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The Role of Science and Technology in Sustainable Development: A case Study in Ho Chi Minh city, Vietnam

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***Abstract*---**Science and technology not only improve people's knowledge by assisting them in perceiving and comprehending the world's nature and laws, but also by assisting them in transforming knowledge into technical means, or ways to improve the world, thus effectively serving each country's socio-economic development. Ho Chi Minh City has used its potentials and advantages to seize chances and drive back challenges as part of the international integration process. significant economic, scientific, and technological centers of the country. However, several fundamental issues arise in the growth process in Ho Chi Minh City, such as science and technology failing to match the criteria of the city's sustainable development; The level of science and technology is still low, the competitiveness is low, and production is still based on manual labor; the science and technology staff is still low, and the team of leading experts in priority science and technology fields, such as biotechnology, nanotechnology, microchip technology, and automation, is severely lacking; planning for the development of high-quality human resources has not been given due attention, and implementation has been fragmented; Many issues and deficiencies in policies on training, developing and employing scientific workers in general, and young scientists in particular, remain unresolved. As a result, some significant ideas for promoting science and technology's role in sustainable development in Ho Chi Minh City in the future are proposed.

***Keywords*---**Ho Chi Minh City, science, sustainable development, technology, Vietnam.

Introduction

Ho Chi Minh City is the hub of the Southern important economic region and a major center of the country's economy, culture, and science and technology. To

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promote its benefits, science, and technology in Ho Chi Minh City have produced tangible results in the form of a rapidly growing production force to service socioeconomic needs (Phan et al., 2010). However, science and technology in Ho Chi Minh City have posed problems, such as a low level of science and technology, low competitiveness, and the manufacturing industry's continued reliance on manual labor; science and technology staff remains low, failing to meet the city's rapid development needs; investment in scientific research facilities has increased, but it is still lacking and weak, unable to meet development needs. *Research Questions:*

- What is the status of promoting the role of science and technology in sustainable development in Ho Chi Minh City in recent years?
- What are some solutions to promote the role of science and technology in sustainable development in Ho Chi Minh City in the coming time?

Literature review

Research in science and technology

The work *"Science and technology as a primary productive force"* assert science and technology's central role in industrialization and modernization, as well as the strong relationship between science, technology, and commodity production (Cu, 1996). "Science and Technology with Cultural Values" examine the dialectical relationship between culture and science and technology; science and technology influence philosophy, ethics, art, and lifestyle; culture is oriented toward scientific and technological advancement (Phu, 1988).

"Science and technology to alter the planet and people" is a work in progress. The origins, nature, and evolution of science and technology, as well as the interaction between science, technology, and production, have been examined on both theoretical and practical levels. Science and technology's role is to better the world via realizing cognitive function (Gallagher, 2000; Mollah et al., 2001). The final section of the study examines science and technology's function as the foundation and driving force of industrialization and modernization in Vietnam, as well as its impact on equipment and equipment (Kumar, 2005; Lin et al., 2013). Modern production equipment is crucial for training and promoting human resources, as well as enhancing the mechanism and structure of production management and contributing to the achievement of development objectives sustainability (Tram, 2003).

"Labor productivity" has increased rapidly as a result of scientific and technological advancement, and people in many countries have become prosperous, affluent, healthier, and live longer; however, many of these benefits come with unfavorable side effects, according to the work "The flip side of technology." The book's 15 chapters cover a wide range of topics related to technology's negative effects, including how people know how to use coal, how mineral exploitation has changed nature and climate, resulting in many natural disasters for mankind, how inventions, particularly inventions related to writing, antibiotics, and social networks, have harmed people's health, safety, life skills,

and culture, and how inventions and inventions related to writing, antibiotics, and social networks have harmed people's health, safety (Townsend et al., 2018). *"Science and Technology Development in Vietnam: Current Situation and Solutions"* has analyzed science and technology in Vietnam have made important progress in all aspects, making a practical contribution to economic development - society, improve the quality of people' s life and consolidate national defense and security (Nguyen & Le Khac, 2021). However, science and technology in Vietnam today still has many shortcomings such as: The level of science and technology of social production remains low and backward compared to other countries in the region; low labor productivity; domestic businesses are still less interested in investing in research and development; investment in science and technology activities is low, structure is not suitable, efficiency is low; the contingent of science and technology staff lacks quantity, is weak in quality, and the structure is not suitable. These shortcomings have been affecting the demand for reform of an economic growth model to meet the requirements of rapid and sustainable development. In the coming time, to overcome the above problems, Vietnam needs to deploy a synchronous system of solutions (Vu &Tri, 2021).

