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G60 Sci-Tech Corridor fires Songjiang's global aspirations

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The G60 Sci-Tech Corridor is celebrating its eighth anniversary, a critical milestone in Songjiang's ambition to become a global innovation hub. The corridor, a thriving research and development hub, has boosted the local economy and established a standard for high-tech advancements.

R&D Platforms

The G60 corridor has achieved remarkable growth in research and development funding, with an investment intensity of 6.79 percent, placing it among the top in Shanghai. It has received 139 science and technology awards at the city level and higher. Innovations include the world's most advanced 450mm semiconductor crystal growth systems, ALD photovoltaic mother machines and the first-ever somatic cell cloned monkey model for studying biological rhythm disorders.

Key R&D platforms have clustered here in recent years, including the G60 neuro-intelligence and low-carbon technology innovation hubs.

The Shanghai Low-Carbon Tech Innovation Hub, led by Professor Sun Yuhan from the Chinese Academy of Sciences, comprises 24 experts from renowned universities and institutes worldwide. This hub focuses on carbon peak and neutrality goals, pushing for efficient and circular carbon utilization and advancing storage and hydrogen energy technologies.

Technological breakthroughs such as formylation in hydrogen, zinc-air energy storage and inorganic materials are transitioning from labs to market, fostering three multi-million-dollar tech enterprises.

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>
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> Director of the Songjiang District Science and Technology Commission

Additionally, the Shanghai Shaanxi Coal High-Tech Research Institute has established a new R&D center in Songjiang with a significant investment of 2 billion yuan (US$275.86 million). This institute focuses on transforming scientific and technological achievements in fields like fine chemicals, new materials, new energy, intelligent equipment and life health in collaboration with top universities like Fudan, Tongji and Shanghai Jiao Tong University.

"Songjiang has significantly enhanced the introduction and cultivation of major R&D platforms since initiating the national strategy for the G60 Sci-Tech Corridor in 2016," stated Xiao Yang, the director of the Songjiang District Science and Technology Commission. Including tech centers and university labs, Songjiang has nurtured 492 research institutions, enriching its public research platform offerings.

Strategic Emerging Industries

The corridor vigorously advances industries such as integrated circuits, biomedicine, artificial intelligence, new materials, new energy and intelligent security, striving to build world-class industrial clusters.

Take the integrated circuit industry, for instance. Shanghai Advanced Silicon Technology Co Ltd exemplifies this push. Its production lines have been operating at full capacity, continuously rolling out highly customized 200mm and 300mm silicon wafers.

"Our sales volume increased by more than 20 percent in the first quarter, and we expect orders in the second quarter to rise similarly," the founder and chairman, Chen Meng, said.

More thrilling is that their fully automated, intelligent production line for 300mm silicon wafers is among the most sophisticated globally built in the last two decades. "Nineteen out of the top 20 global integrated circuit manufacturers are now our batch customers," said Chen.

Statistics from the Songjiang District Economic Commission offer an insightful overview of the district's thriving integrated circuit (IC) industry.

Songjiang has become a comprehensive hub for the IC sector, encompassing all critical stages from IC design, wafer fabrication, packaging and testing to materials and equipment manufacturing.

This robust ecosystem has spurred significant industrial growth in the region. Last year alone, Songjiang's IC industry achieved an industrial output value exceeding 20 billion yuan, underscoring its vital role in the broader national strategy to enhance China's tech prowess and economic vitality.

Future Intelligence

Artificial intelligence is a pivotal engine powering new productive forces in Songjiang, with applications like smart robots rapidly emerging. Renowned domestic and international robotics companies converge in the district, significantly boosting its technological landscape.

Songjiang is currently home to seven major data center projects, including the Tencent Yangtze River Delta AI Advanced Computing Center, the Instruments and Electronics Shanghai Associates (INESA) Smart Computing Center (Songjiang) and the Beidou Space-Time (Shanghai) Big Data Integration Application Industrial Base. These facilities highlight the district's commitment to advancing cutting-edge computing and data processing capabilities.

The Tencent Yangtze River Delta AI Advanced Computing Center, known as China's largest GPU intelligence computing center, has already begun operations. With an investment of 45 billion yuan and plans to construct 24,000 racks on 15.7 hectares, this project is poised to become a leading global hub for concentrated, efficient AI computing.

