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Balancing economic growth and sustainability for environmental protection in Southeast Asia: a regional perspective

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Abstract

Purpose – This paper examines the complex relationship between environmental protection and economic growth in Southeast Asia, focusing on the region's efforts at balancing rapid development with environmental sustainability. It analyzes current challenges, emerging trends and potential solutions for achieving sustainable development while maintaining economic growth.

Design/methodology/approach – The study employs a comprehensive literature review methodology, analyzing academic sources, government reports and international organization publications from 1998 to 2025. It combines qualitative analysis of policy frameworks and case studies with quantitative assessment of environmental impacts and economic costs. The research framework integrates multiple perspectives on environmental governance, technological innovation and sustainable development.

Findings – The analysis reveals that Southeast Asia contributes approximately 40% of global greenhouse gas emissions, with energy-related emissions projected to rise by 34–147% between 2017 and 2040. Environmental degradation costs the region 1–9% of their GDP. However, promising developments include increasing renewable energy adoption (projected 35% solar photovoltaic technology by 2025), improved sustainability reporting frameworks and innovative financial instruments. The study identifies key challenges in institutional capacity, policy implementation and resource management while highlighting successful initiatives in countries like Singapore and Vietnam.

Originality/value – This article brings together important historical events, present problems and expected future changes in Southeast Asian economic growth and environmental protection. By linking environmental governance, technological progress and economic growth, it gives lawmakers, companies and academics useful ideas and analysis. The study is especially helpful for figuring out how emerging countries can deal with environmental problems and still grow in a way that does not harm the environment.

Keywords Sustainable development, Southeast Asia, Circular economy, Environmental governance, Climate change resilience, Green energy transition

Paper type Research paper

Introduction

The transformation of Southeast Asia's economy presents a paradox of human progress and environmental consequences. The region's amazing wealth has pulled millions of people out of poverty, but like a double-edged sword, it has also left a long shadow over its ecological future. This strong economic engine is responsible for almost 40% of the world's greenhouse gas emissions. It is now at a very critical juncture where industrial ambitions meet environmental imperatives.

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Southeast Asia's development story resembles a powerful river, carving new paths of opportunity while occasionally breaching its banks. As cities reach skyward and factories hum with activity, the region's appetite for energy—particularly fossil fuels—grows insatiably. Recent studies paint a sobering picture: projections indicate a potential surge in energy-related emissions of 34–147% between 2017 and 2040, despite mounting environmental concerns (IEA, 2024).

Yet, emerging trends point to a move toward sustainability. Scholars call this the "decarbonizing revolution," and it is part of a big plan to have net-zero emissions by the end of the century (ACE, 2020; Zhou *et al.*, 2020). Keeping the region's economy going strong while coordinating this big environmental transformation is hard. It draws a fine line between progress and protection that will define our generation's legacy.

Several important trends are shaping the region's sustainable development, including changes in regulations and business responsibility, the use of technology, adapting to and being resilient to climate change, financial innovation, working across borders, and building up people's skills. The region must balance growth with environmental protection and sustainability.

The region's energy mix poses a significant challenge, with coal still accounting for over 40% of power production, making energy change a significant obstacle (Fallin, Lee, & Poling, 2023). But there are some positive signs in the use of green energy. ASEAN member states are likely to have 35% of solar photovoltaic technology by 2025, and costs have gone down remarkably, making it more competitive (Ecodrisil, 2025).

Despite ASEAN's significant progress in green energy, further efforts are necessary to ensure a sustainable energy future and fully realize its potential. The area's utility-scale wind and solar power potential grew by 20% in 2023, to more than 28 gigawatts (GW). With 19 GW of total power, Vietnam leads the region, followed by Thailand and the Philippines, each with 3 GW. Southeast Asia is expected to have more than 35% of total energy power by 2025. However, an additional 10.7 GW is required to achieve this goal. However, challenges such as delays in project initiation, regulatory issues, and dependence on coal and gas persist (Smith, O'Malia, Prasad, Stylianou, & Behrsin, 2024).

Overall, there are promising developments in renewable energy adoption. Environmental rules are becoming tighter, and guidelines for sustainability reporting are improving. The Corporate Sustainability Reporting Directive (CSRD) and other rules are compelling companies to report on their environmental effects with greater transparency and responsibility (de Wysocki, 2024). When AI and green projects come together, they change the way companies deal with environmental problems. Companies are using AI to better collect and analyze ESG data, enabling them to monitor environmental impacts more effectively (Fernandez & Mun, 2025). Integrated methods to address climate change are becoming more and more important to countries. Some countries are focusing on developing green energy while making sure everyone can afford to get power. This demonstrates the alignment of economic and environmental goals (ESCAP, 2024).