Sustainable development research

The work "Sustainable Economics" addressed the issue of traditional economics reform, as well as the necessity to create a new understanding and a foundation for sustainable economics. He argued that the twenty-first century is a test for humanity and that we can choose between two paths: the century of sustainable development or the century of climate and resource conflicts (Robinson, 2004; Hall et al., 2010). The worldwide recession of 2009-2010, as well as the global financial and economic crisis, made us aware of something we had previously overlooked: an economy cannot be built on speculation and bad credit. In the long run, anyone who lives over their means is a failure. Since then, he has laid the groundwork for important reforms in traditional economics, such as ethical foundations, responsibility, and so on, as well as laying the foundations for a new understanding of economic science (Holger, 1954).

"Sustainable Development in Vietnam - Achievements, Opportunities, Challenges, and Prospects" presents the authors' research and evaluation of sustainable development in Vietnam, including 12 economic indicators, 17 social development indicators, 12 environmental resources, and cultural indicators, as well as the criteria used to evaluate sustainable development by Dr. Le Anh Son. The author's criteria are key justifications for studying the state of sustainable development in various regions and provinces across the country (Thai & Loi, 2007). The notion of sustainable development is described in the work "*Sustainable development from concept to action"* as a history of sustainable development conception and the experience of developed and developing countries' sustainable development orientation... (Thanh & Khanh, 2009).

In summary, a review of the research situation related to the topic has shown that, the issue of the role of science and technology in sustainable development has been mentioned and researched quite a lot, but the Those studies are still separate, not in-depth and systematic works (Selwyn, 2003; Guston & Sarewitz, 2002). With a large number of works of high theoretical value and practical

significance as above, it is a valuable source of material for me to inherit, continue to research and discuss in depth and systematically in the article.

Research Method

Theoretical basis, the thesis is carried out based on the worldview and methodology of dialectical materialism and historical materialism, Ho Chi Minh's thought, the point of view of the Communist Party of Vietnam (Tinh, 2021). on the role of science and technology in serving sustainable social development. The issue is also based on research methodologies such as historical and logical methods, analytical methods, and methods, in addition to the overall methodology of Marxist-Leninist philosophy's materialist dialectic. To aid in the research and presentation of the work, synthesis, deductive and inductive approaches, statistical methods, comparative methods, and generalizations from reference sources were used.

Results and Discussion

Status of promoting the role of science and technology in sustainable development in Ho Chi Minh City

Ho Chi Minh City is a significant economic, cultural, scientific, and technological center, as well as a crossroads for international trade and a country of converging potentials and advantages for economic, cultural, and social growth. Globalization and the fourth industrial revolution are currently having a significant impact on Ho Chi Minh City (Phan et al., 2010; Nguyen et al., 2018). In such a setting, the Party Committee and the City administration have always grasped the issue of economic growth and social progress and campaigned for its execution in each step and policy to achieve the development strategic goals. "Increase the city's economic growth quality and competitiveness, link economic growth to cultural development, develop people, achieve progress, social justice, and environmental protection; improve social welfare and people's quality of life." To create a high quality of life, civilization, modernism, and love in Ho Chi Minh City" (Ho Chi Minh City Party Committee, 2015).

Achievement

First, the achievements of science and technology's impact on economic development in Ho Chi Minh City's sustainable development. Over the years, the City's socio-economic development has made a significant contribution to the study, deployment, and use of technology in manufacturing and business, thereby enhancing people's lives. Implement the Party's broad national development reform strategy efficiently. High and consistent economic growth has provided funds for investments in research and technology, human resource development, economic restructuring, and the enhancement of local socio-economic management mechanisms.

