



MINISTRY OF SCIENCE AND TECHNOLOGY

INTRODUCTION OF

THE VIETNAMESE STRATEGY FOR SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT TO 2030

Danang, April 27th, 2023

CONTEXT , PURPOSE, MEANING OF PROMULGATING THE STRATEGY

Every 10 years, the National Congress of the Communist Party of Vietnam approves the Socio-Economic Development Strategy to determine the country's socio-economic development viewpoints, objectives, directions, tasks and solutions in the next 10 years. This is an important document that guides the development strategies of industries and fields, including the science and technology



The 10-year socio-economic development strategy for 2021-2030 affirms that in order to achieve the goal of becoming a high-middle-income country by 2030 and a high-income country by 2045, in the coming period, Vietnam needs to transform growth model from a model based on cheap capital, resources and labor to a model based on STI



On May 11th , 2022, the Prime Minister signed Decision No. 569/QD-TTg promulgating the Strategy for STI Development to 2030.

The strategy is especially important not only for the science and technology, but also for the entire political system because the role of STI in the next 10 years is a strategic breakthrough, which is decisive for creating breakthrough productivity, quality, efficiency and competitiveness of the economy.

THE MAIN CONTENTS OF THE STRATEGY

1. Viewpoints on STI Development
2. Objectives of STI Development
3. Main Directions of STI Development
4. Major tasks, solutions for STI Development
5. Organization of Implementation.

SOME KEY ISSUES IN THE STRATEGY

- ✚ Affirming the role of STI as a strategic breakthrough and the main driving force of economic growth.
- ✚ Strongly developing STI to create breakthroughs in productivity, quality, efficiency and competitiveness for fast and sustainable socio-economic development.
- ✚ STI development meets requirements, responds to challenges and takes advantage of opportunities posed by new contexts such as the Fourth Industrial Revolution, digital transformation, and the global COVID pandemic.

- ✚ Clarifying the content of innovation. Innovation is the process of transforming new ideas and knowledge into specific results such as products, services, processes, etc. in order to bring added benefits to the socio-economy; Innovation cannot be separated from science and technology.
- ✚ Developing a national innovation system, in which enterprises play a central role; Research institutes and universities are strong research entity.
- ✚ In addition to pursuing new technology development and expanding technological frontiers, focus on promoting the application and rapid diffusion of existing technologies into the economy. Promoting the enterprise's capability to apply, absorb and master technology. Strengthening the management capacity, technology management and innovation of enterprises.

SOME KEY ISSUES IN THE STRATEGY

- ✚ Focusing on removing barriers on legal system, economic, financial and investment policies for S&T activities, and autonomy of S&T organizations.
- ✚ Focusing on building outstanding specific institutions, mechanisms and policies, promoting technology application and transfer.
- ✚ Allowing the implementation of a mechanism for testing new policies, accepting risks in the deployment and application of new technologies, innovation, and new business models.
- ✚ Promoting the socialization of investment sources for STI, especially from enterprises.
- ✚ Closely linking social and humanities sciences with natural sciences, technical science and technology in the process of implementing socio-economic development tasks.
- ✚ Clearly defining targets and action plans to apply and develop STI in all aspects of activities at all levels, sectors and localities.

VIEWPOINTS ON STI DEVELOPMENT

Affirming the main principles of STI development; the basis for designing and harmoniously resolving the relationship between viewpoints and other contents of the Strategy

1. Affirming the role, position and contribution requirements of STI for socio-economic development, ensuring national security.

2. Clarifying the synchronous, interdisciplinary, focused-driven manner in the fields of science and technology, developing the national, sectoral and regional innovation system, in which enterprises are the center.

3. Pointing out the need for a harmonious and effective combination between internal capacity development and making the most of opportunities and external resources for the development of STI.

➔ ***The viewpoints of the Strategy emphasized:*** Developing STI is a leading national policy, focusing on developing the national, sectoral and regional innovation system with the role of orientation, coordination, and creation of the institutional and policy environment of the State, at the same time, harmonious combination between endogenous and exogenous capacity for rapid and sustainable development based mainly on STI.