The financial sector is introducing new sustainable finance products such as green bonds and loans tied to sustainability. These products are important for funding environmental projects while also helping the economy grow (Fleming, 2024). To protect the climate, countries are building effective alliances. For example, Singapore has made deals with other countries to act on climate change, which shows how important it is to work together across borders. Additionally, an increasing number of individuals are recognizing the crucial role of trained workers in promoting healthy growth.

Europe's need for workers with "green" skills has grown by 5% each year from 2021 to 2024. This is a trend that will likely affect how Southeast Asia develops its talent (Fernandez & Mun, 2025). On the other hand, the region is confronted with significant challenges, including an average annual increase in transport emissions of 2%, the need to invest approximately $1.5 trillion annually in sustainable energy transitions, and an anticipated 79% and nearly 100% increase in passenger and freight transportation by 2050. But there are possibilities in the

private carbon market, which is growing quickly and making it possible for new ways to cut down on pollution. Supply chain management and the creation of business models and structures that can withstand climate change could utilize sustainable methods (de Wysocki, 2024).

Because of how complicated the situation is, we need a reasonable method that considers both economic and natural needs. To be successful, policy frameworks, technology adoption, and financial methods that support long-term growth and sustainable development must continue to be improved.

This study focuses on Southeast Asia to look at the complicated link between protecting the environment and economic growth in the region. The main objective is to figure out how these areas can combine rapid economic growth with protecting the earth. The study employs a comprehensive literature review method, incorporating academic sources, government reports, publications from international organizations, and new data from 1998 to 2025. It looks at policy frameworks and case studies using qualitative analysis and figures out the costs and effects on the environment and the economy using numeric data. The study focuses on new issues, problems, and possible answers for protecting the environment while keeping the economy growing.

Historical context and evolution of the development-environment relationship

The connection between environmental protection and economic growth has changed a lot over the years. There have been many important events that show how this complicated and diverse problem has changed over time. MacDonald (1998) points out that the modern environmental movement took off in the 1960s. The 1962 groundbreaking book *Silent Spring* by Rachel Carson played a significant role in raising awareness about the connection between economic activity and environmental damage. The Stockholm Conference on the Human Environment in 1972 was a major event that showed how developed and developing countries had different ideas about how to connect the environment and development. It also set the stage for future arguments and talks (United Nations, 1972).

Sustainable development is an idea that came about in the late 1980s as a possible way to balance the needs for economic growth and environmental safety. A common understanding of sustainable development came from the Brundtland Report of 1987, which stressed the need to meet the wants of the present without making it harder for future generations to do the same (World Commission on Environment and Development, 1987). Many countries and groups have used this concept as the basis for their policies and plans, which has had a big impact on the way people talk about sustainable development around the world.

Transforming the idea of sustainable development into effective policies and practices is still very hard, especially in places like Southeast Asia that are growing very quickly (Elliott, 2004). The Earth Summit in Rio de Janeiro in 1992 was a turning point in the history of sustainable development. The United Nations signed the UN Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD) at this summit (United Nations, 1992). Different goals and interests have often slowed down these international deals, which have been crucial for supporting sustainable development and addressing environmental issues.

The idea of sustainable development has grown and changed over the past few years to include new ideas and trends. The UN approved the Sustainable Development Goals (SDGs) in 2015, providing a comprehensive plan for achieving sustainable development. They have 17 goals and 169 targets that deal with many problems, such as poverty, inequality, climate change, and environmental damage (United Nations, 2015). The SDGs emphasize the significance of adopting a comprehensive and integrated strategy for sustainable development, acknowledging the interconnectedness of economic, social, and environmental issues.

Getting different goals and interests to work together is one of the hardest parts of achieving sustainable development. Rockström *et al.* (2009) state that climate change, species loss, and

environmental destruction are putting enormous stress on the Earth's systems, putting at risk the very roots of human well-being. As a way of thinking about the limits of Earth's processes and how sustainable growth needs to work within these limits, the idea of planetary borders has grown (Steffen *et al.*, 2015).

