

Strategic Plan for National Spatial Development

Summary



Planning Principles

Visions and Goals

Policy Guidelines for
National Spatial
Development

National Spatial
Structure

Implementation

Strategic Plan for National Spatial Development Summary

June 2010

Strategic Plan for National Spatial Development
(Summary)



Preface	04
Environmental change	04
Trends and challenges	06
Planning Principles	14
1.1 Definitions	14
1.2 Purposes	14
1.3 Orientation	14
1.4 Core values	16
1.5 Evidence-based planning and action plans	17
Visions and Goals	20
2.1 Safe, nature and ecology	20
2.2 Prime and healthful living	21
2.3 Knowledge-based economy and international logistics	23
2.4 Saving energy, reducing carbon emissions, and conserving water	24
Policy Guidelines for National Spatial Development	26
3.1 National land conservation	28
3.2 Innovation and economic growth	29
3.3 Urban-rural sustainable development	30
3.4 Green and intelligent transportation	31
National Spatial Structure	32
4.1 National spatial structure	32
4.2 Concept of national spatial governance	44
Implementation	52
5.1 Problems of implementing national spatial planning and development	52
5.2 Concrete strategies of spatial governance	54
5.3 Execution of the Plan	59

Land is the root of national development and people’s survival. Sustainable development of national land is vital for a country’s long-term peace and stability and for its people’s happiness and well-being. Therefore, the government has a responsibility to the people who have settled in Taiwan over the generations, to conduct national land planning and development in a way that satisfies everyone’s greatest aspiration in life by creating a suitable home and work environment. This third national spatial plan will present strategies for Taiwan’s spatial development, and will serve as guiding directions for long-term development planning by the central government, local governments, and all government agencies.

Environmental Change

More than a decade has passed since the Council for Economic Planning and Development (CEPD) formulated the second National Comprehensive Land Development Plan. During that time, there have been many huge changes in the domestic and international environments and in economic and social development, which have substantially altered the directions of national spatial development.

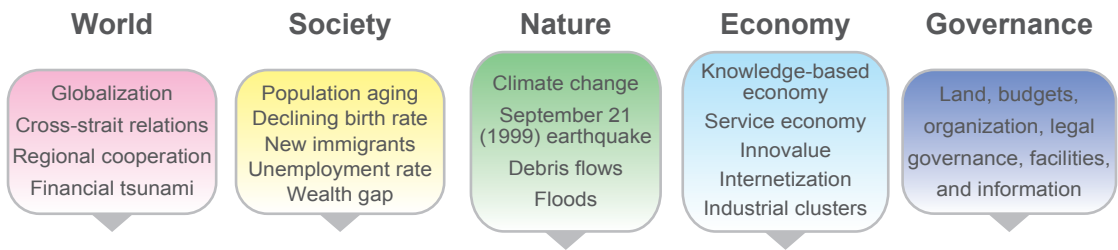
- 1. In recent years, all parts of the world have

experienced increasingly frequent and severe floods and droughts, with escalating ecological damage, under the effects of global warming and climate change. These natural disasters have had a sharply rising environmental and economic impact. Hence, the whole world has reached consensus on and is taking vigorous action toward reducing greenhouse gas emissions and adjusting activities to mitigate these menacing trends.

Taiwan is facing a great challenge from climate change and inappropriate land development. Floods and debris flows caused by torrential typhoon rains have become increasingly common, resulting in severe damage to land resources, loss of soil and water resources, and environmental degradation.

The flooding and debris flows caused by Typhoon Morakot on August 8, 2009 took an exceptionally heavy toll on upland forest and low-lying coastal areas in southern Taiwan, resulting in massive loss of life and property, significant harm to the national economy, and widespread destruction of the upland forest environment.

We cannot avoid being struck by natural disaster. The only questions are: When, where, and how severely will they strike? Hence, we need



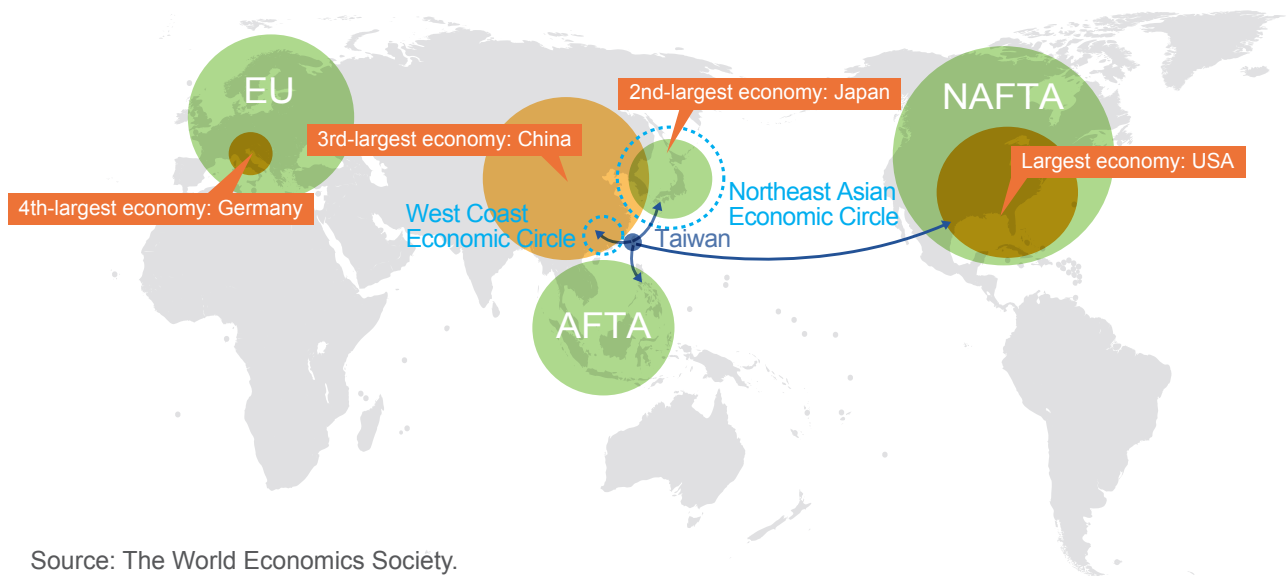
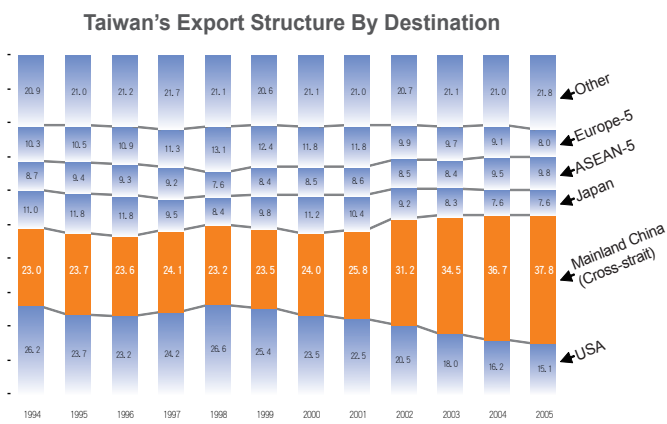
to change our approach to spatial development by heightening emphasis on living in harmony with changes in the natural environment. This has now become a main theme of our government.

2. Globalization has intensified competition in the international economy. The 21st century has brought a reordering of the world economy, the accelerating integration of regional economies, and the rapid development of innovation- and knowledge-based economic activity. Against this background, Taiwan's industry has entered a transitional stage, with many of its industries moving production to mainland China, and with strong ebb and flow of change occurring in the economic and trade status on either side of the Taiwan Strait.

