking on positively the city's problems using non-conventional approaches, such as continual upgrading of informal settlements and providing them with utilities, connecting remote hillside communities to the rest of the city with the world's first cable car system for daily commuting (MetroCable), innovative library parks that double as social nodes, urban escalators to cut vertical travel times at hilly neighbourhoods, and using the public realm as a mechanism of providing safety rather than surveillance.

These catalytic projects were developed using limited

funds, and part of the profits generated from the city's efficient public companies goes back into urban development.

Medellín prides itself on social innovation; sociologists work hand-in-hand with urban planners on the frontline to offer help to the people, while residents from local communities are employed to serve as guides, excellent examples of instilling local pride and creating of self-defensible spaces. Citizens are also empowered to decide the use of five percent of the municipal budget to meet their needs, even the poorest citizen is made an active participant of the city's transformation.

To ensure a sustainable economy, efforts can be seen from both the government and the private sector in their strong alliances. An example is the Medellínovation District, a new technological district spearheaded by RutaN, a corporation set up by the city to foster economic development in key areas by providing funding to companies with the know-how.

Medellín's achievements today would provide a great inspiration to other cities facing similar issues.

# Yokohama

SPECIAL MENTION 2014 | ASIA PACIFIC



Aerial view of Yokohama

© City of Yokohama

Yokohama is recognised for overcoming its urban challenges faced over the last 40 years (up to 2014) through excellent partnership with its citizens and stakeholders. As a satellite city at the edge of the Tokyo Metropolitan Area, Yokohama successfully established its own identity as a liveable, relatively affordable, and family-friendly city by tapping on the internationalisation of the region and excellent transport networks.

The city's leadership is commended for its long-term vision and project-oriented approach that has helped to bring this to fruition, while Yokohama's high level of collaboration with its stakeholders and citizens is an admirable model.

As most of the land is held privately, this presents a considerable obstacle to large-scale planning and implementation of development projects. However, the city sought to work hand-in-hand with the community to achieve significant transformation.

Minato Mirai 21, the city's revitalised waterfront business district is a prime example. The city negotiated with stakeholders to free up land for downtown development and concluded agreements with the community to implement good urban design and coordinate development actions in the entire district. It was observed however, that in the next

phase of development, a larger and longer-term view will be desirable to enhance the attractiveness of the city and its waterfront.

Yokohama is also an inspiring model for waste reduction. A remarkable 43.2 percent reduction of waste from 1.61 million tonnes in 2001 to 0.93 million tonnes in 2010 was achieved despite an increase in population. This feat embodies the collaborative spirit of Yokohama to work together as an entire city to achieve extraordinary results. Building on this initial success, the city aspires to reduce waste further in the coming years.

Yokohama is a leader in partnering the industry to develop smart technologies to address its future challenges. Smart energy management systems are experimented in existing houses, buildings and factories and new mobility systems such as compact electric vehicles are piloted in Minato Mirai 21. Through Y-PORT, the city's international technical cooperation programme, Yokohama cleverly marries economic growth and international contribution by tying up with local businesses to export urban solutions to emerging cities. Yokohama's outstanding collaboration with its citizens and stakeholders is an exemplary model for cities around the world.

# Auckland

SPECIAL MENTION 2016 | ASIA PACIFIC



The revitalised Wynyard Quarter

© AsiaTravel/Shutterstock

Auckland is recognised for overcoming its planning challenges over the last 20 years (up to 2016) notably through a highly integrated and innovative governance model. Pre-2010, the city suffered from a fractured and dysfunctional planning system which hindered the alignment of vision across districts and created incoherent planning outcomes.

Auckland strategically orchestrated the vision of ‘One Mayor, One Council, One Plan’ to amalgamate local territorial authorities into a unified Super City. By realigning and redesigning its governance model as one integrated Super Council, Auckland brought about urban transformations, and social integration of Māori and other indigenous groups.

The Auckland Plan is a compelling and achievable vision for its spatial development for liveability and sustainability in the next 30 years. It addresses future challenges of growing population and jobs, ageing infrastructure, affordable housing, environmental heritage, and the Māori’s quality of life. Early into the plan, the unemployment rate fell from 8.7 to 5.7 percent at the end of 2014, and there is an annual saving of 264 million AUD compared to the previous model.

The social integration of Auckland’s first peoples is not

only in policy-making processes but also in everyday life. Auckland embraces the Māori proverb “He tangata, he tangata, he tangata” (or ‘It is people, it is people, it is people’) in all of its plans. Community projects like the Te Oro Arts and Music Centre, Toia Otahuhu Recreation Project and Mangere Arts Centre demonstrate early commitment to greater multi-culturalism, contributing to social cohesion.

Auckland takes the lead in urban design excellence to generate catalytic benefits for the city. Through significant design-led initiatives such as the Queens Wharf and Wynyard Quarters redevelopment at the waterfront, and the refurbishment of the Auckland Art Gallery, Britomart, and Shared Spaces at the city centre, there is now unprecedented public access to the waterfront.

Auckland offers lessons to other cities seeking to rise above numerous challenges, especially those of disjointed governance. It is an outstanding model for governance innovation and social integration, and given time, the city will prove that even the world’s most distant city can radically transform itself, unleash the creativity and cultural potential of its citizens and contribute to a global conversation worldwide.

# Sydney

SPECIAL MENTION 2016 | ASIA PACIFIC



Sydney Harbour

© Taras Vyshnya/Shutterstock

Sydney is recognised for demonstrating strong leadership, relentless commitment, and partnership its citizens and stakeholders in the tackling of its challenges. Despite limited regional power under State authority, Lord Mayor Clover Moore and the City Council strategically aligned the city's work and institutionalised key strategic planning principles into their governance.

With a small population of less than 200,000 and constraints in economic development, Sydney is commended for its urban transformation through a long-term shared city vision 'Sustainable Sydney 2030 Plan'. This plan not only directs urban developments along three guiding principles (Green, Global and Connected) but expresses the community's desire for a city that is economically prosperous, leads in environmental management, liveable, inclusive, and culturally alive.

Sydney demonstrates open engagement with its people in the development of its city vision with an 18-months public engagement process, the most extensive its history. The city vision is therefore a shared one amongst its citizens, further exemplified in the Better Building Partnership initiative where landowners collaborate with government leaders to commit to realise the city's target of 70 percent reduction in

greenhouse gas emissions by 2030.

Sydney is also widely noted for guiding its urban development projects with good design. An example is the new Green Square project where the industrial edge of the city's inner south is transformed into a vibrant global village through quality architecture. In addition, more than 250 public intervention projects display keen urban design excellence, including parks, playgrounds, childcare centres, pools, libraries, theatres, community, and cultural spaces. An exceptional example is observed in the previously crime-infested district of Redfern, where the rejuvenation of public parks and playgrounds effectively helped to increase community trust among residents.

Sydney's transformation is a testament to the dynamic leadership of the Lord Mayor and the City Council. It serves as an admirable leadership model for other cities, especially in the area of addressing political limitations. By developing better partnerships and fostering greater collaborations amongst government, private sector, civic groups and the community, Sydney proves that remarkable and successful urban transformation is still possible. Sydney's achievements today provide great inspiration to other cities facing similar constraints.

# Toronto

SPECIAL MENTION 2016 | NORTH AMERICA



A streetcar plying King Street, Toronto

© TRPhotos/Shutterstock

Toronto is recognised for its outstanding social integration strategies and reversing the trend of suburban sprawl through the revitalising of its city centre over the past 40 years (up to 2016) – a result of long-term visioning backed by a committed civil service, public and private organisations and a people that embraces its diversity.