Another important trend in sustainable development is that people are becoming more aware of the need for fair and open ways to protect the environment and grow the economy. Poverty and inequality are big problems for sustainable development, according to the World Bank (2019). To fix these problems, it is imperative to focus on fair and inclusive economic growth as well as protecting people and the environment. The idea of a "green economy" has come up to achieve sustainable development. It focuses on social and environmental safety, as well as low-carbon and resource-efficient economic growth (UNEP, 2011).

Ultimately, the relationship between economic progress and environmental protection has undergone significant changes over time. Many important events have marked this issue's growth and development. The idea of sustainable growth has become popular to balance different goals but putting it into practice is still very hard. New ideas and trends, such as the SDGs, planetary borders, and fair and inclusive ways to grow the economy and protect the environment, are transforming the global conversation on sustainable development. Understanding the links between economic, social, and environmental problems and using unified and all-encompassing methods is crucial as the world grapples with the challenges of achieving sustainable development.

Key development trends affecting environmental protection

Several major trends have shaped the environment-development dynamic in Southeast Asia as overviewed below:

Rapid urbanization and industrialization

Southeast Asia's urban expansion presents a complex environmental challenge that demands immediate attention. According to UNDESA (2018), the region's urban population will surge dramatically by 2050, creating unprecedented pressure on the environment, particularly in emerging and established megacities (Hugo, 2019). This rapid urbanization, driven by industrialization and economic growth, is reshaping the regional landscape at an extraordinary pace.

The environmental impact is multifaceted and severe. The region hosts several of the world's most polluted areas (World Bank, 2002), with major air pollution sources including biomass burning, vehicle emissions, industrial activities, and waste incineration (Gu, Fang, & Yim, 2024). Water pollution and access to clean water remain critical issues, threatening public health and ecosystem stability. Additionally, inadequate waste management systems lead to serious health hazards and water contamination, creating a cycle of environmental degradation (UNEP, 2019).

The relocation of manufacturing facilities from OECD countries to Southeast Asia, particularly to China and Vietnam, has intensified industrial pollution. While foreign direct investment (FDI) drives economic growth and employment opportunities (UNCTAD, 2020), it has simultaneously accelerated environmental degradation and biodiversity loss across the region (Kojima, 2016). This trade-off between economic development and environmental preservation presents a significant policy challenge.

Cities are responding with innovative solutions to address these challenges. Green infrastructure, including rooftop gardens and urban forests, helps combat urban heat islands and improve air quality (Santamouris, 2014). Renewable energy adoption is increasing, with many countries setting ambitious targets to reduce their carbon footprint (IRENA, 2018). The circular economy concept is gaining traction to reduce waste and promote sustainable consumption patterns (Ellen MacArthur Foundation, 2019).

Big problems exist that need to be solved. Poor management, not enough money, and bad infrastructure continue to make it hard to carry out environmental policies (World Bank, 2018b). Rapid growth has also made social gaps bigger, and many city dwellers can't get basic services like clean water, sewage, and medical care (WHO, 2019). These problems hurt weak groups more than others and could undo the region's progress in growth.

A comprehensive strategy must combine the adoption of renewable energy, improved urban planning, and green infrastructure. Importantly, improved regulatory frameworks, stronger governance systems, and sustainable urbanization planning are essential. Achieving a balance between environmental preservation and economic development is crucial while ensuring equitable access to resources and services. Southeast Asian cities can only expect to build livable, sustainable urban environments for future generations by implementing integrated solutions.

Globalization effects

The link between economic globalization and environmental protection is complicated and has many sides. On one hand, global competition can lead to a "race to the bottom" in environmental rules, as countries might lower their standards to draw in foreign investment. Companies focused on making the most profit may choose to cut costs instead of caring for the environment, which can result in damage and waste. But foreign investment can also help the environment by bringing in cleaner technologies and better practices. Big companies usually set higher environmental rules for their operations around the world to keep their good reputation and satisfy what consumers expect globally (Angel & Rock, 2000).

"Green globalization" is a new idea that looks at how global trade and investment can help protect the environment and promote sustainable development (Zhang, Xu, Chen, Li, & Chen, 2022). This method recognizes how globalization affects the environment but also shows its ability to bring about positive change. It highlights that economic growth and environmental protection can work together instead of being at odds when managed well. At the same time, "green finance" has become more important, including things like green bonds and impact investing to support environmental projects and encourage sustainable economic growth (Sachs, Woo, Yoshino, & Taghizadeh-Hesary, 2019). These new financial ideas are opening ways to fund environmental projects and encouraging sustainable business practices.

