

Harbin 2025 Invigorates Global Ice and Snow Economy

Voice of the World

Edited by TANG Zhexiao

The 9th Asian Winter Games in Harbin, northeast China, delivered a spectacular sports gala with the participation of 1,200 athletes from 34 countries and regions across Asia, and invigorated global winter sports.

This is the third time that China hosted the event. This time, 34 National Olympic Committees (NOCs) participated in the Games, exceeding the record of the 2017 edition in Sapporo, Japan, which was attended by 30 NOCs.

The cultural performances at the opening ceremony made full use of advanced technology like virtual and augmented reality, glasses-free 3D technology, and digital AI, creating a visually stunning experience for the audience, Nepali daily *The Kathmandu Post* reported.

From the Beijing 2022 Winter Olympics to the Harbin 2025 Asian Winter Games, the principle of green and eco-friendly sustainability adhered to has attracted global attention. Harbin utilized existing ice event venues, reducing construction costs and ensuring local institutions would benefit from improved sports facilities after the event. For the first time in Asian Winter Games history, 100 percent green electricity was used. This sustainable model sets an example for future host cities.

Known as China's "ice city," Harbin is the birthplace of the country's modern winter sports and hosted the third edition of the Games in 1996 as well. In



Tourists visit the Yabuli Ski Resort in Harbin, northeast China's Heilongjiang province. (PHOTO: XINHUA)

recent years, as China expands its winter economy, which encompasses sports, culture, and equipment, the ice and snow economy is becoming a new driving force for high-quality development of Harbin, and a link connecting it with the world.

Data from the Ministry of Culture and Tourism shows that during the last snow season, Harbin alone welcomed over 87 million visitors, marking a 300 percent year on year increase and generating 124.8 billion RMB (about 17.4 billion USD) in tourism revenue, up 500 percent.

According to a guideline issued by the General Office of the State Council,

the ice and snow economy will be promoted as a new growth point. The goal is to reach 1.2 trillion RMB by 2027, and 1.5 trillion RMB by 2030.

"Behind the burgeoning ice and snow economy is the success of acting on the development philosophy of 'ice and snow are invaluable assets' and speaks to the enormous potential of China's economy," Chinese Foreign Ministry spokesperson Guo Jiakun said.

As winter sports and tourism surge, a batch of measures including optimizing the visa-free policy and opening new international flight routes, have encouraged many foreign tourists to embark on China travel.

"Winter tourism in China has rebounded sharply in a welcome boon, providing a boost to sluggish domestic consumption," said Reuters, adding that the growing popularity of winter sports has also drawn skiers and snowboarders to the slopes of Xinjiang Uygur autonomous region in northwest China.

China's burgeoning ice and snow economy has injected a new impetus into the global tourism market. Alexander Aytertye Odonkor, a global economist and columnist, wrote in an article, "China's emergence as a significant player in the global winter sports market presents a compelling opportunity for the international ice and snow industry."

Chinese Films Acclaimed in World Film Industry

Comment

By GONG Qian

Since the beginning of the Spring Festival holiday this year, China's movie market has shown explosive growth. As of February 9, its total box office earnings reached 15 billion RMB (2.22 billion USD), largely attributed to the films released during the eight-day holiday.

Additionally, some Chinese movies have premiered overseas, including *Ne Zha 2*, *Detective Chinatown 1900*, and

Creation of the Gods II: Demon Force, which has sparked a wave of international critical acclaim.

"The Chinese New Year unleashed one of the most impressive surges in moviegoing we've seen in recent years," Richard Gelfond, CEO of Imax, said in a statement. "This is a shot of adrenaline for moviegoing in China that comes at just the right time," he added.

Among the new films, *Ne Zha 2* undoubtedly stole the show, with strong word-of-mouth reviews at home and abroad. It received a high score of 8.3 out of 10 on IMDB, one of the world's most popular rating and review platforms for

films, even before its U.S. release. By February 11, the blockbuster had grossed more than nine billion RMB (about 1.2 billion USD), becoming China's highest-grossing film ever and the first ever to cross one billion USD in a single market, according to Hollywood publication *Deadline*.