Toronto is one of the world's most diverse cities, with a population of nearly 50 percent non-native Canadians originating from over 170 countries and speaking over 160 languages. In today's context of globalisation, Toronto is highly commendable for its social integration strategies. It goes beyond tolerance by embracing the diversity of its immigrants. The Toronto Public Library's initiatives to welcome and integrate newcomers help them settle down quickly. The Library also functions as community-building with its extensive 100 city-wide branches. Toronto's assimilation of its diversity can be seen in its diverse food, culture, communities, and people from all walks of life.

Like many North American cities, Toronto faced the common challenge of a 'dying city core' and suburban sprawl in the mid-20th century. The city first implemented the Central Area Plan in 1976 to reverse this trend through key strategies to achieve 'complete communities' (communities

with the right density and transit options), invest in transit and walkability, and enhance business climate. The city also uses good urban design and 'complete streets' (streets that support multi-modal transport) to create a liveable and attractive urban environment for businesses and residents alike, as seen in its 20-year Waterfront Toronto development since 2001 to attract people back to the city centre and reconnect with its waterfront.

Today, the city is enjoying the fruits of its labour: its central area population increased by 95 percent since 1976 to almost 200,000. Its waterfront is completely transformed from former rail and industrial uses into a vibrant mixed-use district, with new residences, businesses and culture facilities amidst well-designed public spaces, promenades, and industrial heritage.

Despite limited federal and provincial support and a 'weak mayor system', the city overcame its many obstacles achieved success. Looking ahead, with the right focus on the shortage in affordable housing and far-from-ideal transit, Toronto could devise creative solutions amidst limited funding to tackle these pressing issues and become even better.

# Vienna

SPECIAL MENTION 2016 | EUROPE



Vienna's historic city centre

© lizenzfrei

Vienna is recognised as an excellent example of a very old city that has successfully transformed itself from a backend city of Western Europe to a highly liveable, innovative, and green city, while protecting its rich heritage, especially its historical city centre.

Despite the restrictions due to its UNESCO World Heritage Site status, Vienna focused on developments that will impact the entire city, such as the new Wien Hauptbahnhof (Central Train Station) in one of 13 Key Areas, under its STEP 2025 Urban Development Plan. As such, Vienna continues to innovate while erasing its 'museum city' archetype.

Vienna is highly commended for its environmental stewardship. Recognising its responsibility as an upstream city of the Danube River, Vienna takes the lead in protecting the environment. Under its ambitious goal of becoming Europe's Environmental Model City, the city safeguarded over 50 percent of its municipal lands as green spaces, 35 percent as protection zones, and 15 percent as species protection.

Waste management measures contributed to the reduction of 130,000 tonnes of CO<sub>2</sub> emissions annually. The city engages its enterprises through the EcoBusinessPlan, a

consultancy to help them reduce their environmental impact and in turn achieved 121.4 million Euros operating costs savings since 1998.

In an age with pressing climate change issues, Vienna is far-sighted in its approach towards flood protection in the Danube River. A series of protection measures since 1884 culminated in the 20-year development of the 21-kilometre New Danube and Danube Island completed in 1989. The solution is not only effective by exceeding the maximum flow rates of the catastrophic floods of 2002 and 2013, prevented major damages, but also creative in serving as a closed water body for recreational activities during non-flood times. The Danube Island is created from the excavated soils of the New Danube and provides a large public park for the city.

Vienna is already widely recognised as one of the most liveable cities in the world today. Yet, the city does not seem to rest on its laurels but continues to raise the bar of sustainability and liveability, under the visionary city leadership looking into all aspects of quality of life in the city. Vienna is a role model in its commitment to good environment and sends an important environmental message to other cities around the world.

# Hamburg

SPECIAL MENTION 2018 | EUROPE



The new HafenCity with the Elbphilharmonie on the right

© Jonas Weinitschke/Shutterstock

Hamburg is recognised as an extraordinary port city that overcame planning challenges to become an attractive and welcoming city of opportunities for its people and growing immigrants. It evolved from conventional urban expansion on the fringe through its inner-city densification strategy to meet increased demands for housing and urban mobility.

HafenCity, a former underused harbour and industrial space next to the historic Speicherstadt, is transformed into a dynamic mix-use district of housing, workplaces and recreation areas. Recognising that built heritage is important to quality of life, the city focused on the urban design of the new district to relate to the old city, while sensitively protecting against flooding.

The city leaders are instrumental in driving affordable housing for all and creating an attractive city for the young. Major residential developments comprise three equal parts: social housing, condominiums, and privately funded rental housing. In Altona, a soon-to-be defunct rail yard, plans are underway for new housing, while intercity train service will be improved, and previously divided neighbourhoods linked.

Hamburg's culture of cooperation is characterised by public-private partnerships for housing and transportation

and complemented by a citizen participation process.

Extensive and early public engagement led to holistic solutions such as the Autobahndeckel – a series of landscaped decks to reconnect existing parks and add gardens spaces. A comprehensive integration programme gives newcomers the best possible support to overcome the barriers that normally impede their assimilation and allows them to become positive contributors as quickly as possible, with the potential to achieve German citizenship.

Hamburg is also commendable for pushing towards sustainable urban development through the ongoing conversion of its transportation system to renewable energy, and its innovative initiative 'switch' to reduce private car usage through the introduction of alternative mobility options at key transportation nodes.

With excellent urban initiatives creating a conducive environment for its inhabitants and imbuing the city with an uplifting spirit, Hamburg stands out as an exemplary model for other cities who are looking for ways to enhance economic competitiveness through education, workforce support, and high quality of life.

# Kazan

SPECIAL MENTION 2018 | EUROPE



Aerial view of Kazan with the Kazan Family Centre in the foreground

© Maria Passer/Shutterstock

Kazan is recognised for its impressive turnaround from a formerly drab city with youth criminal gang and poor public health problems into a healthy city now known for sports and social and religious harmony. The city recognises that the people are its most valuable asset and invested strategically in sports, medicine, nutrition, and family life to improve Kazan's overall quality of life.

Kazan leveraged international sporting events such as the 2013 Summer Universiade to brand itself as a national sporting capital and constructed a range of sporting infrastructure that benefited its people post-event as part of the city's push for wider adoption of sports and wellbeing.

The Department of Food and Social Catering of Kazan – the largest food industry operator in the region – caters meals to some 265,000 people including schools and hospitals, ensuring good nutrition to its people. The Kazan Family Centre is an institution that promotes family life by celebrating marriage life and multiple births and organises social activities for families.

Kazan saw dramatic improvements in the city's quality of life: over the last ten years, the lifespan of its residents increased by nine years, birth-rates increased by two times, abortion rates decreased by 40 percent, and crime rates decreased by two times.

Kazan is also commendable for taking the lead among its peers in embracing innovation. The city capitalises on its youth, as seen in its young leadership, and is committed to bring new ideas that could catalyse positive change. Kazan co-hosted FIFA World Cup 2018, as well as WorldSkills Competition 2019. These events provide the impetus for infrastructural upgrades and urban development that will benefit the people.

The embankment of the Kaban Lake and the rehabilitation of Lebyazhye Lake are also positive examples to show how Kazan creatively improves the city through landscaping, while providing new recreational areas and opportunities for the people.

Kazan is highly remarkable as a city of diverse cultures, comprising 115 different nationalities, 36 national cultural organisations, 180 religious communities, and 9,000 foreign students. Most notably, the city's population is made up of approximately 50 percent orthodox Christians and 50 percent Muslims living in peaceful co-existence. The friendship and respect for one another's individual beliefs makes Kazan a model city of ethnic and religious diversity, and demonstrates that civil, racial, and religious harmony is achievable and sustainable.



# Surabaya

SPECIAL MENTION 2018 | ASIA PACIFIC



A clean and green kampung neighbourhood

© City of Surabaya

Surabaya is recognised for its strong appreciation of culture and for taking a bold urban development strategy to preserve and develop its kampung neighbourhoods, instead of displacing them, while also experiencing rapid economic growth.