Concomitant change has appeared in the economic, social, and cultural realms. Competition between city-regions has intensified, the unemployment rate has risen, the wealth gap has widened, and civil society has experienced a growing quality divide. These phenomena have

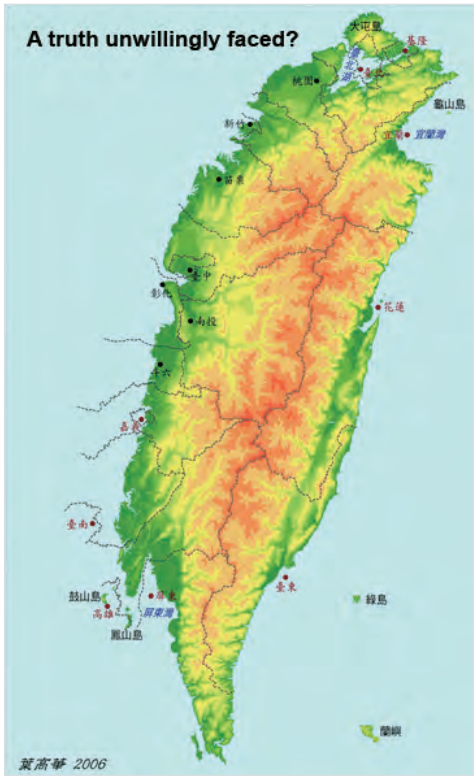
exerted an extensive and profound impact on national spatial development.

The effects of globalization, changes in East Asia's politico-economic temporal and spatial environment, changes in Taiwan's overall development needs, trends of change in the natural environment, the merging of administrative districts, and the launch of high-speed rail service along the west coast, all contribute to the necessity of reevaluating Taiwan's land use situation. To address the major development issues currently facing the nation



Source: The World Economics Society.

and society, we need to come up with a new national spatial framework and development orientation that takes in global and East Asian fields of vision. We also need to plan and present policy and strategy directions in the four main spheres of education, economic affairs, town and country planning, and transportation at the national and regional levels, strengthen domestic regional governance capabilities, and propose new ideas for creating an environment that raises Taiwan's overall competitiveness and helps us toward achieving sustainable development.



**Taiwan With The Sea-Level
Raised 35 Meters**

(Source:<http://richter.pixnet.net/blog/post/504390>)

Trends and challenges

After examination of the trends and challenges affecting Taiwan's national spatial development, the following were identified as the main spatial issues to be taken into consideration in the subsequent formulation of spatial development strategy.

1.Globalization and the accelerating development of cross-strait relations.

The universal spread of information and the convenience of transport have made it easy for resources to flow quickly between countries. This has induced manufacturers to form globalized systems for division of production labor, as a means of reducing manufacturing costs and locating themselves close to their markets. Countries worldwide are responding to the intense competition in global markets and the gradual deepening of regional economic integration by moving toward the development of economic alliances. At present, the world's three main regional economic integration blocs are the European Union, the North American Free Trade Area (NAFTA), and the ASEAN+3 grouping.

Since 2002, East Asia has been Taiwan's biggest export market, accounting for more than 50% of Taiwan's total export value. Within this region, mainland China is our most important trade partner, export market, and source of trade surplus (in 2008, it took 39% of Taiwan's gross exports and received 69% of Taiwan's total

outward FDI). This demonstrates that mainland China and other East Asian countries are already on an equal footing with the US and Europe in affecting Taiwan's economy and trade. The aforementioned trends of globalization and development of cross-strait relations both have a bearing on domestic industrial spatial deployment and transportation policy.

City-regions

A city-region is a regional economy developed jointly by a central city and neighboring counties and cities, forming a spatial partnership in which they complement each other's strengths and offset each other's weaknesses in respect of industrial clusters, work force, and public amenities. By expanding the infrastructure and eliminating the boundaries of cross-regional governance, they create spatial resource integration synergies. To keep up with the global trend of the development of spatial networks, the central cities of major city-regions usually develop a concentration of high-quality service functions, and become important global or regional nodes.

2. The environmental impact of climate change

The incessant development of human economic activity has caused a continuous increase in the concentration of greenhouse gases in the Earth's atmosphere. The strengthening greenhouse effect has caused global warming, rising sea levels, and the yearly increasing frequency and heightened severity of extreme and abnormal weather. This has produced massive changes in the world's eco-environment, upset the balance of eco-systems,

and seriously affected the security of human life and property.

Under the impact of this global climate change, Taiwan also has faced significant changes in its climate in recent years. The effects of these changes have posed severe tests and challenges for life, production, ecology and survival.

3. Scarce fossil energy and unstable prices

In recent years, sharply rising oil prices have been a focus of global attention. Due to the rapid growth of energy consumption in emerging

Glocalization

At the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro – the so-called “Earth Summit” – world leaders adopted Agenda 21, which emphasized the principle of “thinking globally and acting locally,” and called on local authorities to play the role of leaders, communicators and suppliers of resources for putting the Agenda into effect. In 2002, this movement was taken further forward with the proposal of eleven sets of prerequisite conditions, covering reform of traditional diplomacy, peace and development, culture-centered issues, local governance, resource management, civil society and democracy, public foundations, private-sector resources, fiscal mechanisms, innovative sectors, and capacity building. In addition, action strategies were presented for the seven major prioritized sectors of city diplomacy, local socio-economic development, culture, tourism, sports, empowerment of young people, and information and communication technologies (ICT).

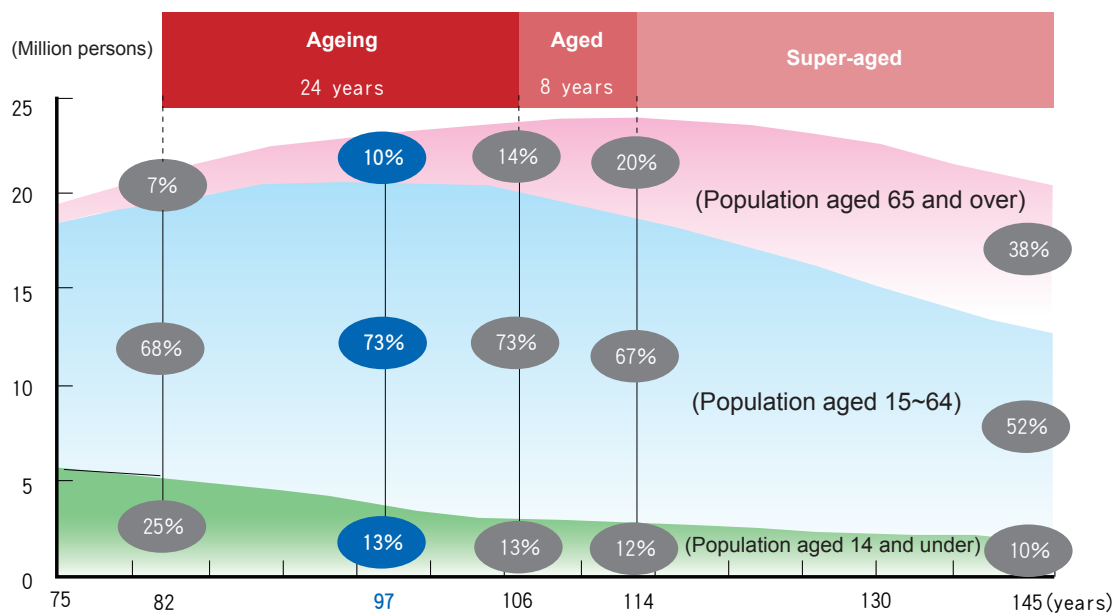
countries, the combination of high demand with constrained supply is likely to keep energy prices at a relatively high level. Although Taiwan is an export-oriented country, it is highly dependent on imported energy. Hence, the energy problem and energy price fluctuation will impact Taiwan’s international competitiveness and economic development.

To reduce dependence on imported energy and effectively raise energy-use efficiency, Taiwan needs to rethink its approach to spatial location and the utilization of national land resources. This includes adjusting its transportation pattern toward the development of public transport, and reviewing urban-rural and industrial spatial location, to reduce metropolitan energy use and

achieve the optimum division of production and consumption among various forms of energy. It also calls for using Taiwan’s natural resources to develop clean or renewable energy, and developing a self-sufficient green energy industry.