The strong recovery of the Chinese movie market reflects its tech innovation in filmmaking. *Ne Zha 2* is being hailed as a symbol of progress in Chinese film, the BBC said. It received widespread acclaim for its storytelling, character development, and visual effects. Notably, it includes more than 1,900 special effects sequences, reflecting a significant advancement in animation complexity. The production team tripled the character count compared to its prequel, "a feat that is sure to impress," *Snippet Magazine* said.

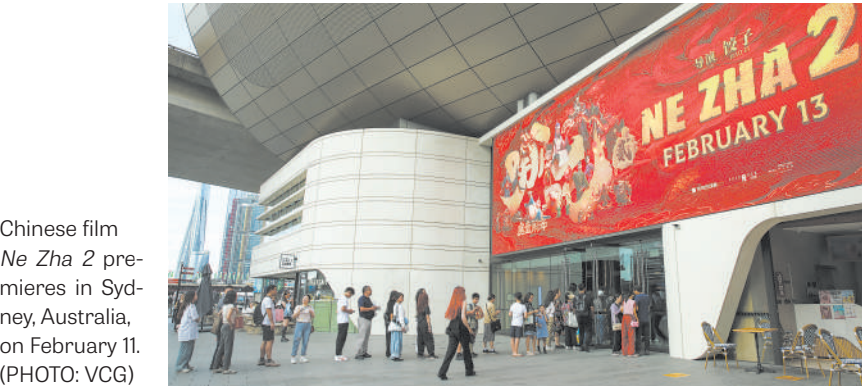
"By harmonizing state-of-the-art visual innovation with timeless human drama, the creators have crafted a work that will undoubtedly influence the next generation of animators," a review on IMDB reads.

The great popularity of Chinese

films in overseas markets also reflects the improvement in China's soft power. *Ne Zha 2* focuses on the theme of anti-heroism, self-discovery and growth, patriotism and responsibility, and mastering our own destiny. According to *Variety*, *Ne Zha 2* "underscores the growing prowess of China's animation industry and its ability to produce content that resonates deeply with both domestic and potentially international audiences."

The success sends a clear message to the global film industry. "China's domestic productions are now capable of competing at the highest level," media and entertainment news platform *Where Is The Buzz* said. With its attention to cultural details, and commitment to entertainment and artistic excellence, *Ne Zha 2* seems poised to set new standards for animated storytelling, *Snippet Magazine* said.

"The 2025 Spring Festival box office performance reinforces China's status as a dominant force in the global film industry," said *Screen Rant*. As China continues to develop its film industry, the global entertainment is poised to see more fine films like *Ne Zha 2*.



Chinese film *Ne Zha 2* premieres in Sydney, Australia, on February 11. (PHOTO: VCG)

Sci-tech Boosts Ice and Snow Economy

From page 1

One innovation involves a short track speed skater practicing under the "eyes" of eight ultra high-definition cameras and image capture devices. A virtual athlete on a computer screen replays the skater's posture and trajectory, and the data is uploaded to a big data platform in real time.

Researchers from the laboratory have also formulated targeted recovery and training sessions based on a series of personal criteria for each skater, which has resulted in improvement of training performances.

Liu said that they have organized and analyzed the data of seven sports and 16 disciplines of winter sports

programs for over ten years. Containing more than one billion pieces of data, the database now covers the basic information, physical capability data and competition videos of over 2,000 athletes at home and abroad.

Conducting learning and analysis of this data, the laboratory managed to provide athletes and coaches with scientific suggestions.

Policy support

In November 2024, the State Council issued guidelines to stimulate the vitality of the ice and snow economy and develop it as a new growth point.

By 2027, the total scale of China's ice and snow economy will reach 1.2

trillion RMB, the venues and facilities for ice and snow sports will be upgraded, service levels greatly enhanced, ice and snow sports more widely practiced, and China's international competitiveness in ice and snow sports further strengthened, according to the guidelines.

Local governments also put forward relevant policies. Two months ago, Jilin province issued a document of implementation suggestions on promoting the high-quality environment for its ice and snow economy.