The Kampung Improvement Programme fostered strong community collaboration with the local government in transforming the kampungs into clean, conducive, and productive environments. It is an inspiring model for alleviating poverty by providing training for improved home-made food and crafts for sale, making available cheap credit by the national government, and marketing the products. The Kampung Unggulan (Prominent Kampung) and Pahlawan Ekonomi (Economic Heroes) programmes, and community-based waste management helped improve incomes, transform subsistence into urban economy, and promote home-based entrepreneurship.

Former Mayor Tri Rismaharini, widely acknowledged for her inclusive and people-centric urban development approach, was instrumental in the city's achievements and transformation. She helped advance Surabaya into a clean and green thriving metropolis with improved quality of life.

Surabaya successfully mastered many innovative ground-up initiatives by harnessing businesses and citizens to make modest attempts at improving the environment, creating jobs, and managing urban waste. The city emphasised on citizen participation and building trust and worked closely with local universities in policy advice and implementation.

Surabaya constantly seeks innovative and cost-effective ways to drive its green vision, such as partnering with the private sector in developing and maintaining green spaces and improving the environment. Today there are about 100 active parks in Surabaya, while the green open space has reached over 20 percent of the city area.

Surabaya inclusive learning efforts include allocating 35 percent of the annual budget to education, providing free education for the underprivileged, setting up reading corners and mobile libraries, and offering free training.

Surabaya has distinguished itself as a forward-looking emerging city and is an inspiration to other cities in developing economies who are looking to learn from a well-managed city now characterised by economic growth, social harmony, and environmental sustainability.

# Tokyo

SPECIAL MENTION 2018 | ASIA PACIFIC



Marunouchi with Tokyo Station on the right

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Tokyo is recognised as an exemplary megacity that is well-managed despite its large and seemingly ungovernable size, credited to the government, and an enlightened private sector contributing towards the greater good as social responsibility. Through the conscientious implementation of its urban blueprint over the last two decades, Tokyo transformed from its economic downturn of the 90s into the highly efficient, liveable, and vibrant city one experiences today.

Tokyo displayed foresight and recognised the importance of good public infrastructure to support the growing metropolis. It epitomises the Japanese concept of *kaizen* through its long-term investment in its public transport network over some 60 years to ensure its contemporary efficiency and success. In most parts of central Tokyo today, it takes only five to ten minutes on foot to reach the nearest train station, while the train modal share within its 23 Special Wards is 48 percent – the world's highest. Despite its growing population, the city reduced its train congestion rate from 221 percent in 1975 to 164 percent in 2015.

Tokyo is highly commendable for its exceptional public-private partnership model over the long term which has produced huge successes for the city. The city overcame its governance and budget limitations by leveraging the private sector with the capability and talents to deliver high quality urban development projects. For instance, the transformation of the Otemachi-Marunouchi-Yurakucho (OMY) District is one of Tokyo's many business centres to increase its long-term economic vitality. Accommodating ground-up initiatives and flexibility in plans helped to transform the OMY District from a business environment into a vibrant, casual, and inclusive one that caters to a wide range of users.

As Tokyo moves towards its next lap, it has a planned vision for the future. The city is focusing on three aspects: 'Safe City', 'Diverse City', and 'Smart City' to make the city resilient, accommodating, and open to broader collaborations to meet future challenges.

Governor Yuriko Koike is an inspiration for her leadership, as seen in her drive for inclusiveness and stepping up the city's barrier-free efforts. In doing so, Tokyo is preparing itself for an ageing society, an initiative which other similarly advanced cities can learn from.

# Antwerp

SPECIAL MENTION 2020 | EUROPE



Het Eilandje in Antwerp with the MAS Museum on the right

© Erik AJW/Shutterstock

Antwerp is recognised for its careful and deliberate development of systematic plans and projects to rejuvenate the city, through large- and small-scale interventions over the long term. The lack of coordination in post-war development and northward expansion of Antwerp's port resulted in disused and neglected areas, particularly along the Scheldt River.

The 2006 Strategic Spatial Plan helped catalyse rejuvenation using *Renovatio Urbis* – strategic interventions to tackle issues of climate change, affordable housing, urban mobility, and strengthen the green and blue infrastructure. Most significantly, the revitalisation of the quays along River Scheldt helped to conserve selected historic heritage, mitigate flood risks, and improve the riverfront access. The climate-neutral Blue Gate project is another major initiative with great potential.

Through the Urban Renewal Housing Programme, sites deemed unattractive by private developers are taken over by AG VESPA – an autonomous public developer – and converted into quality affordable housing. Emphasis is placed on spatial quality, while planning processes are supported by design research guided by the City Architect. These small, surgical insertions in the urban fabric are laudable for seeding efforts to redevelop and revive neglected neighbourhoods.

The city's Smart Ways to Antwerp programme addresses congestion and promotes well-integrated multi-modal travel. The ambitious Over the Ring project to cover a congested ring road will better integrate the city and increase green spaces. To address potential dis-amenities, Antwerp embarked on the nation's most ambitious citizen participation yet. By appointing an independent curator and design team to work with citizen groups for implementable concepts, Antwerp turned potential conflicts into long-term collaboration. This people-centric approach is also seen in the integration of migrants into the larger community.

By fate or design, Antwerp demonstrates merits to a Slow Urbanism approach – the flexibility to adapt and respond to new challenges, gain public support for long-term objectives, and grow the city organically. The breadth and depth of ongoing interventions are highly impressive and poised for success.

The sense of cooperation that transcends all levels sends a strong signal that solutions can gain widespread acceptance if governments are willing to co-create solutions with citizens. Antwerp's achievements offer lessons for cities tackling complex challenges of integrating historical infrastructure with modern city planning.

# Boston

SPECIAL MENTION 2020 | NORTH AMERICA



Aerial view of Boston

© Richard Cavalleri/Shutterstock

Boston is recognised for its holistic and cumulative efforts on climate resilience, housing affordability mobility options, and civic participation, as exemplified through multiple transformative projects. As a dense city with a 75-kilometre coastline, Boston's future-readiness is the innovative and tailored solutions to overcome its vulnerability to flooding. Boston's rebound from decline in the 1980s to a knowledge economy and a thought leader today backed by a highly skilled workforce and residents with a deep love for the city is also remarkable.

Imagine Boston 2030 is highly commended as a forward-looking and first comprehensive citywide plan to guide the city into its next 50 years. It outlines goals in key aspects of housing, transport, and resilience. Boston's ongoing effort to provide innovative and affordable housing solutions and transport measures to shift towards active mobility is praiseworthy and yielding results. For resilience, the city formulated various strategies at multiple scales, such as Climate Ready Boston and Resilient Boston Harbor, to mitigate climate change issues.

Boston's recent efforts to build communities at various economic levels, with residents articulating challenges, setting city goals, and generating ideas, underscore the city's

unwavering commitment to engagement and participation for win-win outcomes.

Boston is sincere in its engagement with developers and NGOs through tailored solutions for value-added development. For instance, the New Balance Headquarters, 401 Park, and Bruce C. Bolling Municipal Building transformed the locales and catalysed further investment.

In the case of Rose Kennedy Greenway, after the linear green as part of the Big Dig project was completed in 1991, the city focused on activating the resultant public spaces. In the last decade, more collaborators stepped forward to install seasonal artworks, contribute programming, and fund the upkeep of the urban oasis. These efforts paid off with the Greenway remaining well-loved amongst residents and visitors alike today and is a role model for park management and placemaking.

Overall, Boston's foresight in resilience leads the way, and urges other waterfront cities to take a similar proactive approach to tackle climate change issues. The city's visionary and strategic planning, together with the close partnership and trust of its people to deliver results, places itself on a good track to achieve its goals for 2030 and beyond.

