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Study on Challenges and Countermeasures for Deepening Cooperation of Scientific and Technological Innovation under the Framework of China-EU "Belt and Road Initiative"

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Abstract: In the context of accelerating global technological innovation restructuring, Sino-European cooperation on scientific and technological innovation under the "Belt and Road Initiative" framework faces challenges such as complex geopolitical developments and divergent perceptions of China within the EU. However, it also harbors opportunities for collaboration in areas like green transition and digital economy. This paper, based on changes in the EU's "triple positioning" towards China and drawing on practical experiences from Germany's new energy transition, systematically reviews the current state of Sino-European cooperation on scientific and technological innovation. It delves into the main challenges currently faced and proposes policy recommendations from dimensions including building strategic trust, innovating cooperation mechanisms, achieving breakthroughs in key areas, and improving policy tools, aiming to provide theoretical references for promoting steady and sustainable progress in Sino-European cooperation on scientific and technological innovation.

Key words: China-EU cooperation; "Belt and Road Initiative"; scientific and technological innovation

I. Introduction

Since the launch of the "Belt and Road Initiative" in 2013, cooperation on scientific and technological innovation has been a vital component of Sino-European bilateral relations. The EU, as a significant pole in global scientific and technological innovation, boasts advanced technology reserves, a robust R&D system, and extensive international cooperation experience. China's rapid rise in emerging technologies and its market size form a striking complement to these strengths. However, in recent years, due to intensified geopolitical conflicts and the restructuring of global value chains, the EU's perception of the "Belt and Road Initiative" has shifted from an early stance of "wait-and-see cooperation" to one of "competitive prevention." Policies such as the "Global Gateway" and "Horizon Europe" not only demonstrate the EU's willingness to cooperate with China but also reflect its strategic intent to strengthen its own technological leadership. In this context, a thorough study of the challenges and strategies for cooperation on scientific and technological innovation under the Sino-European "Belt and Road Initiative" framework is of great practical significance for consolidating the comprehensive strategic partnership between China and Europe and advancing the transformation of the global innovation governance system. This cooperation not only helps to promote the mutual recognition and sharing of scientific and technological achievements between China and Europe, but also provides new ideas and paths for global innovation cooperation. By jointly addressing scientific and technological challenges, strengthening exchanges and cooperation in scientific research, talent training, and innovation policies, the two sides can jointly promote the sustainable development of the global innovation ecosystem. At the same time, this cooperation also contributes to enhancing mutual trust and friendship between China and Europe, laying a solid foundation for building a closer community with a shared future for mankind.

2. Current development of China-EU cooperation in science, technology and innovation

(I) Basis and progress of cooperation

Firstly, policy alignment has been deepened step by step. In 2015, China and the EU jointly released the "China-EU Cooperation Strategy 2020," which listed scientific and technological innovation as a key area of cooperation, laying the policy framework for bilateral science and technology collaboration. By April 2022, 18 EU member states had signed cooperation agreements with China to build the "Belt and Road Initiative," and 20 EU countries had joined the Asian Infrastructure Investment Bank, forming a cooperative chain of "policy dialogue, project implementation, shared outcomes." ^[1] For example, China and Portugal have established three joint laboratories in new materials and space ocean technologies, while Austria has conducted extensive practical cooperation with China in advanced manufacturing technology, and Greece has worked on cultural heritage protection. ^[2] Greece has collaborated with China on the restoration techniques of the Parthenon, using 3D scanning and blockchain technology to create digital

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archives of cultural relics, with related achievements selected as best practice cases under the EU's "Digital Innovation in Cultural Heritage" program.^[3]

Secondly, extensive participation of multiple actors. At the corporate level, Chinese tech companies like Huawei and ZTE have established long-term partnerships with EU firms such as Siemens and Ericsson in areas like 5G communications and smart manufacturing, jointly conducting technology research and standard-setting. At the university and research institution level, the "China-EU Research and Innovation Cooperation Platform" has brought together over 200 universities and research institutions from both sides, implementing more than 500 cooperative projects in fields such as climate change and biomedicine. At the local government level, zones like the Suzhou Industrial Park and Shenzhen Guangming Science City have established cross-border innovation cooperation mechanisms with EU science parks, forming a three-dimensional cooperation model of "park+enterprise+research institution."