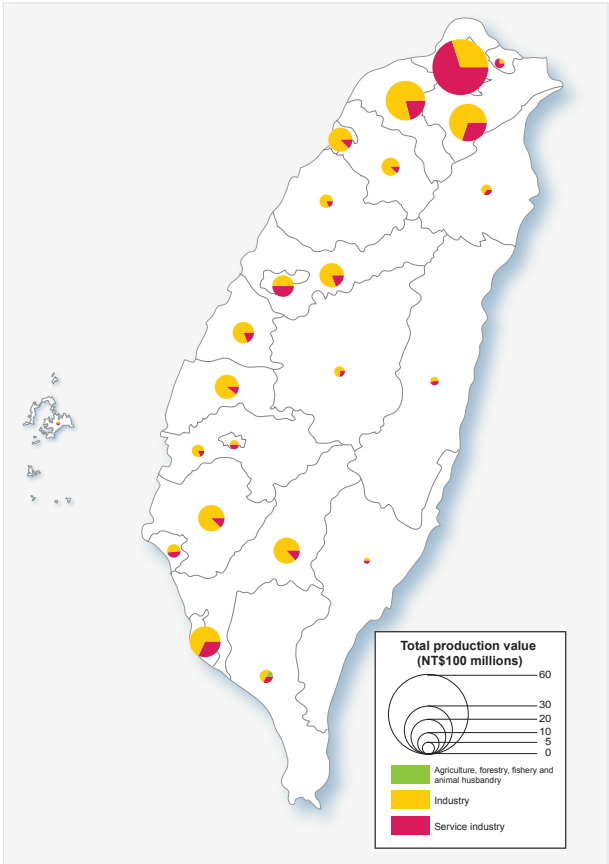
4. Generating city-region competition and trans-regional platforms

Taiwan’s transnational economic competition and linkage is based mainly on geo-economic relations, and it cannot break away from the influence of East Asian and cross-strait economic spheres. Apart from the important economic spheres centered around ASEAN and Japan, the area in East Asia with the highest economic potential is the Greater China economic sphere



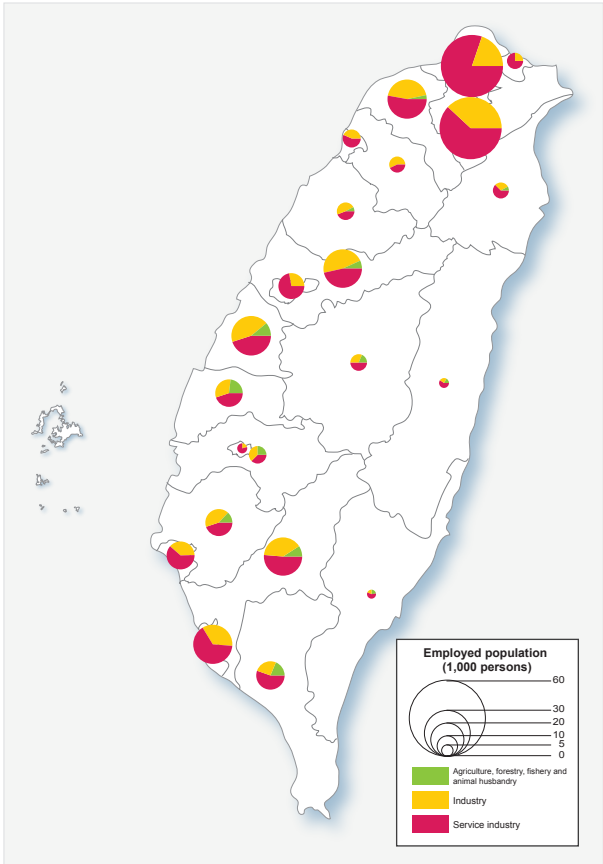
Note: Circled percentages represent the ratio of the age group to the total population at each stage of the population aging trend.

Three Step Population Change and Trend In Taiwan



Total Production Value of Each City and County In 2006

composed of mainland China’s coastal belt, Hong Kong and Taiwan. Within this sphere, the economic region encompassed by the Shanghai city region in the Yangtze River Delta, the Hong Kong city region in the Pearl River Delta, and Taiwan has been delineated as the most important golden triangle of economic growth in Southeast Asia. Since the two sides of the Taiwan Strait gained membership of the WTO, the functional linkage and scale of their economies have developed as never before in history. Hence, there has been a progressively



Employed Population of Each City and County In 2006

maturing line of thinking of the two sides of the strait as belonging to one and the same economic development region.

From the perspective of metropolitan development trends, large cities gain status as global cities by virtue of their global logistics capabilities, and draw the continuous centric concentration of surrounding resources to form large metropolitan areas, or evolve to the even higher level of city-regions. Prime large metropolitan areas and city-regions form a domino effect, massively siphoning in industries



Industrial Cluster Corridors

and talent within the scope of their influence, and enabling spatial resource integration synergies to be created through the formation of cross-regional governance mechanisms and platforms.

Taiwan currently has 25 counties and cities. Under the existing two-tier framework of central and local governance, resource competition and homogenizing development often result in deficiency of scale and lack of distinctive features in urban and rural development. In the past, regional cooperation mechanisms were unable to fully establish and optimally serve as competitive

advantages, making it hard for cities to compete internationally in terms of either economic scale or differentiated development. Hence, there is a need to introduce the concept of inter-regional cooperative governance, with a view to ensuring that Taiwan’s future advancement of regional integration and resources deployment can achieve the maximum benefit.

5.The features of glocalization

In order to be able to build city brands and shape local features, countries worldwide have actively implemented glocalization policies in recent years. Although the general environment is influenced by globalization, there has been a gradual awakening of local consciousness, which has developed into a significant force of resistance to globalization. How to better reflect a city’s unique culture, and how to blend it into and solidify it in the city’s landscape, buildings, industries, residential environment and city residents’ consciousness, to enhance it into an element of the city’s competitiveness, has become a challenge for domestic city governments.

6.Demographic trends of population aging and a declining birth rate

In recent years, Taiwan’s population growth has been in a slowing trend due to falling marriage and birth rates. According to the CEPD’s Taiwan (ROC) Population Projections for 2008~2056, the growth of total population in the Taiwan area will turn from positive to negative during 2023 to 2028. In respect

of the population structure, as advances in medicine and sanitation extend the average life expectancy, the ratio of elderly people will steadily increase, and the old-age dependency ratio will rise and be extended in duration. As population growth declines and population aging speeds up, and in accordance with current trends in the spatial distribution of population, it is projected that the situation of population concentration in northern and western metropolitan areas will continue into

the future.

To respond to the demographic problems of population aging, low fertility, and uneven spatial distribution, it is necessary not only to broadly adjust related policies for population, industry, education, labor, medical care, and so on, but also to make appropriate adjustments in the future to the quality and quantity of public facilities, social service facilities and systems, and spatial allocation.



7. Industrial spatial development from cluster formation to corridor formation

In Taiwan, industrial spatial development has been largely concentrated in the northern region. Also, from the perspective of the regional industrial structure (in terms of total production value and number of people employed), primary industry is mainly concentrated in Yunlin and Pingtung Counties, while the spatial development of secondary industry is concentrated in Taoyuan and Taipei Counties, and tertiary industry is concentrated in Taipei City and County.

As industrial clusters develop, they will gradually gather greater industrial development momentum, and in due course develop into industrial cluster corridors. This will be advantageous to raising the competitiveness of the clusters and maximizing their synergies. Countries worldwide have been vigorously implementing policies to promote industrial clusters. In face of this trend, Taiwan must continue to increase knowledge investment and manpower cultivation, and meld innovation with creativity in building high value-added industrial corridors that seamlessly integrate R&D, innovation and production. From the north to the south of the country, regions incorporating around three to four counties and cities can be formed, with each possessing all of the elements needed (water, electricity, living amenities, manpower, etc.) to support its particular industries. This will help us far better against the intensity of international competition.

8. The IT revolution and internetization

The leaping progress of information and communication technology (ICT) and steadily advancing maturity of broadband network technology have enabled the increasingly rapid dissemination of information and knowledge. This has had a revolutionary effect on economic, social, cultural and spatial development. It has also changed people's behavioral and living patterns, opening the way to elasticizing, virtualizing and individualizing people's living and working modes. The building of complete and well functioning information network infrastructure has profoundly influenced the course of living and industrial development. The booming development of the online virtual marketplace has changed people's traditional ways of doing business and promoted greater variation of employment options. However, on the downside of the ledger, the development of ICT has also spawned a flood of junk information, internet crime, digital divides, and other such social problems.

At the same time, ICT infrastructure and pertinent applications have become important items in ranking the competitiveness of cities and nations. Therefore, in the future, we will need to pay great attention to how to continue building a prime information society, and apply spatial geographic information systems more widely to national land planning, urban construction, communities, and even households, to materialize the conveniences that applications of information and digital technology can bring to life, and incorporate our information

industry development into turning Taiwan into an intelligent society.