Science and technology give to an unending stream of knowledge for employees to study and increase their knowledge and technology levels, but with the rapid advancement of science and technology, modern technologies are continually

socializing in the city's social life. With approximately 125 laboratories and 270 scientific institutes, Ho Chi Minh City has hi-tech Agricultural Parks, Quang Trung Software Park, Biotechnology Research Center, Institute of Computational Science and Technology... In comparison to the rest of the country, the city boasts over 25% of scientific and technology people resources, 50% of registered businesses, and 42% and 15% of creative start-ups and science and technology companies, respectively. In the 2016-2017 fiscal year, the budget for science and technology activities is VND 2,041,979 million (about USD 90 million), or 1.7 percent of the City's total budget; investment in science and technology accounts for 55.2 percent, while expenses for scientific reasons account for 44.8 percent (Ho Chi Minh City Party Committee, 2018). Improve the City's labor productivity; this has created conditions and motivation for city employees to constantly improve the quality, the increasing working capacity of modern technology, and the organization's needs and the need to improve technology, contributing to an increase in the rate of trained laborers from 40% in 2005 to 77.5 percent in 2017, with 26.69 percent of workers working at the primary level of technical expertise; In addition, more than 100 universities, colleges, and intermediate schools, as well as research institutes, are located in Ho Chi Minh City, providing approximately a hundred thousand high-quality professionals each year. Specifically, between 2014 and 2016, the scale of vocational training increased by 1.5 times, while university and college-level training increased by 1.4 times. The city has long had policies in place to promote scientific and technology-related education and training, as well as aggressively linking international partnerships to get access to world-class research and technology. The application of information technology and technological equipment in the production line, which accounts for 70% of work in the city, reflects the quality of the working force (Thang, 2016).

In Ho Chi Minh City, science and technology are all working together to modernize the economic system. The impact of science and technology on the city's economic restructuring towards services, industry and construction, agriculture, forestry, and fishery, as well as the application of science and technology to modernize the city's economic fields and branches, with a particular focus on research and development of spearhead technology fields that contribute to the city's industrialization and modernization processes, such as mechanical engineering, automation, and electrical engineering materials found in the home... The creation of industrial parks, export processing zones, high-tech zones, as well as the implementation of key science and technology programs, all of which contributed to the City's successful implementation of 6 breakthrough programs... have boosted economic development in the service-industry sectors, paving the way for the city's economic restructuring towards sustainability.

Second, science and technology contribute to Ho Chi Minh City's societal development. Workers' primary source of revenue is derived from the sale of their labor power. Poor people's low income is attributed in part to inefficient work and discrimination in the labor market. Here, science and technology bring knowledge and skills to help the poor improve their labor productivity and earn higher incomes, contribute to equity and social progress, and have become the foundation, basis oriented economic development to serve workers, because weak science and technology is one of the fundamental causes of social problems

arising, complicated developments, and what society receives is inequality and discord, which is unsustainable.

In Ho Chi Minh City, science and technology have become the foundation, condition, and driving force for socio-economic development in general and sustainable development in particular. First and foremost, to raise incomes and living standards, as well as to create jobs for workers; second, to narrow the economic gap between the rich and the poor, and to mitigate the negative effects of the market economy through policies that support people from all walks of life, particularly disadvantaged groups, so that they can have more equal access to scientific and technological achievements to improve their living conditions, and, at the same time, to reduce the gap between the rich and the poor in the economy. In recent years, the City has made progress in promoting the importance of science and technology in development. According to the report of the Committee of City People's Committee (2017), "the development of the workforce is improved in both quantity and quality through the improvement of the quality of vocational training (the percentage of working people who have received vocational training)" in the period 2011-2015, the city created 285,938 turns, creating about 615,400 new jobs for employees, an average of 123,000 seats/year (Ho Chi Minh City Party Committee, 2016) contributing actively to the city's social sustainable development goals.

In Ho Chi Minh City, science and technology also play an important role in the protection and care of people's health. This is a high-priority area, with direct consequences for each country's human development index and long-term societal development. The percentage of malnutrition among children under the age of five years has reduced from 6.8% in 2010 to 4.9 percent in 2018 (Ho Chi Minh City Statistical Office, 2019); the average life expectancy of persons in the city is 76.2 years, three years higher than the national average (73.2 years old). When compared to health care in the region (Thailand's average life expectancy is 72 years; Malaysia's newborn mortality rate is at 16 percent), this is a significant achievement in health policy and a 73.3-year average life expectancy) (Ho Chi Minh City Statistics Office, 2019).