At the enterprise level, Huawei and Siemens have established a strategic partnership in the 5G communication sector, jointly launching the "5G Industrial Internet Solution." This solution has been deployed in smart factories of companies such as Bosch in Germany and Haier in China, achieving a 40% increase in device connectivity^[4]. ZTE and Ericsson are collaborating on key 6G technologies, participating in the "6G Smart Connectivity" project under the EU's Horizon Europe framework, promoting global mutual recognition of communication technology standards^[5]. At the university and research institution level, the "China-EU Research and Innovation Cooperation Platform" brings together over 200 universities and research institutions from both sides, conducting joint research on carbon capture and storage (CCUS) in the field of climate change. At the local government level, the Suzhou Industrial Park and the Heidelberg Science Park in Germany have co-built the "Sino-German Innovation Park," attracting more than 120 EU tech companies, forming clusters in biopharmaceuticals and nanotechnology, with the park's output exceeding 50 billion yuan in 2023^[6]. Thirdly, achievements in key areas. In the field of green technology, China and Europe jointly promote the construction of the "Belt and Road Initiative" International Alliance for Green Development, forming complementary technologies in areas such as photovoltaic technology, wind power equipment, and new energy vehicles. In 2023, Germany's share of renewable energy in total electricity consumption exceeded 51.8%, and its mature hydrogen technology, combined with China's vast application market, has provided a model for Sino-European energy transition cooperation^[7]. In the digital economy sector, the China-EU Digital Innovation Platform incubates digital transformation projects, and dialogue mechanisms on topics like AI ethics and blockchain standards are gradually improving. In the life health sector, Chinese pharmaceutical companies and EU research institutions collaborate on COVID-19 vaccine development and the internationalization of traditional Chinese medicine, driving innovative developments in global public health governance.

(2) Cognitive change and strategic adjustment of the EU

Firstly, three dimensions of cognitive evolution. The first group is the pragmatic school of "expectation and cooperation" is represented by European industry, which believes that the "Belt and Road Initiative" provides new growth space for European industries such as automotive, chemicals, and high-end equipment by expanding global markets and deepening ties between Europe and Asia. For example, German car companies have boosted their vehicle exports and localized production by participating in infrastructure construction along the "Belt and Road Initiative" route, leading to an increase in car sales to Southeast Asian markets in 2022.

The second group is the "resistant and opposing" conservatives. At the core of this group are pro-American political forces that view Sino-European technological cooperation as a channel for China's "technological infiltration," promoting the "China threat theory." For example, some EU lawmakers have questioned whether China-Central and Eastern European cooperation is "dividing the EU," pushing the European Commission to introduce the Foreign Subsidies Regulation to strengthen scrutiny of Chinese companies investing in Europe. In 2023, the EU blocked Chinese companies from acquiring German chipmaker Aixtron (ASICS), and pushed for the introduction of the Net-Zero Industry Act, which requires that 40% of photovoltaic modules in the EU market be locally produced by 2030, creating barriers to exports from Chinese photovoltaic companies^[8]. Some EU think tanks have released reports claiming that "China is acquiring core European technologies through technological cooperation," calling for restrictions on Chinese participation in key EU technology projects^[9].

The third group is the "competition and suppression" strategy advocates. Most political and academic figures believe that the EU should engage in "strategic competition" with China in areas such as green technology and the digital economy. In 2019, the EU released its Global Innovation Strategy, proposing to establish an environment for scientific and technological cooperation that is "open, rule-based, and based on shared values." In 2021, it launched the Global Gateway, planning to invest 300 billion euros over the next five years to focus on digital and energy infrastructure in key "Belt and Road Initiative" regions like Africa and ASEAN, aiming to counter China's influence^[10].

Secondly, regional focus of strategic initiatives. In Africa, the EU regards it as its "back garden." At the 2022 EU-AU summit, it pledged to allocate 50% of the funds from the "Global Gateway" to Africa, focusing on supporting renewable energy development and digital infrastructure construction. Through the "Horizon Europe" framework, it funds non-European cooperation projects and strengthens the export of technical standards. In ASEAN, the EU has established 20 dialogue mechanisms, prioritizing green technology and life health, encouraging ASEAN countries to

participate in the "Horizon Europe" research program. From 2014 to 2021, through the Erasmus+program, 8,500 students and scholars were exchanged, building a technology cooperation network guided by "values." The EU and Singapore jointly established the "Digital Economy Governance Center," formulating the "ASEAN-EU Data Interoperability Framework" to integrate ASEAN's data ecosystem into the European governance system^[11]. In Latin America, the EU leverages the "Galileo" satellite navigation system to establish a regional disaster emergency center in Panama and enhances spatial data sharing in Brazil and Chile, aiming to consolidate traditional influence through technical cooperation.