9. Inability to achieve efficiency and fair balance in resource allocation

In the past, the government was unable to achieve efficiency and fairness in the overall allocation of resources. The reasons for this included weak efficacy of governance and difficulty of exerting public authority, plus the inability to effectively establish cross-regional, cross-sectoral and cross-functional integrated development and governance mechanisms. Moreover, in the current allotment of public works budgets, there is a lack of rationality in the division of rights and responsibilities between central and local government, and a lack of consistency in the application of regulations concerning central government subsidies to local government. This gives rise to an excess of demand for construction works, for which insufficient public funds are available, so that project schedules are stretched over-long, and disadvantaged areas are unable to obtain positive and effective assistance.

Furthermore, current central resource allocation mechanisms have caused local governments to get trapped in an inefficient zero-sum contest, vying with each other for industrial park, public infrastructure and transportation projects, while neglecting development of a more suitable nature. And since the government's fiscal constraints make it impossible to fully meet all spending

demands, the result is that public works and service facilities are limited and inadequately dispersed, but at the same time, contradictorily, are often idle or under-used. All of these circumstances will present major challenges for future national spatial development.

10. Rising consciousness of environmental protection

When economic development and environmental protection generated conflict, when scarcities of energy and food made us aware that environmental resources are non-renewable, and when global warming caused the weather to go haywire, icebergs to melt, ecosystems to break down, and suchlike phenomena, important international meetings began to incessantly propose agendas, agreements or treaties for protecting the environment – such as Agenda 21, the Convention on Biological Diversity, the Kyoto Protocol, and the United Nations Framework Convention on Climate Change – to serve as pointers for the direction of effort world citizens should make, or as obligations all of us should do our best to discharge. A comparable series of development has occurred in Taiwan, where, ever since the Environmental Impact Assessment Act was promulgated and put into effect in 1994, pollution emission standards have been continuously raised across the board, concern about domestic environmental problems has prompted the general populace to become actively involved in environmental protection work, and more and more signs have indicated that a tide of green environmental consciousness has formed and is rising year by year.



1.1 Definitions

Spatial planning is the implementation of a series of land-based strategies to integrate and coordinate the spatial development-related allocation of locations and resources among different sectors, to solve co-opetition and conflicts between sectoral policies, promote harmonized environmental, economic and social development, achieve the effective arrangement of spatial order, and reduce regional development gaps, so as to raise overall national competitiveness. Strategic planning is the problem-oriented proposal of approaches and ideas for solutions.

1.2 Purposes

This strategic plan is composed as follows: First, it identifies the key development trends and issues facing spatial development. Next, it maps out the establishment of visions, goals, and development concepts for future national spatial development. After that, it sets out the spatial development policy guidelines for land conservation and sustainable resource

management, innovation and industrial economic development, urban-rural sustainable development, and transportation and communications infrastructure. Finally, it presents an action plan for national spatial governance from the five main basic facets of land, funding, organization, legislation, and governance, to serve as the basis for the government's future implementation and propulsion of national land development by all cabinet agencies.

1.3 Orientation

To respond to the rapid changes in the temporal and spatial environments at home and abroad, and to meet the needs of overall national development, the CEPD in the past formulated two basic national land development plans, the 1979 Plan for the Overall Development of the Taiwan Area and the 1996 National Comprehensive Land Development Plan. Now, in succession to those plans, it has drawn up the Strategic Plan for National Spatial Development, of which the main functional orientation is as follows:

The United Nations Economic Commission for Europe (UN/ECE) defines the spatial planning as follows:

Spatial planning is concerned with “the problem of coordination or integration of the spatial dimension of sectoral policies through a territorially-based strategy. More complex than simple land-use regulation, it addresses the tensions and contradictions among sectoral policies.” (Source: UNECE, 2008, *Spatial Planning: Key Instrument for Development and Effective Governance*)

The basic policy and goal of national spatial development

The basic policy and goal of national spatial development is: Under the precondition of giving top priority to land conservation and environmental sustainability, pursuing the objectives of establishing international competitiveness poles and building a creative environment, while paying due attention to the efficiency, effectiveness and social inclusion required for governance of the process of land development.

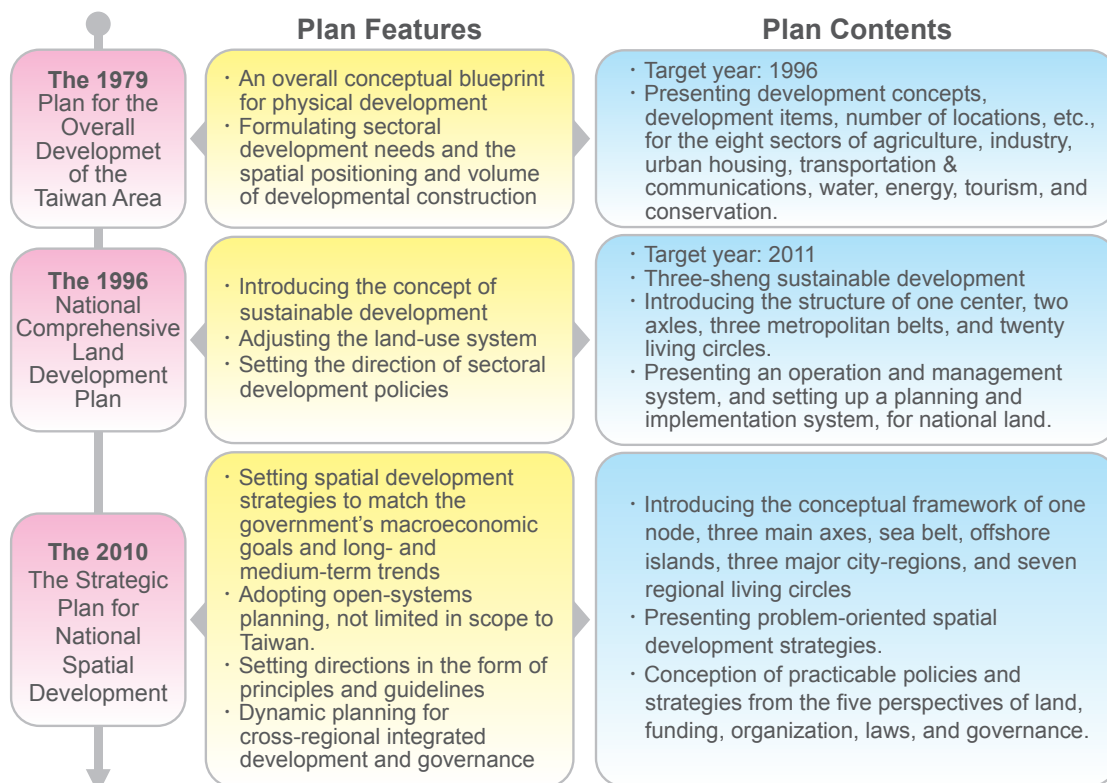
Solution-oriented planning

While cabinet agencies and local authorities

present a massive number of tasks for government implementation, the government can only rely on limited budgets and laws to carry them out. Since laws cannot put themselves into effect, this strategic plan will play the driving role. And in the future, whenever there are major changes in the politico-economic temporal and spatial environment, the government will carry out a timely review of the plan and dynamically adjust it according to actual need.

The root of reasonable allocation of spatial resources

This strategic plan will serve as the basis for government planning of major infrastructure



projects and allocation of spatial resources. When planning and assessing legislation in respect of land development or investment in development projects, government and private entities alike must substantially adhere to the guidelines set out in this plan.

This strategic plan is a different kind of blueprint planning from the two national land development plans that preceded it. The main difference is the key importance of the spatial issue, and the provision of strategic directions for spatial development in the form of principles and guidelines. Another important difference is that this plan stresses cross-regional, cross-sectoral and multi-functional integrated development and governance, to cope with the socio-economic and environmental changes that constantly occur domestically and internationally. Moreover, to address the new spatial development trends of globalization, regional integration, and inter-city competition, the plan embodies a new concept of fluidity of national land (the blurring of national borders). Hence, this plan takes an open systems planning approach in place of a closed one, and is not limited by timeframe or issues, to enable elasticity of response to future changes in the temporal and spatial environments by means of dynamic review and adjustment.

