



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

Building an exquisite green city

Region	Asia and the Pacific
Themes	Planning & Design Public Space Regional & Metropolitan Planning Environmental Resilience
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable Goal 13 - Take urgent action to combat climate change and its impacts Goal 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
New Urban Agenda Commitments	Environmentally Sustainable and Resilient Urban Development

Summary

Focused on becoming a world-leading sustainable city, Weihai is pioneering urban greening through the integration of innovative green infrastructure and natural resource conservation.

Background and Objective

From many years, multiple cities in China have been exploring paths towards sustainable urban planning and green development. A key objective of city managers has been to achieve sustainable urban social and economic development alongside the protection of blue sea and sky, green mountains and clear waters offering urban residents a sense of satisfaction and happiness. This aligns with the principle that a city should not only consist of cold, tall reinforced concrete buildings but also greenness and warmth imbuing residents with a sense of identity and belonging. Situated in northern China, Weihai city has, through years of development, become an exquisite city of great warmth. Weihai is located at the eastern end of the Shandong peninsula. With the Yellow Sea to the north, east and south the peninsula covers 5,800 km² spanning 135 km from east to west and 81 km north to south, with a total of 985.9 km of coastline and a population close to 3 million. Multiple factors are involved in the construction of an exquisite city; however, this section will focus on greenness and warmth. During his visit to Weihai in 2018, Chinese President Xi Jinping proposed that Weihai should aim to develop into an exquisite city, advocating for the city's sustainable development. Over the past five years, the exquisite city concept has guided all aspects of Weihai's politics, economy, culture, society and ecological civilization at the institutional design level, as the city has strived to manage the relationships between its construction as an exquisite city, economic development, rural revitalization, ecological environment and maritime development, visibility and other important areas. At the implementation level, Weihai council has stressed the importance of appropriate planning, meticulous design and construction, precision in management and services, and smart growth in order to improve the city's quality and content, creating a model city. In 2020, the council promulgated the 'Regulations on building an exquisite city in Weihai' which were designed to support and promote the construction and development of a city of the highest-quality and improve the quality of life for urban residents. Weihai has valued the creation of distinctive urban characteristics and the appearance of that of an 'exquisite human habitat between magnificent mountains and sea' to cater for its new era. Refining the six elements of its cityscape, mountains, water, sea, city, bay and islands, it has maintained excellent natural spaces, particularly between the mountains and the sea, providing citizens with a green liveable city that they can explore, feel and experience. Since beginning its construction as an exquisite city, Weihai had established itself as the first pilot city of the Beautiful Cities programme, and in 2020 and 2021 was awarded the title of China's Happiest City. As its urban functions have improved, the happiness and satisfaction of local inhabitants have also increased. During its construction, Weihai carried out a series of innovative explorations thereby accumulating a unique 'Weihai experience' of referential significance.

Actions and Implementation

Weihai has developed many innovative practices and accumulated valuable experience across the fields of social, economic, environmental, cultural development and urban governance. Via a strategy of 'urban greening' Weihai council has integrated green infrastructure to create a sense of warmth in the city, increasing not only the attractiveness of the landscape but its sustainability and functionality. The term 'small street garden' or 'pocket park' refers to green spaces created on small or irregularly-shaped independent plots of land. Offering functional space for recreation, these parks are highly accessible to local residents. Scattered around the city, pocket parks not only enhance the urban visual appearance but add interest to the life of Weihai's inhabitants and are thus highly popular features. The parks play an important role in enriching the quality of life with healthy leisure spaces, enhancing the