3. Major challenges to deepening China-EU cooperation in science, technology and innovation

(1) Geopolitical games intensify the complexity of cooperation

On the one hand, the internal contradiction of the "threefold positioning" towards China. The EU defines China as a "partner, economic competitor, and institutional rival," leading to contradictory perceptions that cause its policy vacillation. In areas such as low-carbon technology, the EU hopes to leverage the Chinese market to promote technological commercialization; in fields like 5G and artificial intelligence, it restricts Chinese companies through "digital taxes" and "technical standards barriers," creating a complex landscape of coexistence between cooperation and containment. For example, in 2023, the EU cited "data security" as a reason to require Chinese companies operating in Europe to relocate their servers locally, affecting the progress of Sino-European digital technology cooperation projects. In the electric vehicle sector, while the EU welcomes Chinese battery manufacturers to build factories in Germany (such as CATL's Thuringia plant), it also initiates "anti-subsidy investigations" and plans to impose tariffs of up to 35% on Chinese electric vehicles^[12]. In the field of quantum computing, the EU allows Chinese research institutions to participate in the "Quantum Flagship Program" for basic research but prohibits them from accessing key technical modules, forming a pattern of "limited cooperation."

On the other hand, the divergent positions of member states weaken the consistency of cooperation. France, Germany, and other major countries, out of considerations for industrial competition, are cautious about the "Belt and Road Initiative" cooperation. They fear that China's technological rise will undermine their own advantageous industries while also being unwilling to lose market opportunities due to a complete boycott. In contrast, Central and Eastern European countries like Hungary and Poland actively participate in the "17+1 Cooperation," establishing close ties with China in areas such as infrastructure and agricultural technology, forming a cooperative trend characterized by "East-West differentiation." In 2022, debates within the EU over whether to renew the Comprehensive Agreement on Investment between China and the EU lasted for half a year, reflecting significant differences in member states' interests.

(2) Ideological barriers restrict the depth of cooperation

On the one hand, the exclusive impact of "values diplomacy". The EU sets "democracy, transparency, and human rights" as prerequisites for scientific cooperation, explicitly requiring partners to adhere to EU research ethics standards in the "Global Innovation Strategy," which has restricted exchanges with China in areas such as social sciences and public policy. For example, citing "academic freedom," the EU has suspended some joint research projects involving Chinese universities, leading to a decline in cooperation in humanities and social sciences compared to 2019. The EU's "Research Ethics Guidelines" stipulate that "democratic participation" and "data transparency" are prerequisites for international cooperation, mandating that partner institutions establish an "ethics review committee" subject to EU oversight, resulting in the forced suspension of 37 cooperative projects in China's social science sector^[13]. In the field of artificial intelligence, the EU restricts the application of facial recognition technology developed by China in European public spaces, citing "algorithmic discrimination," despite the technology having been certified by the International Organization for Standardization (ISO)^[14].

On the other hand, the non-market tendency of technical standard competition. In the fields of digital technology and new energy, the EU is accelerating the formulation of "European standards," aiming to establish a technological rule hegemony. For example, the EU's Digital Markets Act requires large platform companies to comply with specific data governance rules, putting compliance pressure on Chinese internet companies operating in Europe; in the electric vehicle sector, the EU plans to introduce battery carbon footprint standards, which could increase the export costs of Chinese batteries and undermine product competitiveness. Moreover, the EU is actively promoting the standardization of charging facilities and communication protocols for electric vehicles, aiming to create a unified market environment. This series of measures not only poses challenges to Chinese battery manufacturers seeking to expand into the European market but also necessitates adjustments in strategies for Chinese new energy vehicle enterprises.

(3) There are shortcomings in resource input and mechanism matching

On the one hand, the EU's actual capacity to invest is insufficient. Despite the "Horizon Europe" budget reaching 94.4 billion euros, funds for international scientific cooperation were relatively limited in 2021-2027, covering 27 member states and global collaboration. In 2020, EU projects with African, Asian, and Latin American countries accounted for only 3.47% of the "Horizon 2020" framework, far below its investment intensity to member states. The "Global Gateway" relies on private capital and third-party financing, with a fiscal budget of 18 billion euros, which represents just 6% of total commitments, leaving funding implementation uncertain^[15].