1.4 Core values

Sustainability & Adaptation

With due importance attached to the impact of climate change, land development activity and thinking will be adjusted toward seeking a balance between economic growth, social justice

and environmental sustainability.

Equivalence & Balance

Whether urban or rural, in the north or south, east or west, or on the main island or the offshore islands, every region will have equivalence of development opportunity, and enjoy equivalence of employment opportunity and living quality. That is to say, every region will be developed appropriately, but that does not mean they will all receive the same quantity of development or public facilities.

Efficiency & Effectiveness

Under the prerequisites of equivalence and balance, all adopted modes of governance must at the same time place emphasis on efficiency of execution process and effectiveness of execution results.

Diversification & Cooperation

Under the prerequisites of equivalence and balance, all adopted modes of governance must at the same time place emphasis on efficiency of execution process and effectiveness of execution results.

Open Systems & Dynamic Planning

Although Taiwan is an island nation, it is still largely influenced by globalization and the formation of various kinds of regional alliance. Because of that influence, the location of residential and industrial zones is affected by such factors as division of labor, manpower supply, cost considerations, and global positioning, which all have a bearing on land use, the provision of public facilities, and

the quantity and quality of residential living amenities. Therefore, the scope of land-related planning must transcend national boundaries and be progressively and dynamically adjusted over the course of time.

Since government policy implementation is a matter that concerns the mass of the people, it is impossible to have perfect policies and schemes. Therefore, the most pragmatic and flexible approach the government can take to land planning is to apply the second-best principle of adopting second-best solutions that prioritize satisfying the greatest number of the people and are not injurious to the overwhelming majority of people. When undertaking planning, the government must be sure to retain the flexibility to carry out step-by-step micro-adjustments or gradualistically formulate different development options.

Flexibility & Adjustment

After spatial strategic planning has been carried out, and has generated a series of policies, strategies and actions, it is essential to continuously survey environmental changes, social needs, etc, during the subsequent course of implementation, and to amend and adjust action plans as required. That is the only way in which the highest goals of dynamic, strategic planning can truly be achieved.

1.5 Evidence-based planning and action plans

A full array of evidence-based indicators and data for population, economic, business,

social and environmental development should be carefully studied as the basis for strategy formulation, to carry out targeted problem-solution action plans. Requirements for an effective evidential base include: assumptions being clear and consistent, consistency with national and regional planning policy guidelines, compatibility with transboundary tasks and adjacent mechanisms, connectivity between policy and evidence, rationalization of evidence and delineated choices for dealing with changes of situation, interconnection with sustainable evaluation and monitoring, and the conduct of rolling review and revision.

With full consideration given to cross-strait relations, population aging, the low birth rate, global climate change, energy saving, the reduction of carbon emissions, the recent global financial crisis, Asia's gradual emergence as the engine of global economic growth, and other changes in the general environment at home and abroad, as well as to the main issues currently facing government administration, and the overriding needs to attain a sustainable economy, sustainable society, and sustainable environment, the overall goal of national spatial development strategy is: to create an innovative environment and build a sustainable society, with sights set on the new national land development vision of making Taiwan into a country that has a safe natural ecology, prime living and health, a knowledge-based economy and international logistics, and is energy saving, carbon reducing, and water conserving.

Strategic Plan for National Spatial Development
(Summary)



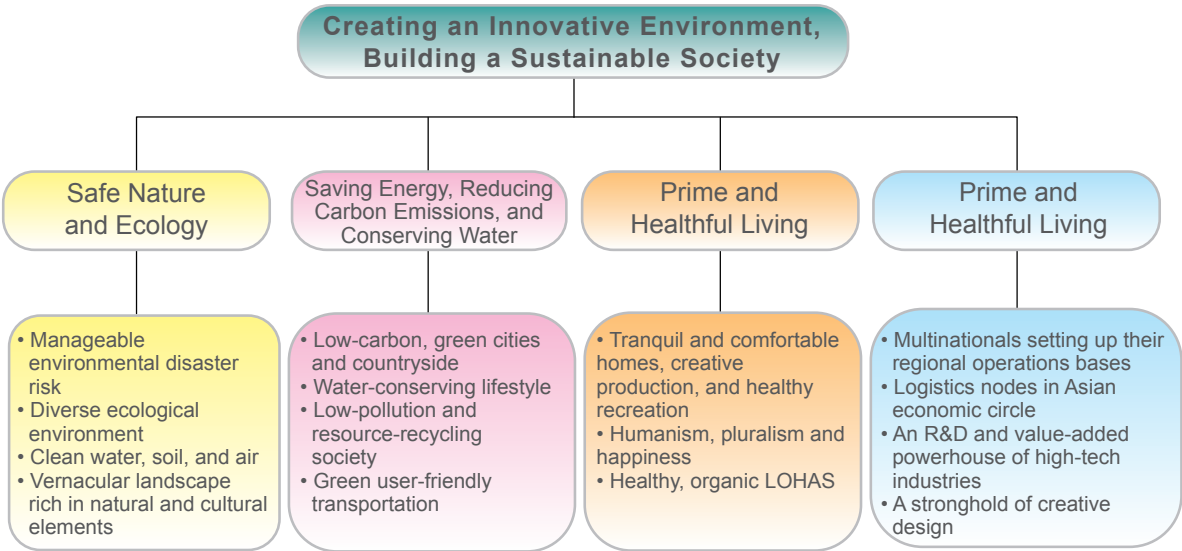


With full consideration given to cross-strait relations, population aging, the low birth rate, global climate change, energy saving, the reduction of carbon emissions, the recent global financial crisis, Asia’s gradual emergence as the engine of global economic growth, and other changes in the general environment at home and abroad, as well as to the main issues currently facing government administration, and the overriding needs to attain a sustainable economy, sustainable society, and sustainable environment, the overall goal of national spatial development strategy is: to create an innovative environment and build a sustainable society, with sights set on the new national land development vision of making Taiwan into a country that has a safe natural ecology, prime living and health, a knowledge-based economy and international logistics, and is energy saving, carbon reducing, and water conserving.

2.1 Safe, Nature and Ecology
Managing environmental hazard risk

The government needs to understand and respond to the impacts of global environmental changes, limit improper development, and adopt natural disaster prevention concepts. At the same time, the government should place emphasis on keeping abreast of information on environmental hazards and providing early warning of such hazards, and seek ways to manage and reduce hazard risk, to build safe and worry-free living space.

- Responding to global environmental changes and promoting the safety of Taiwan’s land environment.
- Carrying out comprehensive governance of river basins.
- Building green infrastructure, and enhancing disaster-prevention capabilities in urban and rural areas.



Diverse ecological environment

Taiwan is a stopping-point in the migration paths of many animals, and is globally renowned for the variety, density and ratio of unique species of its flora and fauna. Across-the-board efforts need to be made to conserve its rich ecological resources, with integration of endeavor in the economic, scientific, educational, and tourism realms to ensure that those resources are used in a sustainable manner, so that Taiwan can play the role of a global repository of plant and animal species.

- Protecting ecological resources and improving the animal habitat environment and review system.

Clean water, soil and air

Land development should take full account of the environment's carrying capacity. This includes protecting forests, bolstering forestation, strictly managing upstream water catchment areas, raising the wastewater treatment rate, and effectively reducing, preventing and controlling water, air and soil pollution. Where the environment has already been polluted, it requires strengthened monitoring and vigorous implementation of prevention and remediation measures. At the same time, gradual steps should be taken to adjust energy consumption distribution and the industrial structure, to develop a low-carbon economy, encourage low-carbon lifestyles, and build sustainable and clean living space.

- Planning land use for low-carbon cities and countryside and low-carbon energy facilities.
- Fulfilling the utilization and conservation of farmland resources.

Rich in natural and cultural landscape

In the future, we should carefully protect and actively utilize all of Taiwan's natural landscapes, resources, folk spirit, festivals, traditional buildings, and traditional crafts to develop unique local "identification marks." Natural and cultural landmarks everywhere should be restored, maintained and enhanced so as to strengthen the people's bonds of identification with and attachment to these spaces, and make them a "spiritual homeland" for the people.

- Elevating land esthetics and building creative urban and rural environments.