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urban environment, improving the functionality of urban spaces and promoting urban restoration. Weihai council adopted a garden design concept for pocket parks, envisioning 'blooming flowers in three seasons and bright colours in all four', alongside the concept of creating ecological sponges which enable water seepage, storage, retention, purification, use and discharge. In efforts to harmonize design with local conditions, the council has sought to better integrate pocket parks by promoting a variety of forms, reasonable layouts, useful functionality, ecological beauty, safety and comfort in order to emphasize the characteristics of 'exquisite city, happy Weihai' into its urban landscape. The construction of pocket parks commenced in 2017. In March of that year, the Municipal Bureau of Housing and Urban-Rural Development together with the Municipal Bureau of Finance issued the Opinions on Strengthening the Construction and Management of Urban Small Street Gardens (WZJTZ [2017] No. 21). Subsequently in December, the two bureaus jointly issued the Regulations on Subsidies for Excellent Small Street Garden Construction Projects in Weihai (WCY [2017] No. 98). These two documents require that bodies constructing 'excellent small street gardens' involving large investments, high technical capacity and significant ecological benefit should be subsidized appropriately. The construction and management standards for Weihai's small street gardens includes pocket parks. In 2018 and 2019, the standards for planning and design, engineering construction, plant configuration, service facilities and maintenance management were further refined, and Construction Standards and Scoring Standards for Exquisite Pocket Parks formulated. The 2020 technical guidelines for the construction and management of Weihai's small street gardens offers a guide for the construction of pocket parks in the city. Today, Weihai's 245 pocket parks have greatly reduced the distance between local residents and green spaces. Weihai council has carried out a phased, zone-based comprehensive renovation and restoration of its shoreline in recent years, and has completed the expropriation and relocation of coastal aquaculture ponds, the ecological restoration of shorelines, and the construction and improvement of coastal footpaths. A number of key areas have been renovated and restored including the Shuangdao Bay Coastal Zone Renovation and Restoration Project (in which approximately 7.3 km of aquaculture pond cofferdams were demolished and approximately 1.5 km of ecological revetments newly built); the Shuangdao Bay Blue Bay Project (in which approximately 3 km of shoreline has been restored, 100,000 m³ of marine waste cleared and 250,000 m³ of aquaculture ponds demolished); as well as the Rongcheng Chengshan Town Malan Bay Shoreline Renovation and Restoration Project (where 4.4 km of revetments have been newly built, 15 million m³ of earthworks and waste cleared, 76,000 m³ of structures demolished, 36,000 m² of beach restored and 119,000 m² of vegetation restored). In addition, the Rushan Langnuankou-Heshangdong coastal zone Protection and Restoration Project has restored 3 km of sandy shore and 1.4 km of reef shore, and constructed 158 m of ecological seawall, whilst a total of 14 km of coastline along the eastern section of the Binhai New City was comprehensively renovated and restored achieving the goal of marine ecological civilization construction: 'clear water, green shores, clean beaches and beautiful bays'. In the western urban district from Yuehai Park to Haibu Road, a 20 km stretch of coastal footpath has been constructed offering the public a continuous, green space that serves as a shared leisure venue whilst promoting ecological health. Following the reconnection of aquaculture ponds to the sea, the council has also worked to reconnect local citizens and urban life to the sea, actively improving public service facilities in coastal green spaces, constructing footpaths along the shoreline, and creating coastal walking experience zones and routes with natural scenery designed to allow citizens the experience of 'facing the sea, feeling spring come and flowers blossom'. Details attest to the degree of effort that the council has exerted in its incorporation of these design concepts into every corner, project and action during implementation. Huancui district's Haiyuan Park renovation project, the Oil Painting Town Fashion Sports Park renovation project, the Huanhai road sea viewing platform and the Banyue Bay landscape improvement project have all been completed in the last two years. A number of footpath renovation and improvement projects have also been completed including those in Shuangdao Bay, Gaoqu District (2.7 km of footpath); Rongcheng City's Jinshiwan Art Park and Hutoujiao (0.51 km of footpath); Xiaowudui rental vehicle (RV) Camp (1.6 km of footpath/greenway); Chunfeng Coast to Wanguocheng South Line (1.2 km of greenway); Rongchengwan (9.91 km of footpath); and Rongli Road (5.59 km of footpath) totalling 18.81 km of new footpaths and greenways. In addition, 2.05 km of footpaths along Chaoyanggang bridge, the coastal park and the seaport have been developed using a permeable concrete construction, as well as the foundations of a 1.5 km greenway from Shuangbangzi to Hekou Wharf. In the Xiaowudui RV Camp area, facilities such as the Diamond Wedding Square, beach tents, an infinity swimming pool, 32 RV yards and 4,500 m² of ecological parking lots have been integrated.

Conclusion

Legal system developments and improvements played a key role in Weihai's transformation. Since obtaining local legislative power in 2015, Weihai council has formulated nine sets of local laws and regulations including four related to urban and ecological civilization construction predominantly involving cityscape protection, water source and coastal zone protection, and hazardous waste management. In 2018, the council initiated the formulation of China's first regulations for an exquisite city – Regulations on Construction of an Exquisite City in Weihai. The Regulations came into force in November 2020 and set out general rules for urban construction from the perspective of urban planning and design, construction management and service guarantees, providing a legal basis for urban examination and an evaluation system, guiding the development of the city's vision. The development of an outline indicator index system also served as a key mechanism in driving Weihai's green development. In 2019, the city issued a three-year action plan for exquisite city construction, laying out a roadmap in the form of 385 exquisite city construction projects and 68 annual key demonstration projects. Refinements made to the standard system and pilot planning also aided design in Weihai. The Weihai Exquisite City Evaluation Index System sets out 50 indexes covering 5 themes (the ecological environment, urban characteristics, public services, development momentum and social governance) along with target values for 2025 and 2035. The document provides a quantified answer to the question, 'What makes an exquisite city?', rendering every work programme quantifiable and implementable. A series of technical guidelines have been compiled for each stage of urban planning and construction management including comprehensive road renovation, greenway construction, construction and management of small street gardens, and landscaping maintenance. Stricter and more detailed than the national norms, these guidelines are ensuring refined, meticulous execution at all stages in the entire urban construction and management process. Preparation of the city's first 'physical examination' report which includes 85 indexes covering 8 themes