On the other hand, China's cooperation mechanism needs to be improved. Currently, China's promotion of "Belt and Road Initiative" science and technology innovation cooperation mainly relies on government-led bilateral agreements, with insufficient participation from enterprises and social organizations. For example, in the "Belt and Road Initiative" Science and Technology Innovation Action Plan, the proportion of projects involving private enterprises is low, far below the level of EU industry's involvement in international cooperation. Moreover, supporting systems such as intellectual property protection and outcome-sharing mechanisms have not yet fully aligned with international standards, affecting the willingness of EU companies to collaborate.

(4) Competition in emerging fields and pressure to restructure rules

On the one hand, the "standard war" in the field of green technology. In the green hydrogen industry chain, Germany has launched the National Hydrogen Strategy, focusing on the development of alkaline electrolyzer technology. China, however, holds a cost advantage in proton exchange membrane electrolyzers. There are differences between the two sides in terms of technical routes and certification standards, and they have yet to establish a mutually recognized cooperation framework. Regarding the Carbon Border Adjustment Mechanism (CBAM), the EU plans to impose carbon tariffs on imported goods, posing an increased risk of export costs for China's steel and chemical industries. It is urgent to strengthen coordination in areas such as carbon footprint accounting and sharing of emission reduction technologies.

On the other hand, "Rule game" in the digital economy. The EU's AI Act categorizes AI applications into risk levels and sets strict entry conditions for facial recognition, data analysis, and other technologies developed in China; the implementation of China's Data Security Law and Personal Information Protection Law also imposes new requirements on EU companies handling data in China. Differences in rules regarding cross-border data flow and digital service taxes have led to frequent frictions in Sino-European digital trade, with increased trade barriers in these areas. These issues have prompted both sides to enhance dialogue and consultation mechanisms, seeking to establish more reasonable and fair rules and standards for digital trade. Both China and the EU recognize the importance of digital trade in promoting economic growth and innovation, and are committed to resolving these differences through cooperation and negotiation. By strengthening mutual understanding and trust, they aim to create a more open and inclusive digital trade environment that benefits both parties.

4. Suggestions on deepening China-EU cooperation in science, technology and innovation

(1) Building strategic mutual trust: laying a solid foundation for cooperation

On the one hand, strengthen multi-dimensional communication and dialogue. Establish the "China-EU Science and Technology Innovation Policy Forum," regularly convening a dialogue mechanism involving government, business, and academia to fully explain the mutually beneficial nature of Belt and Road science and technology cooperation, dispelling the misconception of a zero-sum game. Drawing on Germany's experience in establishing energy partnerships with Israel and Qatar, create a "mini-multilateral" cooperation platform on global issues such as climate change and public health, fostering mutual trust through specific projects. For example, jointly conduct cross-border research on monitoring variants of the coronavirus and recycling batteries for new energy vehicles, forming a cooperative model of "problem-oriented, joint efforts, shared outcomes." This model emphasizes the sharing of resources, expertise, and data among participating countries, ensuring that the benefits of research and innovation are widely distributed. By focusing on specific, pressing global issues, such as the monitoring of coronavirus variants and the recycling of batteries for new energy vehicles, the cooperation platform can foster a sense of common purpose and urgency among participants. This, in turn, can lead to more effective and efficient collaboration, ultimately contributing to the achievement of global goals and the enhancement of mutual understanding and trust among nations.

On the other hand, strengthen exchanges between enterprises and the private sector. Leverage the bridging role of industry associations and chambers of commerce to organize technology matchmaking events and innovation challenge competitions between Chinese and European tech companies in each other's countries. The "China-EU Green Technology Innovation Competition" successfully held in 2024 attracted over 500 companies and facilitated 37 technical cooperation intentions. Expand the scale of the "China-EU Young Scientists Exchange Program," dispatching 2,000 young researchers for mutual visits annually^[16]. The Chinese government has established the "Belt and Road Initiative (BRI) Innovation Scholarship", focusing on funding EU students to conduct joint training in China, fostering a sense of cooperation at the talent level. This scholarship program aims to strengthen academic exchanges and cooperation between China and EU countries in the field of digital economy, and to cultivate a group of talents with international vision and cross-cultural communication abilities. In addition, the Chinese government is actively promoting the "Digital Silk Road" initiative, aiming to establish a digital cooperation platform with EU countries, share digital development experiences, and jointly explore new models and paths for digital economy cooperation. Through these efforts, China hopes to deepen cooperation with EU countries in the digital economy, promote mutual understanding and trust, and jointly respond to global challenges.

(2) Innovative cooperation mechanism: building a three-dimensional collaborative network

On the one hand, promote policy tool alignment. Establish the "China-EU Science and Technology Innovation Cooperation Project Database," focusing on areas such as green energy, digital technology, and biomanufacturing.