Even with these changes, there are still big challenges to face. Managing and keeping an eye on environmental impacts in today's global economy is still a major concern. It's still hard to put environmental rules into practice across borders, especially in developing countries that have fewer resources and weaker institutions. Environmental justice is an important issue because pollution and damage to the environment often hit vulnerable groups the hardest, like low-income communities and indigenous peoples. This unfair spread of environmental problems brings up important ethical and policy issues.

The global economy has had two main impacts on protecting the environment. Even though competition can harm the environment, working together internationally can help us use cleaner technologies and improve environmental practices. New ideas like green globalization and green finance provide hopeful ways to achieve sustainable development, but there's still a lot to do to tackle issues of environmental governance and justice.

To successfully balance globalization and protecting the environment, there needs to be teamwork between countries, solid rules, and creative financial solutions. It needs policies that take advantage of globalization's benefits while reducing its environmental risks, making sure that economic growth helps both people and the planet. Lasting global development that keeps the environment sound for future generations can only be achieved via these thorough methods.

Technological change

Scientific and technological progress could make a big difference in protecting the environment while keeping the economy growing. The Asian Development Bank, on the

other hand, says that these tools are still difficult to get in many places, especially in developing countries (ADB, 2003). This is usually because of a lack of money, infrastructure, or institutional strength, all of which can make it harder to adopt and use new technologies. Additionally, research goals often prioritize financial gain over long-term sustainability. This can lead to the creation of technologies that aren't beneficial for the environment (Hart, 1995). Genetically modified organisms are said to increase crop productivity and reduce insect susceptibility. However, their long-term effects on the environment are still not fully known (Zhang, Wohlhueter, & Zhang, 2016).

A new trend in this field is "green innovation," which means creating and using new technologies and products that are good for the environment and will last (Chavira, Shamsuzzoha, Kuusniemi, & Jovanovski, 2023). Renewable energy, energy economy, and products that last a long time are just a few examples of green innovations. The notion of a "circular economy" is an important trend as it seeks to cut down on trash and encourage people to reuse and recycle things (Ellen MacArthur Foundation, 2019). Using circular economy ideas can help lessen the damage that making and using things does to the world. They can also help create new businesses and jobs.

Although there are opportunities, there are also significant issues that require resolution. It is difficult to deal with "technology transfer," which is the process of moving new technologies from one country or area to another (Corsi, Pagani, Kovaleski, & Da Silva, 2019). Transferring technology can be challenging for many reasons, such as intellectual property rights, trade deals, and rules and regulations.

The "digital divide," which denies everyone the same access to digital tools and the internet, is another problem. It can make it harder for people to use and accept new technologies, especially in Southeast Asia and other developing countries. It has significant implications for protecting the environment, especially when it comes to getting the knowledge and technology that are needed for environmentally friendly practices. Communities and regions lacking robust ICT systems may struggle to implement environmental policies and monitor environmental changes in real time (ITU, 2021).

Thus, although progress in science and technology may lead to ways to lessen the damage we do to the world while still allowing for growth, these are hard to come by in a lot of places, and research goals are often set by how profitable they are rather than ensuring sustainability.

Population growth and resource pressures

High population growth, along with higher levels of spending, puts a huge amount of stress on natural resources and ecosystems, which threatens both the health of people and the environment in the area (ESCAP, 2019). Southeast Asia's rapid development and manufacturing have led to a significant increase in energy consumption. Fossil fuels, which pollute the air and release greenhouse gases, still provide a significant portion of this energy (WHO, 2021). The increasing demand for food, water, and other natural resources also leads to significant challenges. For example, many Southeast Asian countries are having trouble getting enough water, their soils are getting worse, and they are losing species (FAO, 2019).

As part of "sustainable consumption" and "circular economy," renewable energy sources, like solar and wind power, are also becoming more important. Many Southeast Asian countries have set high goals for adopting these sources (IRENA, 2018). Even so, the environmental problems the region is facing are complicated and diverse and need a broad and all-encompassing method to solve. Rapid development and economic growth in the area have damaged the environment in many ways, such as by polluting the water and air and cutting down trees (UNEP, 2019).