# Lisbon

SPECIAL MENTION 2020 | EUROPE



Ribeira das Naus along Lisbon's rejuvenated waterfront

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Lisbon is recognised for its dramatic resurgence over the past decade through innovative ideas and effective implementation despite limited funds. The city took the crisis of earlier financial turmoil as a chance for better governance and transformed itself into an attractive city with new investments, residents, and visitors.

Lisbon collaborates with private sector investment to meet its strategic objectives. For example, incentives to developers to operate affordable homes helped address a growing population, while floor area bonuses to private landowners helped achieve conservation objectives and recover prime parking locations for pedestrian-friendly public spaces.

Lisbon is highly commended for its strategic urban interventions and mobility measures leading to significant physical transformation and improved public realm experiences. Catalytic riverfront projects, such as the Cruise Terminal, pedestrianisation of a major waterfront arterial road, and conversion of a surface carpark into the popular Comercio Square, improved riverfront access and created an attractive recreational corridor that catalyses further rejuvenation.

The integrated approach of opening up new areas enabled the city to grow while preserving its historic core.

The Beato Creative Hub will transform a disused military complex into a start-up facility to foster entrepreneurship, while community nodes converted from under-utilised spaces encourage people to step out of their homes. The Lisbon Green Corridors progressively realised since 2008 helped connect communities and create attractive recreational areas and much needed green spaces.

The city leaders recognised that the city must act now to meet its 2050 goal of carbon neutrality. While striving for a 40 percent increase in regional public transport network, small but impactful measures such as a 40 Euro monthly metropolitan pass, improved pedestrian connectivity, and regular road closures helped encourage the adoption of more sustainable modes.

Working with the local community helped the city do more with less, such as the Participatory Budget initiative which allocates five percent of the municipal budget to citizens' proposed projects, such as the rejuvenation of the once-stigmatised Mouraria Quarter into a vibrant district today. Lisbon demonstrates resilience in the face of adversity to overcome limitations by turning crisis into opportunity. Its story of rebound should encourage other cities in similar situations.

# Sustainable Cities of the Future

by Professor Wulf Daseking

Professor Wulf Daseking, member of the Nominating Committee, urges cities to focus their energies on the urgent issues surrounding climate change, and suggests how cities of the future can take shape.

“As the world becomes more urbanised, sustainability will become even more important to cities. We are here to learn from one another, and the Prize is one such place to look to.”

—Professor Wulf Daseking

Copenhagen aims to be carbon-neutral by 2025

## AN UNPRECEDENTED CHANGE

The conditions of our world are currently changing at an unprecedented rate – no matter which continent, country, or city that we live in. The effects of global warming can be felt everywhere. It affects all areas of life, be it food, energy, waste, land consumption or water supply. And in more developed cities, current lifestyles are put to the test – it is no longer justifiable to continue these lifestyles as before. This forces us to develop solutions especially for cities, and to find the necessary answers to this increasing problem.

Let us recall the Rio Conference that took place in 1992. Then, it was decided that CO<sub>2</sub> emissions should be reduced by 20 percent by the year 2012. When world leaders met again in Copenhagen in 2012, they were disappointed to find that – with very few exceptions – this goal had not been achieved worldwide. Alarmed by increasing environmental



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catastrophes, such as hurricanes, floods, periods of heat and drought, melting glaciers and rising sea levels, world leaders convened again in Paris in 2015, where they came to a consensus to limit the global rise in temperatures to below two degrees Celsius. Despite their best intentions, a lack of clarity to this definition may again have repercussions in its implementation period and financing models. Nevertheless, this was a moment of breakthrough in climate protection.

## WHAT NEEDS TO BE DONE

Where then is this journey headed to and what needs to be done?

The responsibility for carrying out environmental protection and sustainability lies in each and every country and their cities. The latter is especially of importance, where solutions are to be differentiated and tailored for existing built urban systems and new areas of planning. While these entities can vary vastly across the world and are shaped by fundamental factors such as political leadership, culture and religion, there are certain universal goals and measures that can be agreed upon and exchanged across borders.

## CITIES OF THE FUTURE

To me, cities of the future are those that are dense, compact, mixed, and decentralised. They are the ones that are developed along lines of local public transportation, where inner-city development/redevelopment is favoured over sprawl. Together with their larger area/region, they form an integral urban unit where urban issues must be addressed collectively in order to find shared solutions. These urban regions should aim to only consume as much as they can generate or produce themselves, with the reduction of fossil fuels at the forefront of their policies.

In the future, residential neighbourhoods where most residents are located in, may become the most important planning focus in the development of cities. As such, public and private infrastructure facilities must be expanded or strengthened in order to meet the needs of these neighbourhoods, with the reduction of vehicular traffic and increase in public spaces playing a decisive role.

The model of the 'city of short distances' (an urban planning concept of high residential density with mixed land uses) can be implemented in these neighbourhoods. The creation of mixed residential areas, the designation of jobs

that are compatible with urban life, the design of green spaces and leisure areas, as well as decentralised concepts for energy, water, waste, and transport must be pursued consistently in the interests of sustainability.

## A MINDSET SHIFT

To achieve a long-lasting transformation, cities should seek to involve residents in all aspects, while creating independent organisational structures in their administrations to carry out effective and efficient implementation of plans. Master plans must be worked out in conjunction with sound financial planning, whose individual measures must in turn be consistent with the objectives of the city as a whole.

Sustainability will be the most important task for the future. To this end, cities would need adopt a mindset shift and develop tailored solutions. We must accept that recycling takes precedence over the demands on new resources. However, cities must also acknowledge that solutions cannot be found through technical measures alone. Economic systems will also need to be adapted to this new task. It will be a long, arduous journey, and a global breakthrough can only succeed if we start on this journey early through educating the young.

## LOOKING TO THE PRIZE

The Lee Kuan Yew World City Prize gives special meaning in this sense. As the most important urban development prize worldwide, it honours cities whose special achievements have given them role model status. As the world becomes more urbanised, sustainability will become even more important to cities. We are here to learn from one another, and the Prize is one such place to look to.

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PROFESSOR WULF DASEKING is Professor at the University of Freiburg and was the Director of City Planning Office for the City of Freiburg from 1984–2012. He has over 30 years of experience in city planning and urban development and is an internationally renowned figure recognised for shaping Freiburg to its current status as Germany's ecological capital.



# Creating Green and Liveable Cities of the 21st Century

by Mr Wong Mun Summ

Mr Wong Mun Summ, member of the Nominating Committee, discusses how cities can capitalise on green spaces to become green and liveable cities of the 21st century.

“Cities need to become more compact and sustainable: shrinking our footprint and integrating nature into the way we build, can make a huge impact on our climate, environment and biodiversity.”

—Mr Wong Mun Summ

Across the globe, cities are losing green spaces – whether they are the rapidly expanding megacities of Asia or the sprawling suburbs of North America and Europe. We are increasing the footprint of our cities and sacrificing nature for expansive urbanisation. This is exacerbating climate change and causing problems such as urban heat island effect, traffic congestion, poor air quality, as well as deteriorating liveability and resilience.

## **SAFEGUARDING AND EXPANDING GREEN SPACES**

To counter these problems, cities around the world have developed various strategies to retain and expand their green spaces. Vienna, for example, safeguards more than half of its municipal territory as green spaces, and plans to keep this ratio in place, even as the city grows. The High Line in New York City, an old derelict railway line, has been repurposed and turned into a vibrant, elevated urban park. It not only contributed positively to the natural environment, but also sparked a ripple effect that has attracted hotels, businesses,

and housing to the area, revitalising the whole district.