Moreover, Beidou Boyang and Huawei have recently signed an agreement to jointly develop the Beidou Boyang·Huawei Space Information Shanghai Computing Center. This initiative will focus on synergistic innovation across domains such as AI computing platforms and the spatial information industry.

Academically, Songjiang is also fostering AI research and development through its educational institutions. Donghua University has established an AI Research Institute and Shanghai University of Engineering Science has set up the G60 Sci-Tech Corridor Robotics Industry Technology Research Institute.

In collaboration with local universities, Tongji University established the Songjiang Robotics Research Center, demonstrating the district's dedication to fostering cutting-edge technological development and educating the next generation of AI and robotics experts. This strategic focus not only enhances Songjiang's industrial capabilities but also positions it as a central player in the global AI industry.

A magnet for talents

Designer Ye Longkai proudly stands beside two automotive power battery module lines in the busy assembly workshop of a smart equipment company in Xiaokunshan, Songjiang, ready to ship to SAIC Motor Corporation's Zhengzhou (Henan Province) base.

Ye, from Guangxi Zhuang Autonomous Region, graduated last year from Shanghai University of Engineering Science with a mechanical and automotive engineering degree. Despite being new to the job, he has rapidly advanced under the mentorship of experienced colleagues. His design innovations, including an automated laser cleaning device for battery pole columns and a pre-welding CCD positioning device, have garnered interest from leading automotive manufacturers.

Reflecting on his decision to stay in Songjiang after graduation, Ye said, "Having spent four years in university here, I have developed a deep affection for Songjiang. The region offers excellent talent policies and substantial growth opportunities, which is why I chose to remain here."

He recently passed the preliminary review for a talent housing subsidy, which will soon provide him with about 900 yuan per month to alleviate housing costs.

Ye's story is far from unique. Songjiang has rolled out an ambitious suite of ten supporting policies aimed at attracting talent, covering areas such as youth entrepreneurship, technology transfer, skill training, salary support and affordable housing.

These measures are part of a comprehensive, tiered strategy that revolves around identifying key enterprises and outstanding talents, employing a multi-pronged approach that includes internships, employment rewards, training incentives, talent apartments and housing subsidies to provide full-cycle support for professionals.

By the end of 2023, Songjiang had officially recognized 3,000 key enterprises within the Yangtze River Delta G60 Sci-Tech Corridor for targeted support and tallied a total of 21,880 outstanding talents.

The district has also amassed a portfolio of 20,000 high-quality talent apartments and 40,000 rental housing units aimed at accommodating professionals.

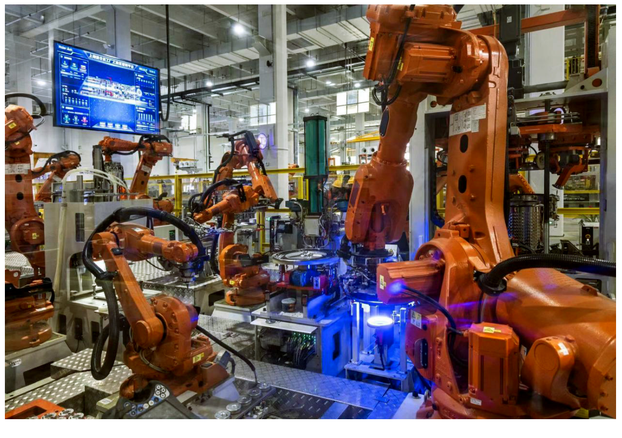
In 2023 alone, more than 25,000 individuals received over 87 million yuan in rental subsidies.

This comprehensive support system not only fosters a thriving professional community but also positions Songjiang as an attractive destination for innovative talents.

An artistic rendition of the Songjiang Hub, which will optimize the district's business environment upon completion.

A night view of the G60 Science and Technology Innovation Corridor

The Songjiang G60 satellite is launched.



Robotics are in operation in a workshop at Haier Casarte, one of China's leading home appliance manufacturers.

An employee of Shanghai Advanced Silicon Technology Co Ltd is testing a silicon wafer.

Engineers at Shanghai Austar Pharmaceutical inspect the instruments in the factory.