Resolution No. 57-NQ/TW - A breakthrough in the development of science, technology, innovation and national digital transformation

In the context of increasingly deep globalization, the Fourth Industrial Revolution taking place strongly, and increasingly fierce international competition, on 22nd December 2024 General Secretary To Lam signed and issued Resolution No. 57-NQ/TW of the Politburo on breakthroughs in the development of science, technology, innovation and national digital transformation. This is a document of strategic significance, marking an important turning point for the country in the fields of science, technology, innovation and digital transformation. The Resolution also has special significance, being a guiding principle for the development of wealth, civilization and prosperity; a call to action for the entire Party, people and army to make joint efforts to turn Vietnam into a developed, high-income country with global competitiveness, entering a new era, an era of nation's rise. The Journal of Environment introduces some contents on the Party's strategic tasks, solutions and vision in the Resolution.

BREAKTHROUGHS OF RESOLUTION NO.57-NQ/TW

The first breakthrough of Resolution No.57-NQ/TW is that the Party has set specific high-level goals by 2030, with a vision to 2045 to turn Vietnam into a developed, high-income country, emphasizing that science, technology and innovation are key drivers to promote economic growth, increase labour productivity and improve national competitiveness. The Resolution proposes many breakthrough mechanisms and policies, prioritizing and encouraging the development of science, technology and innovation such as: Financial investment, development of high-quality human resources, administrative reform, encouragement of public-private partnership... towards removing barriers in the system, thereby facilitating enterprises and individuals to develop more strongly. Accordingly, by 2030, the potential and level of science, technology and innovation will reach advanced levels in many important fields, among the leading groups in upper-middle-income countries; the level, capacity of technology and innovation of enterprises will be above the world average; a number of science & technology fields will reach international levels. Vietnam is in the top 3 countries in Southeast Asia, the top 50 countries in the world in terms of digital competitiveness and e-Government development index; the top 3 countries in Southeast Asia in research and development of artificial intelligence, the center for developing a number of digital technology industries and fields in which Vietnam has advantages; at least 5 digital technology enterprises are on par with advanced countries. Vision to 2045, science, technology, innovation and digital transformation will develop steadily, contributing to making Vietnam a developed, high-income country; the digital economy will reach at least 50% of GDP; be one of the digital technology industrial centers of the region and the world; be among the top 30 countries in the world in innovation and digital transformation. The rate of digital technology enterprises will be equivalent to developed countries; at least 10 digital technology enterprises will be on par with advanced countries; attract at least 5 more leading technology organizations and enterprises in the world to set up headquarters, invest in research and production in Vietnam.

The Resolution identifies the need to increase investment in science, technology, innovation and digital transformation. Specifically, by 2030, the budget for research and development will reach 2% of GDP, of which the budget from social investment accounts for more than 60%; allocate at least 3% of the total annual budget for the development of science, technology, innovation and digital transformation at the national level and gradually increase according to development requirements. The increase in investment according to Resolution No.57-NQ/TW will approach the investment level of developed countries, thereby creating motivation for the Vietnamese scientific community; enhancing the national science, technology potential. However, to achieve the proposed investment level, it is necessary to have mechanisms, measures to support enterprises, even removing the ceiling of 10% of taxable income and regulating the fund management mechanism of enterprises more openly, because Vietnamese enterprises are mostly small and micro enterprises, needing large financial resources for digital transformation and technological innovation.

In addition, Resolution No.57-NQ/TW has made a breakthrough in thinking in managing state budget investment for research and development activities. Accordingly, the budget for research and development of science & technology is prioritized to be implemented according to the fund mechanism, through science & technology development funds. The fund mechanism is an international practice, meaning that the state budget funding for science & technology tasks (science & technology subjects, schemes, projects, programs, etc.) will be allocated directly to science & technology development funds according to the charter capital level and the ability to arrange

annual budget sources. Budget from funds will be provided promptly according to the progress of task approval, transferred automatically and settled once at the end of the research contract. This approach meets the timeliness of research activities, creates favourable conditions for scientists and is consistent with international practice.

Resolution No.57-NQ/TW also identifies "accepting risks, risky investments and delays in scientific research, technological development and innovation". Previously, management agencies and public opinion believed that all research tasks funded by the State must be 100% successful, and failure would be considered a waste, causing loss of state budget. But in reality, doing research means finding something new, there is always the potential for failure. Even in developed countries, the rate of successful subjects applied in practice is only about 20 - 30%. That is also the reason why developed countries have a system of venture capital funds and a culture of accepting failures in research, thanks to which they have unicorn startups, technology corporations with many high-tech products. Obviously, this innovative regulation of the Resolution will encourage scientists to dare to think, dare to do, dare to take on tasks when accessing state budget investment sources for science, technology and innovation.