In a similar vein, Seoul completed several outstanding urban rejuvenation projects that prioritise people and move away from car-centric urban planning. For example, the elevated highway that covered Cheonggyecheon – an 11-kilometre stream – was demolished to restore the stream. Another example is Seoulo 7017, formerly the Seoul Station Overpass built in 1970 which was adapted to an elevated pedestrian passage with greenery, retail spaces and public spaces along the way.

Closer to home, Surabaya has undergone a massive transformation to become one of Asia's greenest cities by developing, revitalising, and maintaining over 100 parks. The government carried out its holistic city-wide 'clean and green' programme without notable financial resources or implementing high-tech methods. Its success attributes largely to the citizens that were bought in to the programme, who have since taken ownership over green spaces and community-based waste management measures such as recycling, composting and waste banks.



Surabaya enlivened its kampung neighbourhoods with greenery



© City of Surabaya

### FROM THE SINGAPORE'S PERSPECTIVE

In its short history as an independent nation, Singapore too has undergone phenomenal growth and development. Growing up here, I have experienced Singapore's transition into one of the world's most densely populated cities. But despite its rapid growth, Singapore has also managed to become one of Asia's greenest cities.

Singapore is in a unique position because of its size and location in the tropics. Though rich in human capital, it is land-scarce and has almost no natural resources. With these two major constraints, Singapore must become future-oriented and innovative. It has to find a balance between sustainable growth and development while also ensuring that liveability and green spaces are not sacrificed.

Singapore intensifies land use by redeveloping existing brownfield sites into high-density housing. My firm WOHA, a research-based architectural practice, participated in a design competition for Pinnacle@Duxton – Singapore's first 50-storey public housing in 2001. The process turned into a seminal case study for our practice. We distilled key ideas for high-density high-amenity strategy: the idea of multiple ground levels, where ground floor amenities are lifted up into the sky and multiplied three-dimensionally, creating new elements such as sky streets and sky parks. We have since implemented these in subsequent projects such as Newton Suites, and SkyVille@Dawson.

In 2009, the Urban Redevelopment Authority Singapore launched the Landscaping for Urban Spaces and High-Rises (LUSH) programme to incentivise developers to integrate landscaping and publicly accessible common spaces – equivalent to 100% of the site area – into their buildings at strategic locations. LUSH has since expanded its scope to include elements such as green roofs, vertical greenery, solar panels, and urban farms. To date, Singapore has over 100 hectares of 'skyrise greenery' while aiming to double this figure by 2030, strengthening its distinct, imageable brand as a City in Nature.

Capitalising on LUSH, WOHA pushed the boundaries of integrated greenery with recent projects such as PARKROYAL COLLECTION Pickering, and Oasia Hotel Downtown. The former is an icon with its tropical hanging gardens in the sky, while the latter is the realisation of a truly tropical skyscraper, with natural ventilation, open common spaces and a green façade permeating and covering the entire building.

To share our experience and strategies for the exploding megacities of the tropical belt, WOHA published the book 'Garden City Mega City: Rethinking Cities for the Age of Global Warming' to showcase inclusive community-centric design, integrated landscaping, architecture and urbanism can help improve quality of life within high-density environments. Cities need to become more compact and sustainable: shrinking our footprint and integrating nature into the way we build, can make a huge impact on our climate, environment, and biodiversity.

Today, with the urgency of climate change, policymakers need to recognise that urban development must not merely aim for balance but also actively regenerate with nature. Development impacts our planet, and our resources are finite. We must find thoughtful solutions that emphasise resilience and sustainability to restore, preserve and enhance our social, cultural, and natural capital. By learning, sharing, and setting ambitious objectives, we can rapidly evolve solutions to create liveable cities of the 21st century and beyond, that foster community, nature, and biodiversity.

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MR WONG MUN SUMM is the joint founding director of WOHA Architects, one of Southeast Asia's best known and most awarded architectural practices based in Singapore. He graduated with Honours from the National University of Singapore in 1989 and is a member of various Design Advisory Panels in Singapore.





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1 Hamburg's HafenCity is raised to anticipate rising sea levels

2 Tokyo created a green oasis in its Marunouchi CBD

3 Lisbon rejuvenated its once-stigmatised Mouraria Quarter



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3

# It Began With A Good Lunch

by Professor Kishore Mahbubani

## IT BEGAN WITH A GOOD LUNCH

Good ventures can begin with good lunches. The then-Deputy Prime Minister of Singapore, Dr Tony Tan, invited me to become the founding Dean of the Lee Kuan Yew School of Public Policy over lunch in New York City in 2003. The then-Minister of National Development of Singapore, Mr Mah Bow Tan, invited me to become the founding Chairman of the Nominating Committee of the Lee Kuan Yew World City Prize over lunch in Singapore in 2008. Fortunately, both ventures were successful.

Then-Minister Mah's timing for launching the Prize was brilliant. The year for launching the Prize, 2008, was the year when human history crossed a significant threshold: for the first time in human history, more people lived in cities than in rural areas. The need for good models of city development had never been greater. The search for winners of this Prize provided a great learning opportunity to understand best practices in urban management in all areas of the globe.

At the same time, the noun 'city' is as misleading as the noun 'animal'. The animal world is remarkably diverse, with lions and tigers, monkeys and mice, elephants and giraffes

As the Chair of the Lee Kuan Yew World City Prize Nominating Committee since its inauguration until the 2018 Prize cycle, Professor Kishore Mahbubani has led and moderated multiple deep conversations, heated debates, and even strong opposing opinions during the Prize evaluations. In this essays, he shows his appreciation for the rigour and wisdom of the Committee in their deliberation and selection of the eventual Prize winners.

qualifying as 'animals'. Similarly, in the city world, we have megacities like New Delhi and New York City, mini cities like Bilbao and Malmö, affluent cities like Vienna and Copenhagen, developing cities like Ahmedabad and Medellín. The significant point about this list of examples is that each of these cities either won or was shortlisted for the Prize, showing the open mindedness of the members of the Nominating Committee in looking for best practices in urban management. Indeed, this Committee visited every continent of the globe in searching for winners of the Prize.

## A LABOUR OF LOVE

The selflessness and dedication of the Prize Nominating Committee members was truly remarkable. This was a labour of love for them. None were paid. Yet, many members would travel long distances to attend selection meetings in Singapore. And they would travel even longer distances to visit cities that were shortlisted. With their enormous experience and understanding in this field, they asked probing and penetrating questions. And when the final choice

“At the end of the day, this will be the biggest accomplishment and contribution of the Prize: to generate better lives for billions of people.”

—Professor Kishore Mahbubani

had to be made, the Nominating Committee members participated in the discussions with open minds, ready to listen to good reasons why a city should win.

#### WISDOM AND COURAGE

The wisdom of the Nominating Committee members is demonstrated in the final results. The diversity of the winners of the Prize is truly remarkable, ranging from an elegant European city, Bilbao, to a new renaissance city, like Suzhou, from a well-developed city, like New York City, to a newly rejuvenated city, like Seoul. It also took great courage for the Nominating Committee members to select Medellín, a city that was until recently one of the most dangerous cities in the world. The willingness of the members to look at each candidate fairly and objectively provides great hope that the Prize will continue to grow from strength to strength in coming years.

#### A BIG ACCOMPLISHMENT

If Mr Lee Kuan Yew were to come alive today, he would be truly proud to see the list of winners of the Prize named after him. As a fervent believer in the need to study and understand best practices in good governance from all around the world, he would be pleased to see that this is exactly what the Prize Nominating Committee has accomplished.

There is also no doubt that the world’s urban population is going to explode in the coming decades, going from 50 percent of the world’s population to nearly 70 percent by 2050. Billions of urban dwellers would benefit if the best practices of urban management, highlighted and profiled by the Prize, spread to cities all around the world as healthy viruses creating a better world for all of humanity. At the end of the day, this will be the biggest accomplishment and contribution of the Prize: to generate better lives for billions of people.