Objectives of STI development



OBJECTIVES OF STI DEVELOPMENT

Identify specific targets to be achieved by 2025 and 2030; the basis for determining orientations, tasks, solutions, and prioritizing resources for STI development; is an important basis for evaluating the implementation of the Strategy



The objectives of the Strategy inherit some of the objectives in the Strategy of the previous period and add a number of new goals to meet the requirements set forth for STI and socio-economic development such as: Contribution of STI to economic growth, spearhead industrial development, global innovation index, promotion of STI activities in enterprises, etc.

GENERAL OBJECTIVES



Determining the role and contribution of STI to socio-economic development, safeguarding national defense and security

Identifying goals for developing potentials and qualifications of Vietnam's STI

Basing on determination

- ❖ Deploying the STI development viewpoints which have been identified.
- ❖ Based on the Socio-Economic Development Strategy for the 2021-2030 period and some important documents of the National Party and State.
- ❖ Inheriting and adjusting the overall goals of the Strategy of S&T Development for the period of 2011-2020.

SPECIFIC TARGETS (9 groups)

Objectives of contribution of STI in socio-economic development

- (1)** Contribution of STI to economic growth
- (2)** STI will play an important role in the development of spearhead industries
- (3)** Contribution of STI to the development of culture, society and people, providing scientific basis for making guidelines, and policies.

Objectives on developing STI capabilities

- (4)** Global Innovation Index
- (5)** Increasing investment in S&T
- (6)** Human Resource in R&D
- (7)** Restructuring and improving the capacity and efficiency of the S&T organization system
- (8)** Promoting STI activities in enterprises
- (9)** International publication, intellectual property and national quality infrastructure development.

Objectives of STI development

Total factor productivity (TFP)'s contribution to economic growth above 50%

The proportion of the value of high-tech industrial products in the processing and manufacturing industries will reach at least 45%

STI helps maintain the Human Development Index (HDI) at over 0.7

The Global Innovation Index (GII) will be improved continuously, among the top 40 in the world

Investment in S&T: 1.5% - 2% of GDP. GERD: 1% - 1.2% of GDP. Society's contribution to scientific research and technological development: 65% - 70% by 2030

Human resources for scientific research and technological development (full time) will reach 12 people/10000 people by 2030

KEY ORIENTATIONS FOR STI DEVELOPMENT

Determining priorities in STI development; acting as a bridge between goals and tasks and solutions; becoming the foundation for allocating resources towards realizing the goal of STI development



The Strategy focuses on:

- ❖ The development orientations of scientific research, development and application of technology in which Vietnam has strengths, potentials and has great potential.
- ❖ Determining the orientation of key tasks for the development of STI, in which specially emphasizes on the orientation of STI to serve sustainable and inclusive socio-economic development, promoting STI activities in enterprises, reform and completing public management of STI.
- ❖ Adding orientations for innovation activities, including orientations for innovation in sectors and socio-economic regions.



04 KEY ORIENTATIONS FOR STI DEVELOPMENT



Focal tasks in the STI development



Development of scientific research

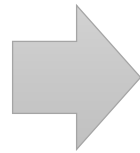


Technology development and application



Innovation activities

1. Orientations for focal tasks in the STI development



- ✚ STI focus on serving sustainable, inclusive socio-economic development, national defense and security safeguarding;
- ✚ Reforming and completing the state management of STI;
- ✚ Developing the potential for STI;
- ✚ Promoting STI activities in enterprises and developing the science and technology market.

2. Orientations for the development of scientific research

Social sciences and humanities

- Researching and forecasting development trends of globalization and international integration;
- Trends of competition and conflict in the international context;
- Sustainable development trends;
- Summarizing the reality of the process of national reformation, construction and development in service of planning guidelines, strategies and policies for national development and protection;
- Research on development theory in a new context
- Studying scientific and practical grounds for renovating the leadership method and improving the leadership capacity, ruling capacity and combat capacity of the Party;...

