

This year, the Qingdao government has upheld the development concept centered on people and made continuous efforts in the environment, education, healthcare, sports and culture, enhancing service quality and efficiency.

Qingdao's sights set on ecological vitalization

Carbon reduction, environmental protection drive city's efforts to realize its green transformation

By WANG JINHUI

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To help build an ecological civilization, Qingdao, a coastal city in East China's Shandong province, is ramping up its efforts to realize green development by transforming its industry and energy structure, reducing its carbon emissions, and strengthening its environmental protection.

With more than 2,300 green enterprises, the city ranks at the provincial forefront in terms of quantity and revenue scale. It has also established 54 large green factories and 11 green supply chain management enterprises.

Qingdao is in the process of upgrading its energy structure, and bolstering clean and efficient utilization of coal. This year, the city's total installed capacity of new energy power generation exceeded coal-fired power for the first time, reaching 5.38 million kilowatts.

A comprehensive low-carbon transportation system is also under construction. About 97 percent of Qingdao's operational buses now use new energy and clean energy, and its sea-rail intermodal volume ranks first among coastal ports nationwide for the ninth consecutive year.

Since the 14th Five-Year Plan (2021-25), the city's coal consumption has dropped below 30 percent. Qingdao has already achieved the target for the 14th Five-Year Plan on reducing chemical oxygen demand, ammonia nitrogen and volatile organic compounds, while boosting resource-saving production that prioritizes environmental protection.



The seaside scene of Qingdao in East China. PROVIDED TO CHINA DAILY

In the industrial sector, Qingdao serves as a key city for construction of a national waste material recycling system, and in agriculture, it is steadily improving green production levels, with a straw utilization rate of 96 percent and a stable livestock manure utilization rate of over 90 percent.

Meanwhile, the city is integrating urban-rural sanitation, building 904 routes for the collection and classification of household waste and achieving a 100 percent harmless treatment rate, while in the construction sector, the rate of



Migratory birds at a wetland in Chengyang district, Qingdao.

WANG HAIBIN / FOR CHINA DAILY

resource utilization of construction waste has exceeded 71 percent. The city houses 143 million square meters of green buildings.

Ecological protection

Qingdao has delineated 1,705 square kilometers of ecological protection redlines and has set up 140 environmental automatic air monitoring stations covering towns, streets and functional areas, as well as 66 surface water monitoring sections on key river basins, important water resources and large industrial parks.

Meanwhile, in conjunction with improving the entire governance system and completing rectification of 772 river outfalls and 6,174 marine outfalls, the city is eliminating or controlling pollution sources such as coal burning, industry, motor vehicles and ships by completing 450,000 rural clean heating transformations and adding 20.75 million sq m of urban centralized heating areas.

Qingdao's efforts to control spring dust and combat ozone pollution in the summer and autumn include intensified dust control measures at construction sites, rectifying 1,120 bare land plots and completing over 6,000 governance projects. The city is also carrying out land greening, completing afforestation on 1,794 hectares of barren mountains and burnt areas, and improving the quality and efficiency of 10,672 hectares of forests.

Over the past three years, 341 hectares of historical abandoned mines have been rectified. Three Qingdao mines are now included in the national green mine list, and the Jiuding Manor project in Laixi city was named one of China's top 10 typical cases of social capital participation in ecological restoration.

The city is also enhancing biodiversity protection, achieving a global record for the most sightings of the Chinese crested tern, aka "the mythical bird".

While advancing construction of a park city, Qingdao continues to increase greenery, constructing 289 kilometers of urban greenways, 191 pocket parks and a total of 286 provincial-level and 700 city-level beautiful rural demonstration villages.

Taking aim at citizens' health and happiness

By WANG JINHUI

In an ongoing effort to improve the health of its citizenry, Qingdao is focusing on resolving pressing medical issues and enhancing residents' sense of happiness and security.

By the end of 2023, Qingdao had a total of 8,980 medical and health institutions at all levels, with 69,611 beds, 124,019 personnel, outpatient services for 102 million visits per year, inpatient services for 2.05 million visits, and an average life expectancy of 81.78 years for residents.

The city is currently carrying out national pilot projects for the reform and high-quality development of public hospitals, as well as the inheritance of traditional Chinese medicine. It is home to 23 national key specialties, seven national work studies, three national key TCM laboratories and 118 provincial key specialties, and has established four Shandong TCM specialty clusters in pulmonary diseases, rehabilitation, cardiovascular diseases and preventive medicine.

In terms of talent cultivation, Qingdao has 52,600 medical personnel with bachelor's degrees or higher, 13,300 individuals with senior professional titles or above, 44 national high-level talents such as members of the Chinese Academy of Engineering, 82 provincial high-level talents including members of the



A traditional Chinese medicine doctor takes the pulse of a local resident in Licang district, Qingdao.

ZHANG YING / FOR CHINA DAILY

Taishan Scholar Plan, and 334 outstanding talents at the city level.

The city is optimizing its medical treatment process, introducing services such as expert team appointments, volunteer companionship, nighttime outpatient services, and on-site and bedside settlements in tertiary public comprehensive hospitals. Moreover, second-tier and above public hospitals provide patients with "one-stop" services such as handling admission and discharge procedures, centralized appointments for examinations, inspections, and health education.

At least one attending physician with a senior professional title is on duty at grassroots medical and health institutions for at least three days a week, providing services such as "diagnosis and treatment first, settlement later" and long-term prescriptions for chronic diseases.