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PROFESSOR KISHORE MAHBUBANI is a Distinguished Fellow at the Asia Research Institute (ARI), National University of Singapore (NUS). He has been privileged to enjoy two distinct careers, in diplomacy (1971 to 2004) and in academia (2004 to 2019). He is a prolific writer who has spoken in many corners of the world. He was the Chair of the Prize Nominating Committee from 2010–2018.



# Thinking Back, Reaching Forward

by Professor Marilyn Jordan Taylor

Each two-year nominations and evaluation cycle for the Lee Kuan Yew World City Prize unfailingly meets a setting and defines a process that are different than those of any other Prize cycle and of any other prize/award. Cities are in continuous change, responding, thriving, failing as the world changes within and around them. Successful mayors and city leaders are those who have the clarity and courage to interpret realities and externalities, and to implement programmes and initiatives that aspire to create a higher quality of life and work, for the long term, for everyone.

## AN IMPORTANT CRITERION

The most important criterion of the many we use to compare candidate cities may well be 'sustainability and durability of the urban transformation'. It strikes me as the overarching quality that cannot be achieved without bringing together policies, programmes and urban initiatives that build community, vitality, resilience, and greater equity.

A long-time member of the Lee Kuan Yew World City Prize Nominating Committee, Professor Marilyn Jordan Taylor often brings inquisitive and balanced views to the table. On evaluation trips, she displays genuine curiosity and deep interest to the various urban initiatives – big and small – that the candidate cities were showing. She reflects on the various aspects of being on the Committee for the past decade, and what made the most impression on her.

## A SIGNIFICANT CHALLENGE

One of the most difficult challenges we faced over the past decade was, and still is, how to create equal footing for highly developed cities and those still in emerging stages. This was – and continues to be – a matter of considerable discussion. It seems to me that the broad array of Prize Laureate cities of different cultures, geographies, and strengths may, over time, speak for itself.

## BEHIND THE SCENES

It is never one accomplishment but rather the integration of many that characterises the Prize-winning city. The Prize Nominating Committee could not do its work without the incredible energy and clear purpose of the Prize Secretary and the extraordinary commitment of the Prize Secretariat.

The outreach to cities, the compilation of the publicity and evaluation materials, and the organisation of our complicated

“The strength of cities rises from multiple sources but is best revealed when strong leaders recognise and catalyse the ingenuity and initiatives of the people whose everyday lives are an act of commitment to a better, shared future.”

—Professor Marilyn Jordan Taylor

travels to shortlisted cities – it is a marathon – lead to improbable conversations and amazing experiences that engender fresh conversations and advance our deliberations.

#### LEARNING FROM EACH OTHER

In the process of our deliberations, each member of the Nominating Committee has an incredible opportunity to learn from the other members. It will not surprise you that we often disagree before we come to agreement. It is an amazing learning experience, a sense of camaraderie that will travel with me always.

#### A CONTINUOUS PROCESS

Going back to each Prize Laureate city three years after the awarding of the Prize to attend the overseas edition of the World Cities Summit Mayors Forum is a powerful experience. Each city continues to change. There may be new mayors, new mayoral teams, fresh challenges, and opportunities to grow new friendships and partnerships. May the Lee Kuan Yew World City Prize and the Mayors Forum become enduring, evolving touchpoints for the sharing of ideas and the mutual accomplishment of essential city goals.

The Lee Kuan Yew World City Prize is unlike all other awards given to acknowledge and celebrate great cities around the globe. None are perfect, yet some come closer to it. The strength of cities rises from multiple sources but is best revealed when strong leaders recognise and catalyse the ingenuity and initiatives of the people whose everyday lives are an act of commitment to a better, shared future.

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PROFESSOR MARILYN JORDAN TAYLOR is Professor of Architecture & Urban Design at the School of Design, University of Pennsylvania (UPenn). She had a distinguished tenure as Dean of the School of Design at UPenn from 2008–2016, following a 35-year career with Skidmore, Owings & Merrill (SOM) as architect and urban designer as well as partner and chairman of the firm, the first woman to hold this position.



# We Must Be Doing Something Right

by Mr Larry Ng Lye Hock

With a strong passion for his work and boundless energy that rubs off on others, Mr Larry Ng Lye Hock is instrumental in turning the idea of an urban planning prize into one of the most prestigious city prizes in the world. Helming as the Prize Secretary since its conception, he holds the Prize dear to his heart, and believes that it has brought cities together, and will continue to do so, for a universal conversation.

“The first ten years helped shape the Prize. I hope that the Prize will help shape cities in the coming ten.”

—Mr Larry Ng Lye Hock

## A HUGE CHALLENGE

In 2008, as Singapore’s land use and conservation authority, we were issued a challenge by the then-Head of Singapore’s Civil Service Mr Peter Ho. This was a challenge that had stumped us initially, one that was deemed so mammoth and impossible at that time, but also one that would change and chart a significant part of my professional career forever. The challenge was to start an international urban planning prize, the second in a planned series of prizes named after Mr Lee Kuan Yew – the late founding Prime Minister of Singapore. Other than the Lee Kuan Yew Water Prize, which was just recently launched at that point in time, we had virtually no other precedence nor an idea of how to run an international prize of such a scale and complexity.

## A PERSONAL HERO

Mr Lee is my personal hero. He was not one known for backing away from mounting challenges in times of difficulties, nor was he one who would settle for anything less than the best for his country and people. Having this once-in-a-lifetime opportunity to be associated with a prize bearing his name was both very exciting and unnerving for me. To turn the challenge down would have been the easier path to take, but to face our fears and rise to the occasion would later prove to be far more rewarding for not only myself, but also all those who were involved in one way or another over the years. One only needs to look to the many personal testimonies presented in this book, to get a sense of how far the Prize has come in just ten years.



## STARTING SMALL

In 2008, our aim to become the most prestigious city prize in the world was all but a lofty pipe dream. Today, we have turned that dream into a reality. After ten years and six cycles, we have garnered participation from over 145 cities in 53 countries from all corners of the world. These cities range from boutique-sized to large megacities, newly established to millennia-old cities, emerging to highly developed cities, relatively unknown to world class cities. These are cities that look towards the Prize, but at the same time, we find ourselves looking towards them. To say that the Prize being referred to today as ‘coveted’, ‘prestigious’, ‘Oscar for city development’ and even ‘Nobel Prize for cities’ was no small feat would be a severe understatement. Let me share our story of how we did it.

Armed with a very small and lean team of only two staff members, and limited experience from co-organising the President’s Design Award launched just two years prior, we began our journey by benchmarking against the very best in class and seeking out the best names in the industry. With less than two years to the inaugural award, we were literally scrambling against time to do a thorough literature search, set up the framework, establish the branding, seek funding and sponsorship, put together a reputable panel of experts, craft the judging criteria, and finally launch the Prize within a year. But the work does not stop there. A Prize is only as good as its nominations. To solicit high quality submissions especially for a Prize that was practically unheard of then, we had to tap on and rapidly expand our networks, sometimes unabashedly, to reach all possible ears and eyes in the shortest amount of time. And yes, we did it.

## DOING SOMETHING RIGHT

Looking back, it is astonishing even to me what we have achieved. Our six Prize Laureates and 21 Special Mentions are the best proof that we must be doing something right. Just the other day, my good friend Mr Ludo Campbell-Reid, former Design Champion and General Manager of the Auckland Design Office at Auckland Council, texted me excitedly about the news of Auckland being named the most liveable city in 2021 by the Economic Intelligence Unit (EIU). This was remarkable considered that this was indeed a vision made real by the 2016 Special Mention city. I am happy for my friend and the city, but I am happier that the Prize has brought cities together, and will continue do so, for a universal conversation to make them better places for the people.