The impact of science and technology in the city may also be seen in the efforts and determination to break free from the cycle of poverty, as well as the City government's supportive policies in putting the policies into action. to encourage thankfulness and humanity in the city's long-term progress, policies on hunger elimination, poverty reduction, and social aid for the poor The city has raised the poverty line eight times, which is considered a breakthrough in poverty reduction policy implementation, and poor households' income is now higher than the national poverty line (in the period 2016-2020) is 1.94 times and approaches the international poverty line (2 USD/person/day). According to the City People's Committee report, by the end of 2016, the city had 64,958 households (accounting for 3,325 of the total number of households); near-poor households with incomes between 21 and 28 million VND/person/year and a deficit in all dimensions below 40 points are 46,859 households (accounting for 2.4 percent) (Ho Chi Minh City People's Committee, 2016, p.12); and the remaining number consists of households with incomes between It may be argued that the City's poverty reduction program has brought joy, peace of mind, and confidence to

millions of impoverished individuals who have been able to access and benefit from the City's assistance measures in recent years. City, high-quality essential social services, particularly in education and training, and health care; more opportunities for impoverished families to develop prosperous, egalitarian, progressive, and happy families.

According to data from the Ho Chi Minh City Statistics Office (2018), group 1 (20 percent of people with low income) earns 1,928,000 VND/person/month, which is 2.0 times higher than 2010, and group 5 (20 percent of the highest income earners) earns 13,262,000 VND/person/month, which is 2 times higher than 2010. The income gap between groups 1 and 5 is widening, rising from 6.7 times in 2010 to 8 times in 2015. (2018). This indicates that the disparity in average income between the richest and lowest quintiles in the city has not improved but is expanding; yet, the city's disparity is still lower than the national average (the difference between the richest group and the poorest group in 2018 is about 9.7 times).

Third, research and technology in Ho Chi Minh City contribute to environmental conservation. The rise in population, together with the acceleration of industrialization, modernization, and urbanization, increases natural resources utilized for production and living, the risk of depletion, a lack of raw material shortage, and increasingly available resources. Water contamination and a lack of potable water in the city are growing increasingly worrying. Pollution of wastewater and trash from industrial manufacturing facilities and industrial parks poses the greatest threat. Water contamination occurs when wastewater from daily living, hospitals, livestock, and other sources is not cleaned and dumped directly into rivers, lakes, and canals. Water pollution has an impact on aquatic creatures, marine ecosystems, soil pollution, and human health because water is a source of disease transmission that is vast, quick, and extremely harmful.

The hourly average concentration of carbon dioxide gas and the hourly average concentration of suspended dust next year will always be greater than the previous year, according to statistics from the Center for Environmental Monitoring and Analysis in Ho Chi Minh City today. Aside from dust, the city's air contains a variety of poisonous gases, the most frequent of which are sulfur anhydride, hydrogen carbide, ammonia, and hydrogen sulfide... There are a lot of motorbikes and cars in Ho Chi Minh City; because of the high traffic density, vehicles are a major source of pollution. According to the Department of Natural Resources and Environment of Ho Chi Minh City, the city is currently substantially impacted by environmental impacts in terms of garbage management: Every day, nearly 1.8 million m^3 of wastewater is discharged into the environment; there are approximately 839 industrial waste sources, primarily due to production and construction activities...; domestic solid waste is approximately 8,300 tons per day, and construction waste is approximately 1,200 to 1,600 tons per day. Furthermore, the city receives approximately 3,000 m3/day of sludge generated by water supply and wastewater treatment stations and plants...; more than 2,000 large-capacity factories and about 10,000 small and medium-sized production facilities discharge 1,500 to 2,000 tons of industrial waste per day, of which 350 to 400 tons are hazardous substances...

1.9 million people live in Ho Chi Minh City, which produces almost 3,500 tons of garbage per day. Furthermore, there are about 134,000 waste sources in production, business, commerce, and service enterprises, producing nearly 3,400 tons of waste every day. The volume of hazardous medical waste generated in the city is around 22 tons per day, primarily from the city's more than 6,000 public and private medical facilities.

Diseases including chronic obstructive pulmonary disease, bronchitis, lung cancer, and others have been created by these consequences, impacting the health of the City's residents. Science and technology have had a significant and positive impact on the city's environmental and natural resource protection, as evidenced by the following: For the manufacturing sector, the city has implemented modern technologies, such as environmentally friendly book technology, using technology that produces less pollution..., has saved raw materials and fuel, and has contributed to lowering production costs and improving price content. The city refuses to issue new production and business licenses that pollute the environment, and it relocates and changes technology to eliminate polluting production facilities. In addition, Ho Chi Minh City provides sophisticated facilities and techniques for implementing projects and works to collect and treat scattered trash in waste treatment zones, as well as to combat environmental pollution. West - North Cu Chi complex, Da Phuoc - Binh Chanh solid dispersion treatment complex are examples of modern complex spreading.