The final breakthrough of the Resolution is the feasibility of the organization for implementation. For the first time, the Head of the Party directly serves as the Head of the Steering Committee for the implementation of the Resolution, and in addition there is also an Advisory Council consisting of qualified and prestigious managers and scientists. This approach is considered a solution to overcome shortcomings of previous stages, when the Steering Committees often only included representatives of state management agencies, did not have enough power in the political system and were heavily term-based.

7 GROUPS OF KEY TASKS AND SOLUTIONS

In order to achieve the goals set out in Resolution No.57-NQ/TW, the Government requires that in the coming time, in addition to regular tasks, ministries, ministerial-level agencies, government agencies, People's Committees of provinces and centrally run cities need to specify and organize the implementation of the following 7 tasks and solutions:

First, raise awareness, make breakthroughs in innovative thinking and strong political determination, resolutely lead and direct, and create new momentum and new spirit in the whole society for the development of science, technology, innovation and national digital transformation

The Government requires ministries, sectors and local authorities to develop and promulgate regulations on the responsibilities of heads of state agencies directly responsible for and directing the implementation of tasks of development of science, technology, innovation and digital transformation of agencies, organizations; regulations on the responsibilities of cadres, civil servants, public employees in implementing annual action plans on the development of science, technology, innovation and digital transformation; and development of digital platforms, digital tools to conduct online measurement of the level of completion of digital transformation tasks.Build and upgrade an online training platform to provide free knowledge of science, technology, innovation, basic digital skills and technology to people, enterprises; launch a nationwide emulation movement to promote the combined strength of the entire political system, the active participation of entrepreneurs, enterprises and people to successfully carry out the digital transformation revolution; commend, honour, reward and promptly encourage scientists, inventors, enterprises, organizations, individuals with achievements in digital transformation; respect each technical invention, initiative, improvement to enhance work efficiency and performance...

Second, urgently and resolutely improve the institutions; eliminate all thoughts, concepts, barriers that are hindering development; turn institutions into a competitive advantage in the development of science, technology, innovation and digital transformation

The Government requires ministries, sectors and local authorities to review, remove all institutional and policy bottlenecks, barriers in the development of science, technology, innovation, digital transformation and high-quality human resources; improve legal regulations to ensure a legal corridor for the operations of all sectors, fields in the digital environment; develop, promulgate specific mechanisms on investment, public investment, public procurement of products that are the results of scientific research and technological development, digital products and services to accelerate national digital transformation. In addition, amend legal regulations to remove bottlenecks in science, technology and innovation activities in the direction of accepting risks, risky investments and delays in scientific research, technological development and innovation. Amend the Law on Science and Technology 2013 and related laws in the project to develop the Law on Science, Technology and Innovation to: (i) Remove difficulties and obstacles, create a favourable legal corridor to promote science, technology and innovation; (ii) Simplify administrative procedures, promote decentralization and delegation of power in state management; (iii) Focus on investment resources from the state budget, attract non-budgetary investment for science, technology and innovation. Supplement policies to remove bottlenecks and improve the Law on Digital Technology Industry; develop incentive mechanisms and policies, simplify administrative procedures on investment in the fields of science, technology, innovation and digital transformation to attract, use all investment resources effectively...

Third, increase investment and improve infrastructure for science, technology, innovation and national digital transformation

Develop a network connecting innovation, creative startupcenters, focusing on strategic technology and digital transformation; implement programs, projects to promote the key technology and innovation fields of the Vietnam National Innovation Center. Strive to have at least 5 projects, programs in the fields of semiconductors, artificial intelligence, digital technology, smart factories, smart cities, etc. implemented by 2030. Develop incentive tax policies for investment, purchase and lease of digital products and services; develop mechanisms, policies to support, encourage organizations, individuals and enterprises to invest in and build laboratories, centers for the research and development of science and technology. Develop the Internet of Things (IoT) industry and a number of specialized industrial parks developing IoT; digitalize industrial parks, industrial clusters in the direction of enhancing IoT applications to become smart industrial parks, industrial clusters; promote, develop a number of sectors and fields applying IoT industry such as manufacturing, trade, energy, agriculture, transportation, healthcare, etc. Complete the legal corridor to promote AI application in solutions for developing digital technology applications in sectors, fields and local authorities, associated with state management in each field, ensuring shortcuts and anticipation.