A prime example and story that I never get tired of retelling is the one of 2016 Prize Laureate Medellín. In July 2016, we were gathered at the gala dinner to celebrate Medellín’s win, and on stage to receive the award from Mr Lee Hsien Loong – the Prime Minister of Singapore, were both the then-Mayor Federico Gutiérrez and immediate past Mayor Aníbal Gaviria. This may have not meant much if not for the fact that both are from opposing political parties. On that special night, the two disregarded their rivalries even if temporary, to come together to sing the same song of Medellín’s achievements. While their governing methods and priorities may differ, their end-goals remained the same: that is to sustain the transformation of what was once the world’s most dangerous cities to a more just and freer one today. When we visited Medellín three years later for the World Cities Summit Mayors Forum, it was clear that the preceding good works have been sustained and brought to even greater heights.

## THE NEXT TEN YEARS

2020 was supposed to be a big year for the Prize. It marked the ten years since its inauguration, and a perfect opportunity for us to ring in a big celebration and show our gratitude to all who have made it possible. Instead, it became a long-drawn and quiet affair where we were forced to slow things down, think through the fundamentals, and even revisit the drawing board. In an unprecedented times where urban resilience and social equity become even more urgent issues, the Prize needs to evolve and step up its role to help guide the global cities conversation. The first ten years helped shape the Prize. I hope that the Prize will help shape cities in the coming ten.

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MR LARRY NG LYE HOCK is the Lee Kuan Yew World City Prize Secretary and was the Commissioner General, Singapore Pavilion, Expo 2020 Dubai UAE. He is appointed by the Minister for National Development as the Registrar of the Board of Architects Singapore since 2005, with the mission to enhance competency, integrity and professionalism of the practice of architecture in Singapore.





1

© Damien Woon



2

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**Behind the scenes**

1 Conversing on a rooftop in Medellín

2 Taking a helicopter ride in Vienna

3 Engaging in an intense discussion during an evaluation meeting in Singapore



3

© Chang Jun Biao

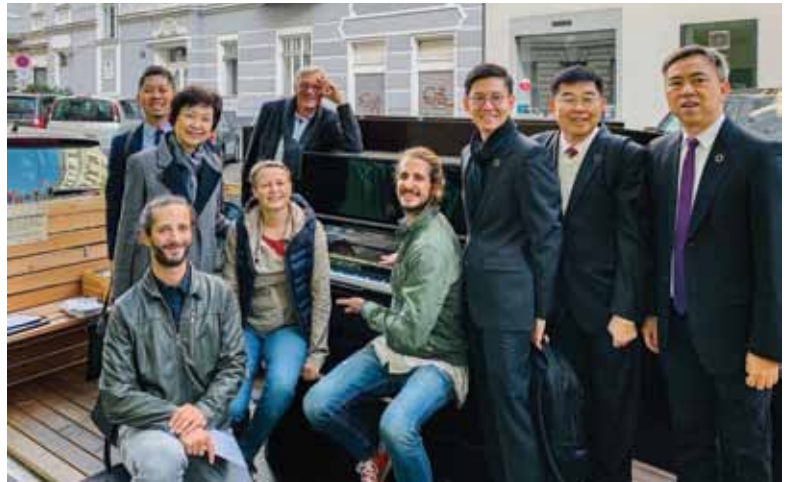
4 Taking a boat ride along the canals in Pingjiang Historic District in Suzhou



© Rachelle Su

4

5 Enjoying an ice-cream at Seoulo 7017 in Seoul



© Chang Jun Biao

6



© Damien Woon

7

5



© Damien Woon



© Damien Woon

8

8 Listening attentively in Lisbon

7 Discussing around a table at a Toronto Public Library

6 Playing a street piano in Vienna's temporal park

# Prize Council 2010–2020

2010  
2012



**Mr S. Dhanabalan**  
 • Chairman, Mandai Wildlife Group  
 • Chairman, Temasek Holdings (1996 – 2013)



**Dr Pierre Laconte**  
 • President, ISOCARP (2006 – 2009)



**Mr Fumihiko Maki**  
 • Principal, Maki & Associates



**Mr J Y Pillay**  
 • Rector, College of Alice and Peter Tan, National University of Singapore  
 • Chairman, Council of Presidential Advisers Singapore (2005 – 2019)



**Mr John So**  
 • Chairman, Global Business Council  
 • Lord Mayor, City of Melbourne (2001–2008)



**Mr Achim Steiner**  
 • Administrator, United Nations Development Programme  
 • Executive Director, United Nations Environment Programme (2006–2016)

2014  
2016  
2018



**Mr J Y Pillay**  
 • Rector, College of Alice and Peter Tan, National University of Singapore  
 • Chairman, Council of Presidential Advisers Singapore (2005 – 2019)



**Mr Flemming Borreskov**  
 • Founder and President, Catalytic Society  
 • CEO, Realdania (2000 – 2013)



**Ms Helen Clark**  
 • Patron, Helen Clark Foundation  
 • Administrator, United Nations Development Programme (2009 – 2017)



**Mr Peter Ho**  
 • Chairman, Urban Redevelopment Authority Singapore



**Dr Qiu Baoxing**  
 • Counsellor, State Council, People's Republic of China



**Mr Ilmar Reepalu**  
 • Vice President, Swedish Association of Local Authorities and Regions  
 • Mayor, Malmö (1995 – 2013)

2020



**Mr Peter Ho**  
 • Chairman, Urban Redevelopment Authority Singapore



**Mr Flemming Borreskov**  
 • Founder and President, Catalytic Society  
 • CEO, Realdania (2000 – 2013)



**Ambassador Chan Heng Chee**  
 • Professor (Former Chair), Lee Kuan Yew Centre for Innovative Cities  
 • Ambassador-at-Large, Ministry of Foreign Affairs Singapore



**Ms Helen Clark**  
 • Patron, Helen Clark Foundation  
 • Administrator, United Nations Development Programme (2009 – 2017)



**Late Park Won-soon (1955 – 2020)**  
 • Mayor, Seoul (2011 – 2020)



**Mr Ilmar Reepalu**  
 • Vice President, Swedish Association of Local Authorities and Regions  
 • Mayor, Malmö (1995 – 2013)



Chair of panel



Member

## Evaluations

### TWO-TIER EVALUATION PROCESS

The submissions for each cycle of the Lee Kuan Yew World City Prize are evaluated through a rigorous two-tier process comprising the Nominating Committee and Prize Council.

Both panels are made up of prominent practitioners, policy makers, academics and experts from a wide range of disciplines in the public and private sectors.

### NOMINATING COMMITTEE

The Nominating Committee reviews and examines submissions, and recommends potential Laureates to the Prize Council.

### PRIZE COUNCIL

The Prize Council reviews and selects the Prize Laureate based on the recommendations by the Nominating Committee.