Environmental governance, or the ability of governments and other interested parties to control and handle environmental effects, is a significant issue (Biermann, 2014). Many Southeast Asian countries do not have sound environmental governance, which makes it challenging to follow environmental laws and policies. This allows environmental damage to

continue unchecked. Another issue is "climate change," which is disproportionately impacting Asia due to its geographical location and fragile economy (IPCC, 2019). Rising temperatures, changing rainfall trends, and an increase in extreme weather events are putting food security, water resources, and human villages in the area at risk. Lastly, the growing population and higher spending levels in Asia are placing significant stress on natural resources and landscapes, posing a threat to both the climate and people's health. Some new ideas and trends, like circular economy and sustainable spending, look like they could help solve these problems. But there are still big problems, like how to control the earth and climate change.

Economic costs of environmental degradation

Environmental damage in Southeast Asia has big and far-reaching effects on the region's economy, people's health and well-being, and even their ability to stay alive. Studies show that damage to the environment costs different Asian countries between 1% and 9% of their GDP. China, the Philippines, and Thailand are some of the countries most impacted (ADB, 2001; World Bank, 2002).

Southeast Asia's environmental damage comes with high economic costs. Air and water pollution lead to many health issues. WHO says that air pollution causes more than 500,000 deaths each year in Asia, which is a significant economic strain (WHO, 2021). Using resources in an unsustainable way, like cutting down forests, puts future economic growth at risk by harming ecosystem services and lowering possible income (FAO, 2020).

Also, environmental damage has a big effect on farming. Soil erosion, lack of water, and climate change are putting crop production at risk. The ADB warns that climate change might cut farm productivity in some Asian countries by as much as 50% by 2,100, leading to major economic losses (ADB, 2022). Furthermore, damage to the environment hurts tourism income.

"Natural capital accounting" focuses on the economic worth of natural resources and points out the financial impact of harming the environment (United Nations, undated). This approach considers that natural resources are limited and can greatly affect the economy. Green finance can help gather money for eco-friendly projects that support sustainable growth in Southeast Asia. Still, even with these efforts, environmental harm keeps causing major economic issues. We need to do more to fix these issues. The fast economic growth in the area has harmed the environment, and if no action is taken, the costs will keep increasing. Besides green finance and natural capital accounting, we need to take more steps to stop environmental harm and support long-term growth in the region.

Poverty and environmental links

Poverty and environmental harm are closely connected in Asia. People with less money usually feel the biggest impact of environmental damage, even though they play a smaller role in causing it. This leads to a vicious cycle (IPCC, 2023). The uneven sharing of environmental costs and benefits is a big factor. Wealthy people often take advantage of resources and escape the bad effects, while those with less money suffer the most from the harm. This unfairness drives poverty and worsens the environment (Martinez-Alier, 2002). Also, not having enough access to things like clean water and energy makes poverty worse. Poor communities often suffer more from environmental damage, making them spend more on basic needs (World Bank, 2019).

The health effects of environmental damage hit the poor the hardest. They live in polluted places and don't have proper healthcare, which causes more illnesses and financial problems (WHO, 2024; World Bank, 2018a). These linked issues keep the cycle of poverty and environmental harm going.

Environmental damage disproportionately impacts poor and marginalized communities (Schlosberg, 2009). Environmental justice seeks to redistribute environmental costs more

equitably and address the root causes of poverty and ecological harm (Martinez-Alier, 2002). Sustainable livelihood approaches aim to tackle these interconnected challenges by creating economic methods that protect both people and the environment (DFID, 2000).

Practitioners recognize that poverty and environmental degradation are deeply linked, focusing on sustainable resource management like farming and logging. In Asia, in general, rapid urbanization and economic growth have intensified environmental challenges, with poor populations bearing the heaviest burden (WHO, 2024).

A comprehensive strategy is crucial—one that holistically understands the complex relationship between poverty and environmental damage, and actively promotes justice and sustainable development.

Governance and implementation challenges

Southeast Asia faces various challenges in managing its institutions, coordinating policies, and ensuring proper market functioning. Not many strong environmental laws and regulation systems exist in most of the region. This is because environmental bodies are often understaffed and don't have enough political power (ADB, 2001). Economic planning often keeps environmental concerns separate, rather than incorporating them into growth plans (Lehmann, 2017). The markets do not always take environmental costs into account, which leads to wasteful use of resources and overconsumption.

However, there are several promising ways to protect the environment and help the economy grow. Market-based tools, like price controls and economic benefits, can help people behave in ways that are beneficial for the environment. Singapore's congestion pricing and vehicle limit system, Thailand's cost-sharing plan for wastewater treatment, and China's and South Korea's carbon pricing programs are all examples.