Fourth, develop, make use of high-quality human resources, talents to meet the requirements for development of science, technology, innovation and national digital transformation

Increase investment in, innovation and improvement of the quality of education and training, ensure high-quality human resources, meet the requirements for development of science, technology, innovation and national digital transformation. Have attractive mechanisms and policies on credits, scholarships and tuition fees to attract excellent students to study in the fields of mathematics, physics, biology, chemistry, key engineering and technology, especially at the postgraduate level. Issue special mechanisms to attract highly qualified overseas Vietnamese and foreigners to work and live in Vietnam. Have special mechanisms for naturalization, house and land ownership, income, and working environment to attract, employ, and retain leading scientists, experts, and "chief engineers" at home and abroad who are capable of organizing, operating, commanding and implementing key national tasks on science, technology, innovation, digital transformation, developing artificial intelligence technology, and training human resources. Build, connect, develop a network of domestic

▲ *Resolution No. 57-NQ/TW is a clear demonstration of the Party's strategic vision and political determination in development of science, technology, innovation and national digital transformation*

and international experts and scientists; build a number of advanced schools and training centers specializing in artificial intelligence; have special mechanisms for public-private partnership in training digital technology human resources; build an online education and training platform, a digital university education model, and improve digital capacity in society.

In addition, develop a team of lecturers and scientists with sufficient capacity and qualifications to meet the requirements of teaching in the fields of basic science, semiconductor chip technology, microcircuits, key engineering and technology; promote cooperation with prestigious foreign universities; strongly innovate training programs according to international standards, modernize training methods and apply advanced technology, especially artificial intelligence.

Fifth, promote digital transformation, application of science, technology and innovation in the operations of agencies in the political system; improve the efficiency of national governance, the effectiveness of state management in all fields, ensure national defence and security

Promote the application of science & technology to build scientific foundations to support decision-making in the operations of state management agencies; build a model of a smart monitoring and control center to strengthen public management, improve governance effectiveness and operational efficiency of all levels of government; implement direction and operation of state agencies online, based on data; enhance interaction between the government and the people to help reduce bureaucracy of the state apparatus; monitor online, comprehensively and promptly warn and early detect to prevent corruption, negativity and waste. Improve the quality of online public service provision throughout the process; provide new personalized, data-based digital services for people and enterprises; provide public services regardless of administrative boundaries. Along with that, develop and master the technology of domestic digital platforms, ensure safety and many utilities for people; quickly popularize essential digital services for people; develop a plan for each person to have a digital identity, digital means, digital skills and digital accounts, forming digital citizens. Develop AI applications to support analysis, warning of natural disasters, responding to climate change and protecting the environment; support analysis, warning of risks to national defence - security, social order and safety...

Sixth, strongly promote science, technology, innovation and digital transformation activities in enterprises

Review, develop incentive policies to encourage enterprises, especially small and medium enterprises, cooperatives, and business households to invest in digital transformation, research, application of science, innovation of technology to improve production and business efficiency and enterprise governance; develop regulations to establish research foundations for digital technology and digital transformation policies in enterprises to research, apply and cooperate in transferring modern digital technology achievements from abroad to the country. Develop mechanisms, policies to support digital technology enterprises, organizations and individuals with capacity to carry out key tasks on digital transformation; policies to support, develop digital technology enterprises to well exploit the domestic digital transformation market for reaching out globally; promote the development of small and medium enterprises. In addition, develop mechanisms to attract the world's leading technology enterprises to set up headquarters, invest in research and production in Vietnam according to the following principles: Production and business in the fields that Vietnam is prioritizing; development of supporting industries in Vietnam; investment in research and development centers in Vietnam at a rate of 1% - 3% of revenue. On the other hand, create favourable conditions to support and develop digital technology enterprises to well exploit the domestic digital transformation market, as a basis for reaching out globally; develop strong enough policies to encourage the spirit of entrepreneurship in science, technology, innovation, digital transformation along with policies to support startups and attract domestic and foreign enterprises to start up in Vietnam.