Natural sciences

- Promote basic research and application-oriented basic research in the fields where Vietnam has strengths and needs to rise to the regional and international advanced level;
- Research the scientific basis for the rational use of natural resources;
- Focus on application-oriented basic research in order to acquire and master core and original technologies for rapid application;



3. Orientations for technology development and application

- Information and communications technology
- Biotechnology
- New material technology
- Technology of machine manufacturing and automation
- Marine technology
- Technology in natural disaster prevention and climate change response
- Energy technology
- Environmental technology
- Space technology
- Advanced and smart construction, transportation and infrastructure technology

4. Orientation of innovation activities

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graph LR; A[4. Orientation of innovation activities] --> B[Innovation in agriculture]; A --> C[Innovation in industry, construction and transportation];
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Innovation in agriculture

- Promoting big enterprises to invest in breeding technology, care and monitoring technology in accordance with safety and traceability standards, preservation technology, and processing technology;
- Focusing on investment in hi-tech agricultural zones, large-scale projects, the implementation of advanced and effective cultivation models in accordance with international standards;
- Forming agricultural innovation systems associated with agricultural economic models, production chains, value chains and products with high economic values.

Innovation in industry, construction and transportation

- Continuing to attract big-sized enterprises' investment in innovation, absorption and mastery of technologies, particularly smart production and manufacturing technology;
- Focusing on promoting innovation in platform and spearhead industries such as energy industry, mechanical engineering, metallurgy, chemicals, fertilizers, materials, information and communications technology, electronics-telecommunications industry.

4. Orientation of innovation activities

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graph LR; A[4. Orientation of innovation activities] --> B[Innovation in the service sector]; A --> C[Innovation in regions];
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Innovation in the service sector

- ❖ Applying widely and intensively technology platforms of the Fourth Industrial Revolution and new business models in services, business and public service activities;
- ❖ Building standards, legal frameworks, mechanisms and policies for facilitating the development of digital platform-based enterprises and those applying digital technologies and services,...

Innovation in regions

- ❖ Promoting innovation activities in key regions based on their respective advantages;
- ❖ Promote research on culture, religion, people and solutions to respond to climate change associated with the characteristics of regions and localities;
- ❖ Setting up an innovation system associated with value chains, sectoral connectivity clusters, and innovative start-up ecosystems in regions and localities

Major tasks, solutions for STI development

- 1. Reforming STI mechanisms, and improving the State management of STI**
- 2. Building national innovation system**
- 3. Attracting and effectively using all investment resources for STI**
- 4. Developing research institutes, universities and other science and technology organizations into major research subjects**
- 5. Developing STI human resources with high qualifications and creative capacity**
- 6. Developing and efficiently using STI infrastructure**
- 7. Promoting STI activities in enterprises**
- 8. Proactively promoting international cooperation and integration on STI**
- 9. Increasing honouring and communication activities to raise awareness of STI**

Main tasks and solutions to promote international cooperation and integration in STI

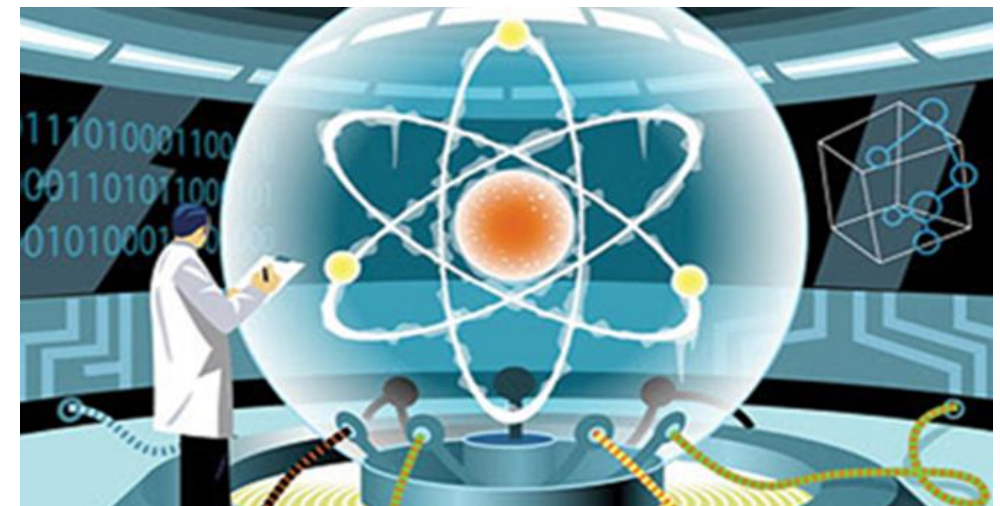
Main tasks and solutions on proactively promoting cooperation and international integration in STI