Furthermore, Ho Chi Minh City employs modern and high-tech technologies in production and business, benefiting people's lives by conserving energy resources, such as using LED lights for lighting systems and solar energy in daily life, which not only improves people's quality of life but also helps to protect the city's environment and natural resources. Science and technology have supplied the City with sophisticated equipment to install a monitoring system for groundwater, surface water, and air pollution problems, with hundreds of monitoring stations to undertake analysis. At the same time, the City advises 20 enterprises on technology transfer on energy efficiency and renewable energy, focusing on boilers, heat pumps, LED lights, water-saving equipment, V-belts, BEMS; inverters, high-performance marine machines, rice husk electricity, biogas for power generation, biodiesel (Ho Chi Minh City Party Committee, 2016).

Limit

To begin with, the economy has expanded, but it is not sustainable. Although the economy of Ho Chi Minh City has been growing for many years, the quality of growth is not sustainable, not commensurate with the city's potential, growth quality, or competitiveness under current conditions. "The level of integration is low." The proportion of high-value industries and services is still low, and the industry is still heavily processed; the business environment is not open and conducive to attracting investment, launching new businesses, and slowly developing supporting industries; science and technology content in product value is still low... The outstanding problems and "bottlenecks" that are hindering the growth of the economy of Ho Chi Minh City are the shortage of high-quality human resources, the level of science - technology and the speed of technological innovation is still low compared to the region and the world, the physical -

technical infrastructure is still weak... These weaknesses have limited the competitiveness of the economy leading to unsustainable growth.

Second, societal advancement is still constrained. Despite the city's progress and development, science and technology have made beneficial contributions to personal and social life, contributing to the creation of jobs, increased earnings, and reduced poverty, and establishing favorable living conditions for people. by strengthening worker resources in sustainable development, circumstances for everyone to be able to engage in social processes on an equal footing; Science and technology, however, are still "not a driving force for socio-economic development" when contrasted to the criteria of social development in sustainable development (Ho Chi Minh City Party Committee, 2010). This is since the majority of the equipment and technology manufactured in Vietnam, and specifically in the city, is still obsolete and slow to evolve. Vietnamese companies, in general, and Ho Chi Minh City in particular, employ technology that is two to three generations behind the global average (Tri et al., 2021). Only 10% of modern machinery and equipment in Vietnam is qualified, while 38% have average qualifications and 52% have old or highly outdated credentials; only 2% of people use new high technology (this rate is 31 percent in Thailand, 51 percent in Malaysia, 73 percent in Singapore). The majority of industrial production firms in Ho Chi Minh City are barely ordinary, if not backward. The average rate is 32 percent, backward and very backward is 43 percent, and modern technology is only 25 percent. Low labor productivity, high labor intensity, high raw material, and fuel consumption, high product prices, and a lack of market competitiveness are all symptoms of technical backwardness (Arunachalam, 2018).

One of the reasons that science and technology have not been pushed in social development is that the city has faced considerable obstacles as a result of its practices, such as: i) The income gap between the richest and poorest quintiles is widening. According to the Ho Chi Minh City Bureau of Statistics (2015), group 1 (20 percent of the lowest income earners) has a monthly income of 1,837,800 VND, which is 4.2 times higher than in 2004, and group 1 (50% of the highest income earners) has a monthly income of 11,894,600 VND, which is 4.5 times higher than in 2004 (Tri et al., 2021). The income difference coefficient between groups 1 and 5 is gradually widening. ii) The benefits of economic growth have not been evenly distributed among all classes of society, "the effectiveness of poverty reduction is not sustainable" (Ho Chi Minh City Party Committee, 2015), and "the greater the difference in life and cultural enjoyment between the people in the inner city and the suburbs" (Ho Chi Minh City Party Committee, 2015); iii) The work of medical examination, Although the medical network has been expanded in the field of people's health care, it is not adequately distributed and inconvenient for individuals.