Additionally, Qingdao is committed to transforming medical services empowered by big data and advanced technologies. It has established a smart medical care system in which 583 medical institutions have achieved mutual recognition of 207 examination and inspection

items, saving patients more than 48 million yuan (\$6.61 million) in medical expenses from January to September this year.

A shining example of the system's efficiency is Qingdao's creation of an electronic medical map with 4.5 billion pieces of data, providing 150 intelligent services covering the entire medical process. By building a 5G emergency platform, the average dispatch time in the city's Shinan, Shibei, Licang, and Laoshan districts has been shortened by 12 seconds, and the average emergency response time has been cut by two minutes.

Qingdao is also constructing closely-knit medical groups in districts and county-level areas, allowing more patients to access high-quality medical services. For example, Shinan and the Affiliated Hospital of Qingdao University have formed a medical group, offering services such as direct appointment with renowned experts. Residents can now book appointments, obtain examination orders and settle payments directly in the community.

Furthermore, Laixi city has built a medical group to introduce 82 resident experts and 43 specially appointed experts from Qingdao Municipal Hospital (Group), providing medical services for residents.

Placing a premium on improved education

By SONG MENGXING

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Qingdao has prioritized improving the basic education of its residents in recent years, including introducing a series of measures to enhance support for constructing a higher-quality learning system.

In recognizing that achieving educational equity is tied to improving basic resources, Qingdao has significantly increased its number of school spaces and optimized the layout of campuses, providing residents with more diversified educational resources. Since 2022, about 197,300 new learning spaces have been added, and the city continues to improve teaching staff to put the concept of "educational equity" into practice.

Qingdao has recruited outstanding professionals for its teaching staff and implemented a five-tier training program involving new teachers, excellent young teachers, backbone teachers, renowned principals and educational experts. Over the past three years, the number of high-quality teachers in the city increased significantly, providing strong support for the improvement of basic education.

Education groups constitute a burgeoning educational management mechanism, and Qingdao has established 235 such groups involving 900 schools. Their goal is to accelerate the sharing of optimal resources to allow more students to access high-quality services. Promotion of the education group mechanism is considered an advanced innovation in terms of resource management.

Qingdao's basic education also

focuses on students' comprehensive development beyond studies. A city action plan provides students with diverse paths for growth in literacy, athleticism and artistic cultivation, while laying a more solid foundation for personal development.

In the morning and afternoon, when the bell rings for extended break time, the playground of Middle School of Shibei affiliated with Qingdao University comes alive with students running, rope skipping and taking part in other sports, accompanied by lively music. Since October, Shibei district has been promoting a "2+2+N" sports work model in all primary, junior and senior middle schools. The model is comprised of compulsory physical education classes and two activities — rope skipping and parkour (obstacle course) — along with optional sports.

Li Xin, principal of the Middle School of Shibei, said the breaks in the morning and afternoon were extended to 30 minutes each, with the aim of improving students' fitness levels.

In another breakthrough, according to Tang Chao, director of Qingdao's Laoshan education and sports bureau, the district has focused on new quality productive forces in pioneering "education digitization".

Laoshan district has issued a three-year action plan (2023-25) for the digital transformation of education, upgrading smart educational facilities in 41 schools and providing more than 30,000 students in grades 3-9 with free smart learning devices.

Fitness and cultural health take center stage

By SONG MENGXING

At a sports square in Qingdao's Shibei district, residents perform fitness routines, while in the amusement area, children laugh and play games. The newly opened square is one of the district's key projects for 2024, and with a focus on greenery and sports, it seamlessly integrates with ecology, catering to all age groups.

Qingdao has built several such sports parks and updated 373 fitness facilities this year. Currently, the city has more than 11,000 public fitness facilities, and the per capita sports space has increased to 3.7 square meters.

Moreover, through an upgraded smart sports platform, residents can locate 11,058 fitness venues, 3,012 gymnasiums and 90,737 pieces of fitness equipment. The platform also offers functions such as event announcements, gymnasium reservations and venue navigation.

Qingdao has also launched a series



Residents from Gaojia community perform at a dance competition held in Chengyang district, Qingdao.

WANG HAIBIN / FOR CHINA DAILY

of activities under the theme of "national fitness enters the community", allowing residents to enjoy athletic activities on their doorstep. To address the lack of sports availability in its outlying environs, the city included rural sports activities as a

municipal project this year and has held 108 rural sports activities.

Qingdao has also enriched public cultural services. It has successively initiated several projects involving the expansion of Qingdao Museum and a new site for Qingdao Library,

and guided different districts to optimize existing grassroots public cultural venues. In addition, the city has hosted exhibitions and performances to enrich cultural activities, including a rural dance competition, a rural singing contest and an exhibition of fine art and photography works.

Catering to the diverse needs of different groups, Qingdao has introduced a "park plus cultural activity" brand, hosting events that integrate art forms beloved by the public, such as music, dance, drama and *quyi* — Chinese folk art forms featuring storytelling and singing.

Focusing on the growing social needs of young people, the city has organized public cultural training programs at night, offering courses in fields such as tea art, flower arrangement and drumming. To date, more than 3,300 sessions have been held and "night school" has become a new trend in the lives of young residents.



Students interact with a robotic dog at an activity held in a primary school in Shibei district, Qingdao.

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