Identify key needs from both sides to form a management mechanism of "project list, joint application, coordinated implementation." Drawing on the EU's open funding model of "Horizon Europe," China's 14th Five-Year Plan for science and technology has established the "China-EU Joint Research Program," allowing EU research institutions to bid on equal terms. The program focuses on frontier scientific research and key technological breakthroughs in fields such as artificial intelligence, green development, and healthcare. By promoting the free flow of talent, technology, and data, it aims to foster a deeper integration of scientific and technological innovation between China and the EU. Additionally, regular meetings and dialogues between China and the EU on science, technology, and innovation have been established to strengthen mutual understanding and cooperation, ensuring the smooth progress and effective implementation of joint research projects.

On the other hand, build a multi-level cooperation platform. At the government level, upgrade the "China-EU Science and Technology Cooperation Steering Committee" and incorporate it into the framework of the "Belt and Road Initiative" High-Level Cooperation Forum to elevate the strategic importance of cooperation topics. At the local level, leverage sister-city relationships such as Suzhou-Delft and Shenzhen-Munich to establish cross-border innovation centers, replicate the successful experience of the "China-Germany Eco-Park," and create a comprehensive platform for "technology research and development, technology transfer, industry implementation." At the institutional level, support the Chinese Academy of Sciences in establishing long-term cooperation mechanisms with the European Research Council and the China Association for Science and Technology with the European Science Foundation, jointly releasing annual roadmaps for key research areas. Promote regular exchanges and visits between scientists, organize joint seminars and workshops, and enhance mutual understanding and collaboration. At the project level, encourage and support joint applications for international scientific research projects by scientists from both sides, and jointly carry out frontier scientific research.

(3) Focus on key areas: foster cooperation growth poles

Firstly, green transition, build a low-carbon technology ecosystem. In the field of hydrogen energy, drawing on Germany's experience in building "hydrogen economy clusters," China and Europe will jointly tackle the full-chain technology challenges for green hydrogen production, storage, transportation, and application. They will establish "China-Europe Hydrogen Demonstration Parks" in places like Ningxia and Inner Mongolia, piloting applications such as hydrogen fuel cell heavy trucks and distributed energy stations. In the renewable energy sector, they will set up a "China-Europe Photovoltaic Technology Standards Mutual Recognition Platform" to promote the alignment of technical standards for high-efficiency solar cells and smart inverters. In the carbon market domain, they will conduct a "China-Europe Carbon Pricing Mechanism Comparative Study" to explore the establishment of a regional carbon market connection mechanism, providing a "China-Europe solution" for global climate governance.

Secondly, digital economy, build an open and win-win ecosystem. In the field of artificial intelligence, establish a "Sino-European AI Ethics Joint Laboratory" to jointly develop ethical guidelines for application scenarios such as autonomous driving and medical AI, avoiding the risk of technology abuse. In data governance, promote the "Sino-European Cross-border Data Flow Pilot," selecting industries like finance and logistics for testing compliant cross-border data flows, establishing a "whitelist" system to ensure a balance between data security and the realization of commercial value. In the industrial internet sector, co-build the "Sino-European Smart Manufacturing Standards System" to connect key links such as equipment interconnectivity, system integration, and supply chain collaboration, supporting companies like Haier and Siemens in jointly developing cross-regional industrial internet platforms.

Thirdly, health. Strengthening global public health cooperation. In the field of vaccine development, establish a "China-EU Joint Vaccine Production Network," and build vaccine packaging plants in South Africa, Southeast Asia, and other regions. Share technologies and processes for mRNA vaccines and recombinant protein vaccines to enhance vaccine accessibility in developing countries. In the realm of traditional Chinese medicine, promote the "Internationalization of TCM Standards" project, collaborate with the European Medicines Agency on acupuncture therapy and quality standards certification for Chinese herbal medicines, and enter the European market for sales. In precision medicine, launch the "China-EU Rare Disease Data Sharing Program," integrate patient data on rare diseases from both sides, and jointly develop gene diagnostic kits.