Third, resources and the environment are currently "hot" topics and have emerged as one of society's most pressing worries. The following are examples of how this category of difficulties expresses itself (Widana et al., 2020). Pollution in the environment has reached dangerous levels. The hourly average concentration of carbon dioxide gas and the hourly average concentration of suspended dust next year will always be greater than the previous year, according to statistics from the Center for Environmental Monitoring and Analysis in Ho Chi Minh City

today. Aside from dust, the city's air contains a variety of poisonous gases, the most frequent of which are sulfur anhydride, hydrogen carbide, ammonia, and hydrogen sulfide... There are a lot of motorbikes and cars in Ho Chi Minh City; because of the high traffic density, vehicles are a major source of pollution.

In terms of trash management, the city's ability to handle waste and household wastewater has already been exceeded due to the growing urbanization of approximately 10 million people. The City's water contamination is being exacerbated by the combination of domestic and industrial wastes. Thousands of cubic meters of wastewater are discharged daily into the Dong Nai and Saigon river systems from metropolitan areas, industrial and agricultural production zones, and local farms (Tay Ninh, Binh Phuoc, Binh Duong, Dong Nai). The end of the source, Ho Chi Minh City, is the most affected by surface water contamination from the Dong Nai and Saigon river systems. The quality of water sources will be impossible to enhance without a coordinating structure between the City and the villages. Diseases like chronic obstructive pulmonary disease, bronchitis, and lung cancer have resulted as a result of these effects, posing a threat to the City's social security.

Some solutions to enhance the effect of the role of science and technology in sustainable development in Ho Chi Minh City

Firstly, raising awareness fully and deeply about the implementation and promotion of the role of science and technology in sustainable development in each step, each strategy, and each socio-economic development policy. associations in general in the Party Committee, government and agencies, social organizations and people of the City. From there, creating a unity in awareness and action of the city's political system, towards the goal of human development.
Secondly, develop a strategy for strong development of science and technology as a basis for improving productivity, quality, efficiency and competitiveness of industries, fields and the whole economy, promoting restructuring economy and renovating the economic growth model, promoting R&D, innovative start-ups, applications combined with technology development, especially in new potential and strong industries and fields. Renovate and perfect mechanisms and policies for mobilizing, allocating and effectively using investment capital for science and technology activities. Continue to improve the policy of state budget investment in science and technology activities in the direction of avoiding overlapping and overlapping allocations, avoiding scattered investment, and ensuring effective use and strong development of labor resources intelligence, raising people's intelligence, training talents.

Thirdly, it is necessary to actively develop and implement policies aimed at solving social problems arising in the development process in accordance with the characteristics of large cities in the country. According to the requirements of the harmonious growth model, policies need to be perfected in two directions: (i) Make all classes of people in society participate in the economic growth process to benefit directly from the fruits of growth; (ii) Timely redistributing the results of growth among all classes of the population, between inner cities and suburbs to create a positive and equitable movement in social progress for people. Implement policies to develop science and technology in parallel with solving social problems

well for the purpose of human development; at the same time creating favorable conditions for the development of non-public healthcare, piloting the establishment of medical examination and treatment establishments in the form of public-private partnership and hospital management model as a public enterprise; speeding up the implementation of universal health insurance; encourage and support all creative ideas, promote innovation and development, especially in the fields of economy, society, science - technology, culture, art...

Fourthly, promote medical socialization, pilot the establishment of medical examination and treatment establishments in the form of public-private cooperation and hospital management model as a public utility enterprise; speeding up the implementation of universal health insurance; encouraging and supporting creative ideas, promoting innovation and development, especially in the fields of economy, society, science - technology, culture, art,... Management of social development Society must focus on building a rational social development model, focusing on expanding the low-income social class on the basis of constantly improving people's living standards take advantage of international support through strengthening propaganda and promotion of foreign aid-seeking programs; use it for the right purpose as committed when receiving aid; publicity and transparency in the use of international aid.

Conclusion

Promoting the role of science and technology in sustainable development in Ho Chi Minh City is one of the basic factors reflecting the level and quality of local sustainable development. In recent years, promoting the role of science and technology in sustainable development in Ho Chi Minh City has contributed to transforming the modern economic structure, thereby serving as a lever to promote growth fast and sustainable economy, improve competitiveness, ensure sustainable development in HCMC. However, promoting the role of science and technology in sustainable development in Ho Chi Minh City also poses many challenges to the goal of sustainable development, it is necessary to implement the above solutions synchronously. to further promote the role of science and technology in Ho Chi Minh City to become the foundation and strong driving force for sustainable development; to build and develop the city into an economic, financial, scientific and technological center of the whole country and of Southeast Asia.

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