- ✚ Strengthening international cooperation in scientific research, technology development and application, purchase and sale, transfer of S&T products, deployment of innovative models and solutions, protection and development of property intelligence, ensuring standards and quality of goods.
- ✚ Promoting capacity building and technology transfer in international agreements and treaties to which Vietnam is a signatory.
- ✚ Actively expanding international cooperation towards supporting some fields of science and technology to reach international level.



Main tasks and solutions on proactively promoting cooperation and international integration in STI

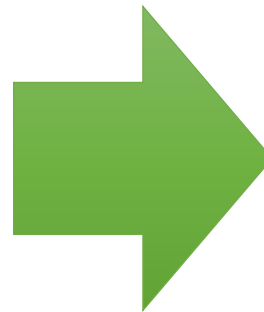
- ✚ Strengthening international cooperation to learn and transfer advanced STI management models to serve to improve the capacity of management apparatuses at all levels
- ✚ Actively participating and making effective contributions to the building of international legal frameworks on STI. Actively participating in international research alliances on emerging issues.
- ✚ The State creates favorable conditions to promote enterprises to participate in international research alliances (introduction, guarantee for Vietnamese enterprises to participate in research and receive technology transfer, ...).



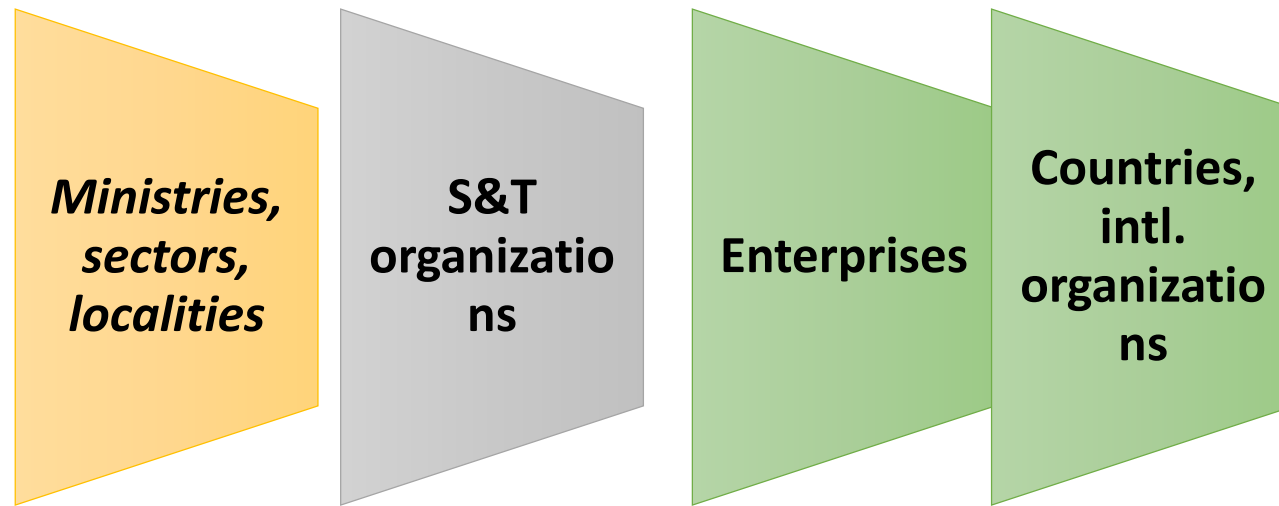
Organizing the implementation of the Strategy

ORGANISATION OF THE STRATEGY IMPLEMENTATION

Determining the roles and responsibilities of ministries, sectors, localities, organizations and enterprises; is the basis for monitoring, supervising, checking, evaluating as well as concentrating resources for the implementation of the Strategy.