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(ecological livability, health and comfort, safety and resilience, transportation convenience, cityscape features, neatness and orderliness, diversity and tolerance, and vitality of innovation) was entrusted to a professional third-party team. The underlying problems detected have not only become the priorities of the Housing and Urban-Rural Development Department but were also reported to the Natural Resources, Planning and other departments in order to guide improvements in the relevant top-level design. In the construction of an exquisite city, Weihai council has attached great importance to the improvement of both content and quality, advocating intensive land use and creating a more compact, efficient and sustainable urban model, increasing the dynamism, liveability and recognition of the city. Based on the blueprint 'mountains in the city, city in the ocean', the council has aimed to construct Weihai as a 'big scenic area' without boundaries. First, it promoted full urban design coverage, and as early as 2017 the city began to explore state-of-the-art urban design methods, transforming two-dimensional urban design data provided by the central city's 16 management areas and 63 management units into three-dimensional models, achieving an integrated compilation of urban planning. Designing each area and building from the perspective of an artist, the city has carefully created elements such as themed streets, landscaping, landscape lighting, street interfaces and urban sculptures, and initiated construction of the Seaport Park, Jinxianding Park and coastal footpaths in order to create Weihai's distinctive 'painting style' coastal landscape. Weihai council has continuously carried out comprehensive improvement of the environment along its 'three lines' – the mountains, coast and railway. Altogether, 141 km of coastal ecological footpaths have been completed incorporating events, consumption and other functions while maximizing the protection of beaches, reefs, pine forests and other ecological components, ensuring they are kept in a natural state with minimal traces of artificiality. A 22.6 km greening project along the mountain view line has been completed using diversified varieties, colours and layers of plants matching and coordinating with trees, shrubs, flowers and lawns to ensure a natural appearance. In addition, reflecting the council's adherence to green, low-carbon development, sponge city construction requirements were incorporated into project construction stages including construction drawing design and review in projects including old residential area renovations and pocket parks construction. Over 25 per cent of urban built-up areas have achieved relevant planning and design values, fulfilling the goal of 'no ponding in light rain, no waterlogging in heavy rain'. The city integrated green, low-carbon concepts in the development of its construction industry developing safe, energy-efficient, green and prefabricated buildings, and promoted the application of prefabricated concrete and other environmentally friendly materials as well as green building standards in all new buildings in the city planning area. This resulted in Weihai's inclusion in the first batch of green city demonstration projects of China's Ministry of Housing and Urban-Rural Development, and recognition as a model green city. Weihai was the first national-level Sanitary City, and a recipient of honorary awards such as the UN-Habitat Scroll of Honour Award and the China Environmental Protection Award. In addition, it was approved as the only pilot 'Waste-Free City' and 'Beautiful City' in the Shandong province. Over the years, Weihai council has prioritized ecology in regard to its economic and social development, cherishing the city's 'blue and green' backdrop. The council has long adhered to a system of 'four maximums': the strictest environmental supervision; most active ecological construction and intensive resource utilization; and the most stringent responsibility assessment. With dozens of berths in excess of 10,000 tons and many deep-water ports, Weihai is well-suited to petrochemical, cement and other port-vicinity industries, and has thus attracted many investors; however, none were accepted. In addition to implementing a strict access policy to maintain environmental integrity, Weihai council has been earnestly advancing mountain restoration, river management, river and reservoir greening and other environmental action plans, with ecological civilization construction expenditure accounting for 17.3 per cent of its general public budget expenditure in recent years. The city's environmental air quality has reached national level II standards for five consecutive years, and 100 per cent of its primary drinking water sources and water located in environmental functional zones in immediate offshore areas is compliant with water quality standards. The council has also promoted the ecologicalization of industry, pioneering new business models including ecology and leisure tourism and ecology and cultural creativity to drive average annual tourist growth numbers of 9.3 per cent and total tourism revenue of 12.2 per cent. In order to further the modernization of Weihai's urban governance capacity and provide citizens with more considerate and satisfactory public services, the city has implemented an innovative mode of social governance incorporating aspects such as grid management, community autonomy, and credit-based measures, ensuring the application of modern ideas and scientific methods to enhance the quality of urban governance. Subject to rapidly increasing digitalization, Weihai council has developed the integration of various e-government platforms, construct efficient, convenient and satisfactory service platforms, collect public opinions from multiple channels, create internal linkages between government organizations and handle feedback from individual departments.