Seventh, strengthen international cooperation in development of science, technology, innovation and digital transformation

Focus on promoting cooperation in scientific research and technological development with countries having advanced level of science, technology and digital transformation, especially in the fields of artificial intelligence, biotechnology, quantum technology, semiconductors, nuclear energy and other strategic technologies. In addition, have policies to purchase, transfer advanced technologies suitable to Vietnam's conditions; proactively, actively participate in developing international rules and standards on new technologies to ensure safety and mutual benefit; promote capacity building and technology transfer in international agreements and treaties to which Vietnam is a member.

THE PARTY'S STRATEGIC VISION IN THE RESOLUTION

The issuance of Resolution No.57-NQ/TW by the Politburo is a clear demonstration of the Party's strategic vision and political determination in developing science, technology, innovation and national digital transformation, because this is both a prerequisite and an opportunity, as well as a requirement of reality not only for Vietnam, but also has impacts and influences on a global scale. In the context of increasingly deep globalization, the Fourth Industrial Revolution taking place strongly, and increasingly fierce international competition, Resolution No.57-NQ/TW has a particularly important significance, a historic turning point in promoting socio-economic development, creating favourable conditions and a solid foundation for the country to enter a new era, an era of nation's rise.

The Resolution emphasizes the role of science, technology and innovation as the key driver to promote economic growth, improve labour productivity, improve production relations, innovate national governance methods, develop the socio-economy, prevent the risk of falling behind, etc. In addition, it clearly defines the goals and orientations for developing science, technology, innovation and national digital transformation in a systematic, breakthrough manner and points out the path, solutions to achieve those goals. Reality shows that the history of development and revolutionary leadership of the Party has always been closely linked to science and technology. From the first faltering steps, the Party soon realized the importance of modernizing the country through innovation, creativity and application of advanced technology. Resolutions, directives of the Party over the years have clearly demonstrated this, from the focus on building a heavy industrial foundation during the period of centralized planning, to the orientation of comprehensive innovation and deep international economic integration during the period of renovation. The issuance of each resolution marks an important turning point, demonstrating the Party's high political determination in moving the country forward, constantly reaching for the goal of being rich and powerful. This shows that the Party's strategic vision in the Resolution is consistent with the global trend, as advanced countries consider this a decisive factor to overcome all difficulties and challenges to achieve sustainable and comprehensive development. In addition, the emphasis on national digital transformation shows that the Party is clearly aware of the need for Vietnam to take advantage of opportunities from digital technology to develop faster and narrow the gap with developed countries.

The Party's strategic vision in the Resolution focuses on developing high-quality human resources, especially in the fields of science, technology and digitalization; emphasizing that building an innovation ecosystem is a necessary factor to promote the spirit of entrepreneurship and creativity in society. Above all, the Resolution demonstrates timely grasp of global trends, such as globalization, supply chain shifts and increased technological competition among countries, demonstrating forecasting as well as adaptation to global trends and international integration.

With new perspective and approach, the 7 groups of tasks and solutions proposed by the Resolution have a dialectical and unified relationship with each other in the implementation process. Each task, solution has a different position, role, and organization method, but in the implementation process, it is necessary to be deployed synchronously with high political determination, drastic and thorough measures. This is the combination of fundamental factors and breakthrough factors, in which the breakthrough idea of innovation in thinking, identification of strong political determination, drastic leadership and direction is emphasized right from the beginning in the tasks and solutions section as the decisive factor for the success of the Resolution. The group of tasks on institutional improvement, granting autonomy and self-responsibility for organization, staff, finance and expertise to public science and technology research organizations, using the state budget to hire experts, using tangible and intellectual assets to link and cooperate with organizations and enterprises... will truly be the driver for development of science and technology, soon bringing research results into practice for socio-economic development. The groups of tasks on increasing investment, improving infrastructure, developing and employing human resources and talents, and international cooperation have followed the development trend of science and technology in advanced countries in the world.

Obviously, Resolution No. 57-NQ/TW is a breakthrough strategy, laying the foundation for the country's sustainable and prosperous development, aiming to achieve the goal of Vietnam becoming a developed country with modern industry and high average income by 2030; and becoming a developed country with high income by 2045. The Resolution has removed barriers, overcome bottlenecks and created a breakthrough mechanism to unleash creativity, resources, promote the development of science, technology, innovation and national digital transformation. Therefore, to effectively implement the Resolution, it requires great efforts and political determination from the entire Party, people and army. Only with unity and drastic actions, we can turn ambitious goals into reality, making Vietnam a rich and strong country with sustainable development in the future ■

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