The Strategy identifies the tasks of a number of specific ministries and sectors that play an important role in the development of STI in the coming period such as the Ministry of Planning and Investment, the Ministry of Finance, the Ministry of Education and Training, and the Ministry of Labor - Invalids and Social Affairs, Ministry of Home Affairs, Ministry of Information and Communications, Ministry of Foreign Affairs



The strategy is a guiding document for the development of STI until 2030. Therefore, the contents of the strategy are directional and provide a common basis for determining goals, orientations, tasks, and solutions in the national 5-year plans for STI development, as well as in sectoral and local STI development orientation documents. It serves as the foundation for building specific mechanisms and policies.

❖ **Ministry of Science and Technology**

To chair and coordinate with Ministries, ministerial-level agencies, agencies under the Government, People's Committees of provinces and cities under the Central government to implement the Strategy; to organize a preliminary and summary of the Strategy's implementation.

❖ **Ministries, ministerial-level agencies, agencies under the Government, of provinces and cities under the Central government**

To concretize and organize the implementation of the Strategy within sectors and localities; put the main targets, orientations, tasks and solutions of the National Strategy for STI development into the content of strategies, plans and development plannings of sectors and localities.

❖ **Research institutes, universities, other S&T organizations**

To concretize the objectives, orientations of tasks and relevant solutions in the National Strategy for STI Development to 2030 into the development strategy, 5-year and annual plans of the organization; Based on the priority orientations for development of STI, identify, build and allocate resources to perform the STI tasks of the organization.

❖ **Enterprises**

Based on the priority orientations for STI development, identify and build the orientations for STI development of enterprises, cooperate with focus with research institutes and universities to implement STI activities.

❖ **Countries and international organizations**

On the basis of Vietnam's priority orientations for STI development, identify priority areas for cooperation, forms/methods of support and cooperation in the development of STI with Vietnam.

Conclusion

The Strategy for STI Development until 2030 has special significance not only for the S&T sector but also for the entire political system.

The main viewpoints, goals, orientations, tasks, and solutions presented in the Strategy will have a positive impact, leveraging strengths and addressing limitations and bottlenecks in the development of STI, and contributing to the socio-economic development of our country. Thereby, they will help realize the goals and targets affirmed in the 10-year Socio-Economic Development Strategy 2021-2030, which aims to quickly improve Vietnam's competitiveness, take shortcuts, catch up, advance, and surpass, in order to achieve the aspiration for prosperous and powerful development.

In the upcoming time, to successfully achieve the goals, orientations, tasks, and solutions for the development of STI, it requires not only the efforts of the science and technology sector, but also the active engagement of the entire political system, with the collective efforts of all sectors, all levels, localities, businesses, and the entire society.

Links to download the Strategy for STI Development until 2030

- 1) Vietnamese: <https://datafiles.chinhphu.vn/cpp/files/vbpq/2022/05/569-ttg.signed.pdf>
- 2) English: [Strategy for Science, Technology and Innovation Development until 2030 approved | Sci-Tech | Vietnam+ \(VietnamPlus\)](#)
- 3) Russian: [Утверждена Стратегия развития науки, технологий и инноваций до 2030 года | НАУКА-ТЕХНОЛОГИЯ | Vietnam+ \(VietnamPlus\)](#)
- 4) French: <https://fr.vietnamplus.vn/promulgation-de-la-strategie-de-developpement-de-la-science-de-la-technologie-et-de-linnovation/190595.vnp>
- 5) Chinese: <https://zh.vietnamplus.vn/越南至2030年科技与创新发展战略获批发布/175599.vnp>
- 6) Spanish: <https://es.vietnamplus.vn/aprueban-la-estrategia-para-el-desarrollo-de-ciencia-tecnologia-e-innovacion-hasta-2030/167404.vnp>

Thank you!