2.2 Prime and healthful living

Tranquil and comfortable homes, creative production, and healthy recreation

To create prime and healthful living conditions in Taiwan, the first requirement is to provide a high-quality residential environment. There is also a need to deliver sound maintenance of public order, affordable high-quality housing, fast and convenient low-carbon public transport, ubiquitous communication networks, and excellent medical and social welfare services, all of which are indispensable elements for the future development of prime and healthy urban

environment. In addition, there need to be locations allocated at various levels of urban-rural systems for appropriate sharing of public facilities and public service resources, to create tranquil and comfortable living environments in both city and countryside.

- Promoting urban regeneration to put land to most beneficial use.
- Providing the public facilities and living amenities needed for a satisfying quality of life.
- Making good use of information and communication capabilities to improve future living and reduce urban-rural divides.
- Elevating land esthetics and building creative rural and urban environments.
- Developing blue transportation, opening Taiwan's sea belt to tourist activities, and promoting the coastal transport industry.
- Moving toward a green user-friendly transport development model.

Humanism, pluralism and happiness

Recently in sustainable city development worldwide, "greenness, health and happiness" have become established as the key attributes of the model city. That is, "humanism and harmonious co-existence with nature" have emerged as the basic values for urban and rural livability. Ecology, Living, Production and Survival have become the benchmarks of sustainable development, representing the wish for cities to provide their residents with "happiness, security, health and comfort" by becoming oases of pleasure, creative vitality and

hope.

- Providing the public facilities and living amenities needed for a satisfying quality of life.
- Building green infrastructure, and raising disaster-prevention capabilities in cities and the countryside.
- Planning land use for low-carbon cities and countryside and low-carbon energy facilities.
- Moving toward a green user-friendly transport development model.

Healthy, organic, LOHAS

A high economic growth rate is no longer the only target of pursuit. The importance people attach to living healthily and happily, as reflected in the growing popularity of LOHAS and "slow living" philosophies, will have a certain degree of impact on Taiwan's urban and rural spatial planning and policy in the future. In keeping with the globally renowned sophistication of Taiwan's agricultural technology, and the recently booming popularity of a healthful organic diet and leisurely living, the government will in the future strive toward building a healthy, organic and happy environment for the Ecology, Production, Living and Survival.

- Fulfilling the utilization and conservation of farmland resources.
- Comprehensively developing farm villages and tribal areas, to ameliorate the imbalance of the urban-rural divide.
- Providing the public facilities and living amenities needed for a satisfying quality of life.

2.3 Knowledge-based economy and international logistics

A setup-point for the regional operations of multinational enterprises, and a logistical node of the Asian economic circle

The rapid rise of mainland China's economy has led to increasingly close economic and trade interaction between Taiwan and the mainland. After the opening of the "three links" across the Taiwan Strait, we must find ways of re-presenting Taiwan's unique locational advantages in this new situation, and speed up the implementation of deregulation, to attract transnational enterprises and overseas-operating Taiwanese businesses to set up regional operations headquarters in Taiwan. We must also find ways to balance our market positioning in the world's three major economic and trade blocs (NAFTA, the EU, and ASEAN+). Besides engaging in merchandise trade, we also need to actively develop services trade (in such spheres as international logistics and international tourism), encouraging local firms to invest in overseas markets and to ally with Taiwanese businesses around the world to form global service marketing networks and secure marketing channels, so as to balance the economic and trade risks of globalization.

- Bolstering international linkage capabilities and gateway functions.
- Sharpening city-region competitiveness and carrying out growth management.
- Strengthening the integrated development of city-region transportation systems and networks.
- Integrating regional advantages and industrial clusters.

Industrial technology R&D and value-adding powerhouse

Taiwan has become a key player in the global value-chain of high-tech industries. It also possesses competitive industrial clusters, as exemplified by the Hsinchu, Central Taiwan and Southern Taiwan Science Parks, with complete high-tech industrial and academic network support systems around them. The cluster effect is particularly conspicuous in Taiwan's semiconductor, information hardware manufacturing, information software, and emerging biotech industries, and is even gradually forming into regional sci-tech corridors. In addition, new-generation high-tech research parks are being developed, which will raise Taiwan's capacity for innovative R&D, and spur the creation of a new economic miracle in Taiwan.

- Promoting industrial clusters to match regional strengths.
- Broadening the flexibility of industrial land use.
- Setting up a mechanism for transforming old industrial zones.
- Planning the promotion of industrial innovation corridors.

Stronghold of creative design

In the Global Competitiveness Report 2007-2008 issued by the World Economic Forum (WEF), Taiwan ranked 3rd globally and top in Asia in the technology and innovation subindexes. In the future, we should build on the foundation of Taiwan's excellent capacity for innovation,

matched with the additional strengths of its all-round industrial capabilities, highly efficient business services, high-quality human resources, democratic political system, free and open social atmosphere, high tolerance of foreign cultures, and ability to define new and original vanguard products, to develop Taiwan into a stronghold of creative design with Eastern features.

- Setting up regional innovation systems.
- Planning the promotion of industrial innovation corridors.

2.4 Saving energy, reducing carbon emissions, and conserving water

Low-carbon, green cities and countryside

In the Guidelines for Sustainable Energy Policy, the Executive Yuan has set the targets of reducing national CO₂ emissions to their 2008 level during 2016 to 2020, and to their 2000 level by 2025. Pursuit of these targets will center on both reducing energy demand and increasing the supply of clean energy. Energy-saving targets include raising energy efficiency by at least 2% annually, and reducing energy intensity (the amount of energy consumed per unit of output of goods or services, with higher intensity corresponding to lower energy efficiency) to at least 20% below its 2005 level by 2015. Increasing the supply of clean energy will involve promoting reshaping of the energy structure and higher efficiency of energy supply and use, developing non-carbon renewable energy, and promoting energy diversification, with the target of raising the ratio of electricity

generated from low-carbon and medium-carbon energy from 40% to at least 55% by 2025.

- Land-use planning for low-carbon space and low-carbon energy facilities.

Water-conserving lifestyle

Due to Taiwan's complex geological and topographical conditions, its short rivers, and its heavy concentration of population in narrow space of habitable land, the average volume of fresh water available for distribution per head of population is less than one-sixth of the global average. Hence, Taiwan is listed as one of the world's water-deficient countries. Since the sustainable use of water resources has a strong bearing on a country's future long-term development, it is essential that the government make appropriate plans for contending with this situation by protecting water resources, raising the efficiency of water use, preventing and remediating water pollution, recycling water for re-use, and so on.

- Carrying out comprehensive governance of river basins.
- Building green infrastructure, and enhancing disaster prevention capabilities in urban and rural areas.

Low-pollution and resource-recycling society

In face of the limitation of natural resources and the environment's carrying capacity, one of the main courses and means for sustainable development in today's world is to build recycling economic systems and urban development systems based on continuous recycling and re-use of material resources. In the industrial development sphere, this requires placing emphasis on the development of low-polluting, low-energy-consuming, high-value-adding industries. Particularly, in recent years, the marginal effects of new investment in petrochemical, steel refining, chip-foundry, and other such facilities, after offsetting their output value and social costs, have not matched the goal of creating a low-carbon society, but have had a huge impact on land development, and hence require further harmonization of their development with this goal. In the sphere of urban construction and management, the main keys to promoting the development of a resource-recycling society lie in promoting the recycling and re-use of water and waste materials, reducing the emission of air pollution from transport and production, and at the same time, establishing proper ideas about consumption in the public mind, to instill new values and promote resource-saving lifestyles.

- Land-use planning for low-carbon space and low-carbon energy facilities.
- Building green infrastructure, and enhancing disaster prevention capabilities in urban and rural areas.

Green user-friendly transport

At present, Taiwan's transport planning and construction is mainly oriented toward motor vehicles. This needs to be transformed into the planning and management of a people-centered transportation system, with the goal of building a transport environment that is people-friendly, affinitive, reliable, comfortable and healthy, and the promotion of green modes of transport as the main development structure, with the use of natural energy as the main means of propulsion, with demonstration of humanistic concern for users, and with emphasis on communitized and localized infrastructure. The soaring cost of gasoline has prompted a growing number of people to opt for using public transport or bicycles as their main mode of transport. This makes it all the more necessary for the government to come up with more schemes for public transportation, and for improvement of facilities throughout the country, in urban and rural areas alike, to cater to the substantial increase in the cycling population.