# Nominating Committee 2010–2020

2010



**Prof Kishore Mahbubani**  
 • Distinguished Fellow, Asian Research Institute  
 • Dean, Lee Kuan Yew School of Public Policy, National University of Singapore (2004 – 2017)



**Prof Alan A. Altshuler**  
 • Ruth and Frank Stanton Professor in Urban Policy and Planning, Emeritus, Harvard Graduate School of Design



**Dr Cheong Koon Hean**  
 • Chair, Centre for Liveable Cities  
 • Chair, Lee Kuan Yew Centre for Innovative Cities



**Late Sir Peter Hall (1932 – 2014)**  
 • Bartlett Professor of Planning and Regeneration, The Bartlett, University College London (1992 – 2014)



**Dr Liu Thai Ker**  
 • Founder, Morrow Architects and Planners  
 • Director, RSP Architects Planners and Engineers (1992 – 2017)



**Dr Alfonso Vegara**  
 • Founder and Honorary President, Fundación Metropoli

2012



**Prof Kishore Mahbubani**  
 • Distinguished Fellow, Asian Research Institute  
 • Dean, Lee Kuan Yew School of Public Policy, National University of Singapore (2004 – 2017)



**Dr Cheong Koon Hean**  
 • Chair, Centre for Liveable Cities  
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**Prof Marilyn Jordan Taylor**  
 • Professor, Former Dean, School of Design, University of Pennsylvania



**Dr Alfonso Vegara**  
 • Founder and Honorary President, Fundación Metropoli

2014  
2016



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**Dr Cheong Koon Hean**  
 • Chair, Centre for Liveable Cities  
 • Chair, Lee Kuan Yew Centre for Innovative Cities



**Prof Wulf Daseking**  
 • Professor, City Sociology, University of Freiburg



**Dr Liu Thai Ker**  
 • Founder, Morrow Architects and Planners  
 • Director, RSP Architects Planners and Engineers (1992 – 2017)



**Prof Marilyn Jordan Taylor**  
 • Professor, Former Dean, School of Design, University of Pennsylvania



**Dr Alfonso Vegara**  
 • Founder and Honorary President, Fundación Metropoli

2018



**Prof Kishore Mahbubani**  
 • Distinguished Fellow, Asian Research Institute  
 • Dean, Lee Kuan Yew School of Public Policy, National University of Singapore (2004 – 2017)



**Dr Cheong Koon Hean**  
 • Chair, Centre for Liveable Cities  
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**Prof Wulf Daseking**  
 • Professor, City Sociology, University of Freiburg



**Dr Chris Luebke**  
 • Advisor to the President and Board, Strategic Foresight Hub, ETH Zürich  
 • Director, Global Foresight, ARUP (2013 – 2020)



**Prof Marilyn Jordan Taylor**  
 • Professor, Former Dean, School of Design, University of Pennsylvania



**Mr Wong Mun Summ**  
 • Founding Director, WOHA Architects

2020



**Dr Cheong Koon Hean**  
 • Chair, Centre for Liveable Cities  
 • Chair, Lee Kuan Yew Centre for Innovative Cities



**Prof Wulf Daseking**  
 • Professor, City Sociology, University of Freiburg



**Mr Lim Eng Hwee**  
 • CEO, Urban Redevelopment Authority Singapore



**Dr Chris Luebke**  
 • Advisor to the President and Board, Strategic Foresight Hub, ETH Zürich  
 • Director, Global Foresight, ARUP (2013 – 2020)



**Prof Marilyn Jordan Taylor**  
 • Professor, Former Dean, School of Design, University of Pennsylvania



**Mr Wong Mun Summ**  
 • Founding Director, WOHA Architects

# About the Prize

The Lee Kuan Yew World City Prize is a biennial international award that honours outstanding achievements and contributions to the creation of liveable, vibrant and sustainable urban communities around the world. The Prize is awarded to cities and recognises their key leaders and organisations for displaying foresight, good governance, and innovation in tackling the many urban challenges faced, to bring about social, economic and environmental benefits in a holistic way to their communities.

To facilitate the sharing of best practices in urban solutions that are easily replicable across cities, the Prize will place an emphasis on practical and cost-effective solutions and ideas, for the benefit of cities around the world. Through this Prize, Singapore hopes to promote exemplary thought-leadership and exchange of ideas among cities, so as to spur further innovation in the area of sustainable urban development.

The Prize Laureate will be presented with an award certificate, a gold medallion and a cash prize of 300,000 SGD (approximately 200,000 USD), sponsored by Keppel Corporation.

## A FITTING TRIBUTE

The Prize is named after Singapore's first Prime Minister. Mr Lee Kuan Yew was instrumental in developing Singapore into a distinctive, clean, and green garden city in a short span of a few decades. Under his leadership, the adoption of strategic land use, transport and environmental policies and programmes have helped Singapore to develop into a liveable city with a high-quality living environment, in tandem with rapid economic growth.

The Prize is co-organised by the Urban Redevelopment Authority of Singapore (URA) and the Centre for Liveable Cities (CLC) and is presented at the biennial World Cities Summit in Singapore.

## DIRECTORY

### Prize Secretary

Mr Larry Ng Lye Hock

### Prize Secretariat

Location	45 Maxwell Road The URA Centre, Tower 13-01, Singapore 069118
Telephone	(+65) 6321 6532
Email	leekuan_yew_worldcityprize@ura.gov.sg
Website	www.leekuan_yew_worldcityprize.gov.sg
Newsletter	go.gov.sg/newsletter
Resources	go.gov.sg/cities
YouTube	go.gov.sg/watch
Instagram	@leekuan_yew_worldcityprize

## PRIZE PARTNERS

- American Planning Association
- The City Planning Institute of Japan
- European Urban Knowledge Network
- Fundación Metrópoli
- International Federation for Housing and Planning
- INTA – International Urban Development Association
- ISOCARP
- Urban Land Institute
- United Nations Environment Programme
- Urban Planning Society of China
- World Green Building Council

Designed by Hanson Ho of Singapore based design studio H55, the Lee Kuan Yew World City Prize's Logo is based on an appropriation of the *ring* symbol, which is commonly used to denote cities on world maps and in atlases.

Complemented by its supporting *map* graphics, the overall identity design communicates the global perspective of the award and creates a new awareness of the real-life possibility of cities benefiting from excellent and innovative urban solutions.



# Acknowledgements

This publication is dedicated to the late Mr Lee Kuan Yew, whose great wisdom and vision has helped to shape modern Singapore.

We would like to express our sincere gratitude to the following organisations and individuals who have at some point lent their great support to the success of the Prize:

- Singapore's political office holders for their endorsement of the Prize, gracing of Prize events at World Cities Summit, and hosting of the Prize's VIPs.
- Keppel Corporation for their generous sponsorship since the Prize's inauguration.
- The Prize Council and Nominating Committee members past and present for their long and thorough deliberations and deep insights into each nomination and city.
- The Ministry of National Development for their kind support.
- The Urban Redevelopment Authority (URA) Singapore Board and Senior Management for their timely endorsement and support.
- The Architecture & Urban Design Excellence team members past and present for their involvements in the Prize, from design of collaterals to evaluations and helping at World Cities Summit.
- The URA Strategic Communications team members past and present for their help to craft key messages for our announcements.
- The Centre for Liveable Cities for the seamless integration of the Prize events at World Cities Summit.
- The Ministry of Foreign Affairs Singapore for their assistance in the Prize publicity efforts.
- The Singapore International Water Week and Lee Kuan Yew Water Prize colleagues for their close coordination and cooperation.
- Dr Cheong Koon Hean, Prof Wulf Daseking, Dr Chris Luebke, Prof Kishore Mahbubani, Dr Alfonso Vegara and Mr Wong Mun Summ for their contribution of essays to this book.
- The six Prize Laureates Bilbao, New York City, Suzhou, Medellín, Seoul and Vienna for being a great source of inspiration for all of us.
- The Special Mentions for their generous sharing of good urban initiatives.
- The 11 Prize partners for their help in amplifying our messages.
- The nominators and key influencers for their forthcoming response to our calls for nominations.
- The 145 nominations from 53 countries for their enthusiastic participation in the Prize since its inauguration.
- The Prize Secretary Mr Larry Ng for his strong leadership and guidance of the Prize since its inauguration.
- The Prize Secretariat team past and present for being the unseen but indispensable force behind the Prize.
- The appointed contractors (including event organisers, writers, medallion fabricators) past and present for their delivery of excellent content and products.
- H55 and AC Dominie for their production of this important book.
- All other individuals whom we have unintentionally left out for their contributions to the Prize in one way or another.