The document supports the industrial development of ice and snow equipment to meet the need of ice and snow sports competition and tourism.

Enterprises, universities and research institutions are encouraged to jointly work on the R&D of new materials, new technologies and new crafts of ice and snow equipment.

Heilongjiang province also issued a similar implementation plan, aiming to boost the development of its ice and snow industrial chain, including ice and snow sports, culture, equipment and tourism, and accelerate the construction of a modern ice and snow industrial system.

The 9th Asian Winter Games Harbin 2025 in February will further excite the public and help drive further development of the ice and snow economy in China.

Opinion

Record R&D Investment Shows China's Innovation Resolve

By LI Linxu

With record R&D spending, China is innovating at full steam to drive its high-quality development.

The country's total R&D expenditure exceeded 3.6 trillion RMB in 2024, up 8.3 percent year on year, according to preliminary estimates from the National Bureau of Statistics. The amount ranks second highest in the world.

The spending accounted for 2.68 percent of the country's GDP in 2024, an increase of 0.1 percentage point over the previous year.

As a key part of sci-tech input, R&D spending is a significant barometer of a country or region's sci-tech prowess, innovation capacity and competitiveness.

China's continuously increasing R&D investment demonstrates its resolve to pursue a path of innovation to achieve Chinese modernization.

The country's R&D expenditure surpassed one trillion RMB in 2012, two trillion RMB in 2019, and three trillion RMB in 2022.

Such investment is bearing fruit from basic cutting-edge research to significant original innovation in science, technology and applications, making China one of the world's leading producers of high-quality scientific research.

A series of new breakthroughs have been made in fields such as quantum

technology, life science, material science and space science.

Last June, China's Chang'e-6 brought the first samples from the moon's far side to Earth, making history in space exploration endeavors.

Thanks to such efforts, the country has steadily moved up in various global innovation index rankings in recent years. It climbed to the 11th place in the *Global Innovation Index 2024* released by the World Intellectual Property Organization, edging closer to the top 10.

It is particularly noteworthy that China's spending in basic research reached 249.7 billion RMB in 2024, up 10.5 percent year on year. The figure accounted for 6.91 percent of the country's total R&D expenditure, an increase of 0.14 percentage point over the previous year.

Meanwhile, various business entities are playing an increasingly important role in R&D spending.

Taking DeepSeek, a pioneering Chinese AI company, for example: the R&D of its renowned large language models is financed by a hedge fund, showcasing that diversified funding channels are fueling the country's technological breakthroughs.

A nation will thrive when innovation blooms. As China marches towards becoming an innovation powerhouse, more exciting sci-tech breakthroughs are on the way.



A researcher checks lunar samples in a lab. (PHOTO: XINHUA)

On the Road to Making Music

Hi! Tech

By GONG Qian

A major road that plays music has gone viral. As part of national highway G333, Yaxue Road, located in northeast China's Heilongjiang province, spans approximately 95.85 kilometers.

The road features four segments of musical roads along its route. As vehicles drive over these sections, different songs can be heard, including the official theme song *Snow in Harbin* to celebrate the 9th Asian Winter Games. According to a project leader, the construction principle of the musical road involves three steps.

First, technology is used to transform selected musical pieces into simulation files for the musical road. Second,

corresponding spacing dimensions are designed based on different melodies to achieve continuous changes in sound waves, simulating a recording effect. This is similar to the process of making vinyl records. Third, grooves are carved into the road surface, and bright colors and markings are applied.

To make an analogy, the musical road can be regarded as a phonograph, where the road surface acts like the record, and car tires are the needle. When the "needle" moves across the "record", the road plays the preset music.

Notably, music can only be heard when vehicles pass through at a certain speed. When a car travels at a speed of 50 to 60 kilometers per hour, the friction between the tires and the road surface creates resonance, producing the music. This encourages drivers to control speed, thereby enhancing road safety to some extent.



Yaxue Road, located in northeast China's Heilongjiang province, features four segments of musical roads along its route. (PHOTO: XINHUA)