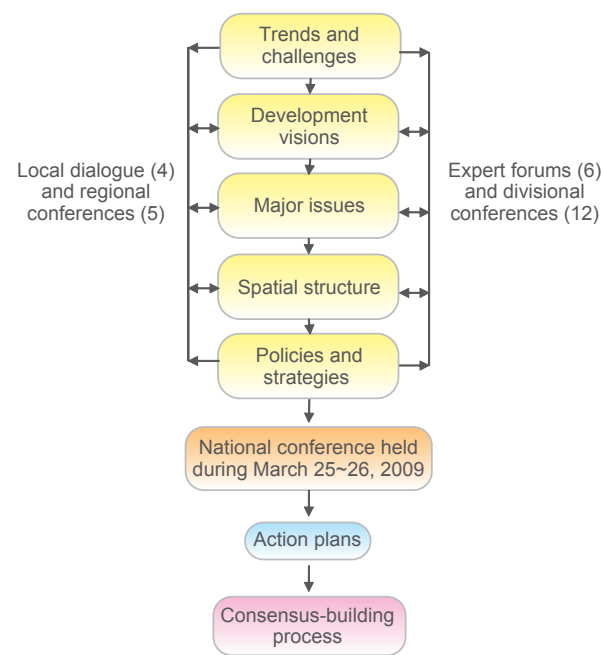
- Moving toward a green user-friendly transport development model.
- Developing blue transportation, opening Taiwan's sea belt to tourist activities, and promoting the coastal transport industry.

In the course of drawing up this strategic plan, the government invited local governments and public agencies throughout the country to conduct a series of local dialogues and conferences, to conduct extensive and intensive exchange of views and discussion concerning the trends and challenges, development visions, major issues, spatial structures, policies and strategies of national spatial development.

To further expand the range of participation, the government also convened the National Conference on Strategic Planning for National Spatial Development on March 25~26, 2009. The CEPD asked the Ministry of Economic Affairs, the Ministry of Transportation and Communications, the Ministry of the Interior, the Environmental Protection Administration,

the Research, Development and Evaluation Commission, and other Cabinet agencies to jointly participate in planning this conference, and invited representatives of government, industry, academia and research institutions, representing the public and private sectors and private organizations, to join in the discussions with a view to gathering consensus on national spatial policy across all sections of society.

To respond to the trends of globalization and climate change, and address the key issues of national spatial development, the conference considered proposals for a development plan that was strategic and dynamic in nature, expressed in the form of principles, and emphasized a cross-regional, cross-sectoral and multi-functional integrated mode of development and governance.



Consensus-Building Process



I-Taiwan 12 Projects

By process of establishing policy goals and clarifying key issues, the conference came up with proposals for national spatial development strategies and methods for, respectively, land conservation, innovation and economic growth, urban-rural sustainable development, and green, intelligentized transportation, as described below.

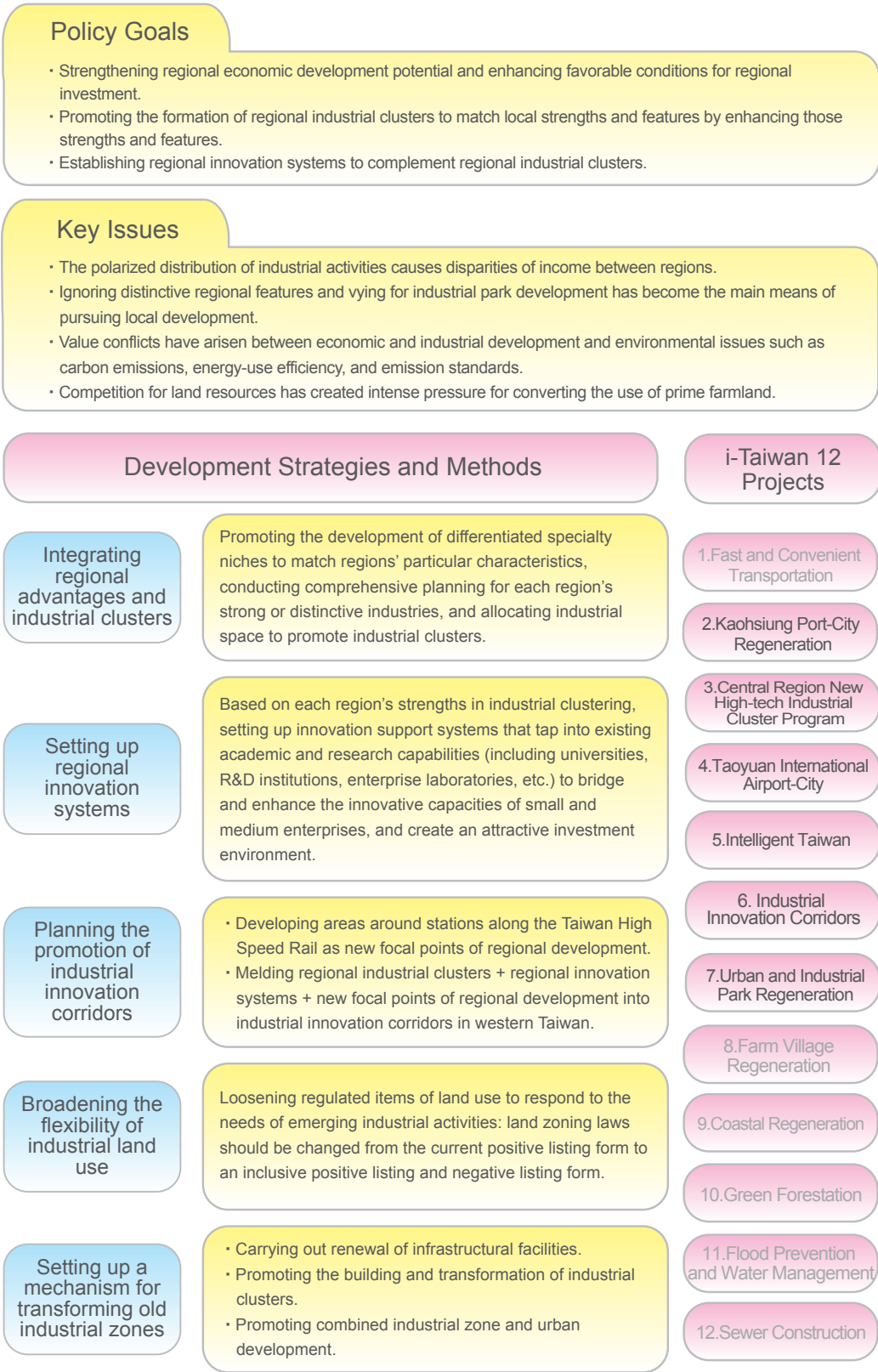
The strategies and methods for these four dimensions of national land development can further be homologized to the i-Taiwan 12 Projects, which consist of 12 prioritized public construction projects, to build an island wide fast and convenient transportation network, regenerate Kaohsiung port and city, develop new high-tech industrial clusters in central Taiwan, create an international aerotropolis in Taoyuan, build up infrastructure for an “intelligent” Taiwan, develop industrial innovation corridors, carry out urban and industrial zone renewal, regenerate farm villages, restore coastlands, plant forests, conduct flood prevention and water management works, and build sewers, slated for implementation during 2009 to 2016, to make up a new blueprint for Taiwan’s economic development.