(4) Improve policy tools: enhance the ability to guarantee cooperation

Firstly, optimize the financial support system. Establish the "China-EU Science and Technology Innovation Cooperation Fund," with a scale of 5 billion euros, focusing on supporting joint laboratory construction, technology transfer center operations, and youth talent exchange projects. Funding sources include fiscal allocations from both sides, corporate donations, and social capital. Drawing on Germany's tiered funding model for the "Energy Research Program," China's Ministry of Science and Technology has set up the "Belt and Road Initiative" special fund to provide R&D subsidies for EU small and medium-sized enterprises participating in cooperative projects, and to offer low-interest loans for large-scale joint research projects. This special fund aims to enhance technological cooperation and innovation between China and EU countries, and to facilitate the participation of EU SMEs in joint research and development activities. Additionally, the Ministry of Science and Technology has established a series of cooperation mechanisms and platforms, including joint research centers, technology transfer centers, and innovation hubs, to promote in-depth cooperation in key scientific and technological fields. Through these initiatives, China and the EU are striving to

achieve mutual benefit, win-win cooperation, and common development in the field of science and technology. Secondly, improve the intellectual property rights and results sharing mechanism. Develop the "China-EU Intellectual Property Cooperation Guidelines for Science and Technology Innovation," clarifying the ownership distribution and licensing rules for joint R&D outcomes. Introduce the "Intellectual Property Pool" model to centrally manage and marketize common technological achievements. Establish the "China-EU Technology Transfer Service Platform" to connect both parties' patent databases, providing one-stop services including intellectual property valuation and transaction facilitation. This platform will facilitate the efficient transfer and utilization of technological achievements between China and the EU, promoting technological innovation and economic development in both regions. By integrating patent information resources and providing professional services, it is expected to enhance mutual understanding and trust between Chinese and European enterprises in the field of intellectual property, laying a solid foundation for deeper cooperation in the future. Furthermore, this initiative will pave the way for joint research projects, technology exchanges, and the establishment of long-term strategic partnerships. It will foster an environment conducive to the sharing of best practices, innovative solutions, and expertise, ultimately strengthening the technological competitiveness of both Chinese and European enterprises in the global market. Thirdly, strengthen cross-border service and regulatory coordination. Simplify the visa process for researchers and implement the "China-EU Innovative Talent Visa Facilitation Program." Provide researchers participating in collaborative projects with a five-year multiple-entry visa, allowing them to freely move between EU member states and China for research. Establish a "China-EU Science and Technology Cooperation Regulatory Sandbox" in pilot areas such as Qianhai in Shenzhen and the Shanghai Free Trade Zone, implementing differentiated regulation on cross-border data flow and technology product certification, providing room for error tolerance in innovative cooperation. Gradually replacing the pre-supervision mode with post supervision mode, encouraging free trade zone enterprises to conduct concept verification in the regulatory sandbox, ensuring effective risk control, exploring data innovation products, and service business models. This regulatory sandbox will serve as a testing ground for new cooperation models and regulatory approaches, aiming to strike a balance between innovation and risk control. By allowing for differentiated regulation, it will facilitate the smooth flow of cross-border data and the certification of technology products, thereby accelerating scientific and technological exchanges and cooperation between China and the EU. At the same time, the error tolerance mechanism built into the sandbox will encourage bold innovation and experimentation, creating a more dynamic and open cooperation environment.

V. Conclusion

China and Europe's cooperation on technological innovation under the "Belt and Road Initiative" framework is not only an inevitable choice to address global challenges but also a crucial engine for driving world economic recovery. Despite current challenges in geopolitics, ideology, and institutional alignment, the shared interests between the two sides in areas such as green transformation, digital economy, and life health far outweigh their differences. In the future, it is essential to build on strategic trust, drive progress through institutional innovation, and achieve breakthroughs in key areas. By adopting a multi-dimensional cooperation model featuring policy coordination, corporate leadership, and diverse participation, we can construct a "open, inclusive, mutually beneficial, and win-win" Sino-European community of scientific and technological innovation. This will not only enhance both sides' innovation capabilities and global competitiveness but also inject new momentum into the high-quality development of "Belt and Road Initiative," providing a Chinese-European solution for the reform of the global governance system.

Acknowledgments: This research work was supported by the Youth Fund Project for Humanities and Social Sciences Research of the Ministry of Education in 2023, titled "Research on the Risks of European Populism to China's Ideological Security from the Perspective of Big Data" (Grant No.: 23YJC710112). We also acknowledge the support of the 2024 International Exchange Program for the Development of Young Faculty Members at University of Science and Technology Beijing (Grant No.: QNXM20250049), and the support of the 12th "Quality Education Core Curriculum" Development Project of University of Science and Technology Beijing (Grant No.: KC2024TS05), and Open Research Project on Science and Civilization and Cultural Exchange between China and Foreign Countries in 2024 (Grant No.: 2024KFYB008).

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