Community-based management methods have also helped protect the environment and promote long-term growth. The Community Forest Stewardship Agreements in the Philippines and village water management programs in Indonesia are all examples of this type of work. Technologies like clean energy, water treatment and recycling systems, energy-efficient building designs, and smart city technologies can help protect the environment while keeping the economy growing.

Policy unity is also important for finding a balance between different objectives. Examining policy formulation from a wider perspective can aid in incorporating environmental considerations into growth planning. Some examples are environmental impact studies for building projects, green growth strategies, integrated urban planning, and ecosystem-based methods of adaptation. In Singapore's case, the country's "green growth" plan has helped it grow its economy quickly while keeping the environment in excellent shape (Singapore Government, 2012). In the same way, China's efforts to support green energy and eco-friendly technologies have created new business possibilities while also lowering the country's environmental impact (Yu, 2024).

Protecting the earth also depends on the actions of many different groups. Governments must establish regulations, ensure their adherence, and foster an environment conducive to sustainable growth. Cleaner technologies, business social responsibility programs, green investments, and sustainable supply chains are all things that the private sector can do to help. Civil society organizations play a crucial role in monitoring the environment, advocating for its protection, educating and increasing public awareness, implementing local projects, and holding other stakeholders accountable.

Several crucial recommendations emerge. Policies must integrate environmental concerns into all aspects of growth planning. We need market change to establish fair prices for natural resources, eliminate environmentally harmful handouts, and establish market-based methods for environmental protection. Institutional strengthening plays a crucial role in enhancing the authority of environmental agencies, facilitating their oversight and enforcement, and bolstering environmental governance across all levels. The community must support community-based

resource management, facilitate environmental knowledge acquisition, increase civil society's involvement in decision-making, and enhance environmental understanding and teaching.

The green economy contributes to environmental protection, and economic growth need not be mutually exclusive; they can complement each other (UNEP, 2011). Using renewable energy, healthy crops, and eco-friendly tools, the green economy method tries to support long-term growth and reduce poverty. Also, circular economy ideas are becoming more popular, and their goal is to cut down on waste and encourage the smart use of resources (Ellen MacArthur Foundation, 2019). The straight take, make, and dispose model of production and consumption cannot go on forever, and circular economy methods try to make the economy more circular and renewable. Overall, protecting the environment needs a thorough, unified plan that deals with the problems of government and encourages long-term growth. The suggestions above can help lawmakers, companies, and non-governmental groups start working together to protect the climate and support long-term growth in Southeast Asia.

Conclusion

Southeast Asia faces big challenges when it comes to protecting the environment, but it also has great potential for new ideas that can help both nature and the economy grow. The idea that being good for the environment and growing the economy can't happen together is old-fashioned. It's time to move beyond this misunderstanding and embrace strategies that acknowledge the strong link between a healthy economy and a healthy environment.

Evidence from various Southeast Asian countries shows that taking care of the environment can go hand in hand with economic growth. Good environmental management helps the economy grow sustainably and improves our quality of life. But achieving this teamwork needs ongoing cooperation from governments, businesses, and communities. Making policies needs to be careful and based on a clear understanding of how economic systems and natural ecosystems rely on each other.

Future researchers will need to play an important part in connecting these areas, working on better tools for combining policies, looking into the economic advantages of protecting the environment, and creating models that can be used in different areas. Measures like the Genuine Progress Indicator (GPI) or Human Development Index (HDI) could provide fresh ways to appreciate environmental services. Policies need to consider how they affect various groups in society, making sure that marginalized communities, like the poor and Indigenous people, receive fair benefits from environmental programs.

A "green economy" can balance environmental and economic goals. Investing in clean energy, sustainable farming, and green technologies can promote long-term growth and help reduce poverty. In the same way, the growth of "circular economy" ideas, which aim to reduce waste and make the best use of resources, provides a way to achieve sustainable development.

The Southeast Asian environment and economy are closely connected. Building infrastructure can boost industry and connect the world, but it can also harm ecosystems. On the other hand, policies such as lower taxes on clean technologies and local economic agreements can encourage eco-friendly practices. Changes in trade that support sustainable investments, and new ideas will help strengthen long-term environmental health.

Sustainability needs to be made a key part of what governments and companies do. Focusing on green infrastructure, supporting low-carbon industries, and implementing strong environmental rules are important steps to achieve this goal. Southeast Asian countries can build a future that is both successful and fair, while also being good for the environment, by moving past the idea that growth and sustainability are opposites.

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