3.1 National Land Conservation



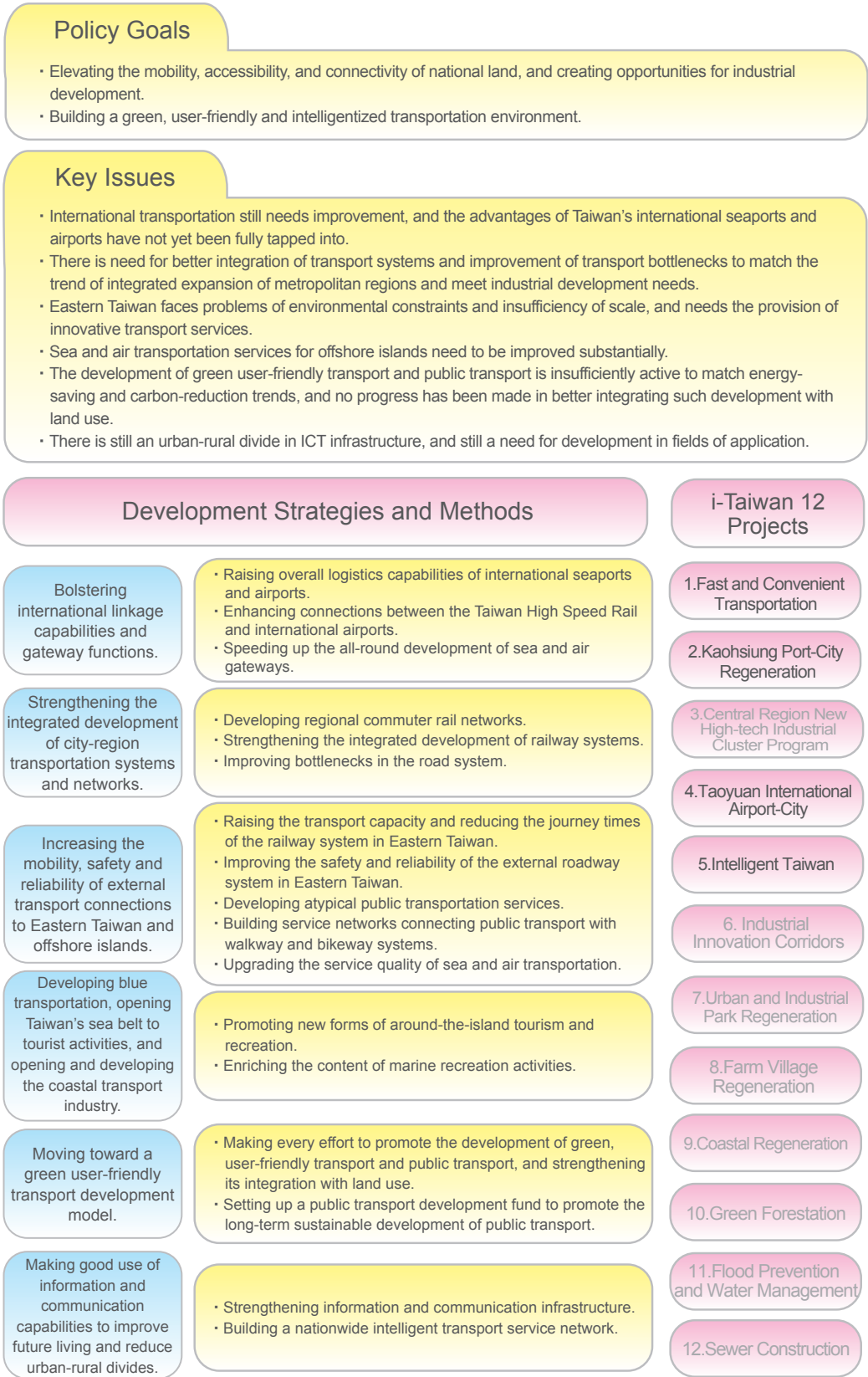
3.2 Innovation and economic growth



3.3 Urban-rural sustainable development



3.4 Green and intelligent transportation



4.1 National Spatial Structure

National Spatial Structure		
International Level	World networks Key nodes	In world networks, Taiwan occupies important positions as a key node in the domains of ICT R&D and manufacturing, S&T innovation, agricultural technologies, Chinese culture, tourism, and an Asia-Pacific logistics gateway.
National Level	Three main axes, a sea belt, and offshore islands	Central Mountain Range conservation axis Innovation development axis in Western Taiwan Prime living and industrial axis in Eastern Taiwan Sea belt Eco-tourism areas on offshore islands
Regional Level	Three major city-regions and Eastern region	Northern city-region, Central city-region, Southern city-region, and Eastern region
Local Level	Seven regional living circles and city-county cooperation regions	Taipei City, Taipei County (Xinbei City, also known as New Taipei City), Keelung City and Ilan; Taoyuan, Hsinchu and Miaoli; Taichung, Changhua and Nantou; Yunlin, Chiayi and Tainan; Kaohsiung City, Kaohsiung County and Pingtung; Hualien and Taitung; Penghu, Kinmen and Matsu. Cross-regional platforms of city-county cooperation regions

4.1.1 International level: Key nodes of world networks

Taiwan occupies less than 0.03% of the world’s surface and is populated by only 0.4% of the global population, but has the world’s 23rd-largest economy and is a strong economic and trade power.

At present, Taiwan’s internationally competitive industries are concentrated in the ICT sector, in which it ranked number one in the world in production value or global market share of ten products in 2008. By incorporating logistics

flow, information flow and cash flow into their operations, Taiwan’s IT product suppliers have already been able to improve from a 98/3 performance (delivering 98% of goods within 3 days) to a 100/2 performance (delivering 100% of goods within 2 days). This has enabled Taiwan to occupy an important position in the global supply chains of these high-tech products.

In addition to its innovative prowess in ICT and other sci-tech industries, Taiwan also has the potential to be internationally competitive in many other industries. It is, for example,

ranked 12th in the world in level of agricultural technology, with mastery in growing many varieties of butterfly orchids, and an excellent record of winning top international prizes for breeding new varieties of ornamental fish. It occupies an important position and has notched up notable achievements in popular music, industrial design, product design, and other areas of cultural and creative activity in the Chinese cultural sphere or in global competition. WEF's global competitiveness ranking data show that the main strengths of Taiwan's competitiveness in tourism are its possession of world-class natural resources

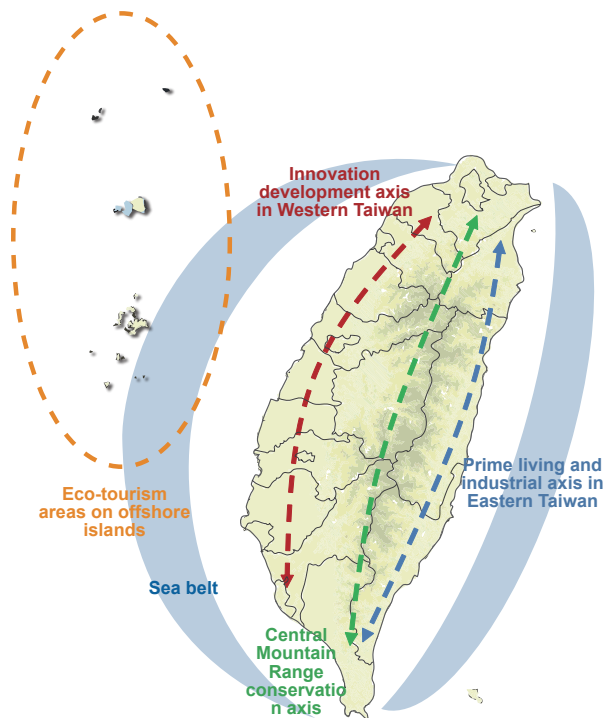
and cultural assets such as Taroko Gorge, Sun Moon Lake, and the National Palace Museum. Moreover, its location in the Asia-Pacific region gives it the geographic advantage of the shortest average journey time by air or sea to and from major cities in the region. With the government's current drive to promote the development of six key emerging industries and the service sector delivering an active boost to the country's advantages, Taiwan must surely have what it takes for promotion as a key node in global networks, with an importance that cannot be disregarded.



**The International Level of National Spatial Structure:
An Important Key Node In World Networks**

Source of Illustration: Derived From Google Earth Imaging.

4.1.2 National level: Three main axes, a sea belt, and offshore islands



National Spatial Structure By Regional Level:
Three Major City-Regions and The Eastern Region

Taiwan’s natural topography and land features shape the orientation of its national spatial structure and development into the form of “three main axes, a sea belt, and offshore islands.”

The Central Mountain Range conservation axis

The Central Mountain Range stretches from near Su’ao in Ilan County in the north of Taiwan to the island’s southernmost tip at Eluanbi. Approximately 340 km long, 80 km wide from east to west, and stretching along an eastward-central axis from top to bottom of Taiwan’s

main island, it divides the island into two disproportionate halves, the larger on the west and the smaller on the east. As well as being narrower, the eastern side also has relatively precipitous terrain, while the western side is relatively broad and flat. The Central Mountain Range is also the water divide of island wide water systems, an important environmentally sensitive region that holds a great share of Taiwan’s ecological, landscape, and natural resources, and that has been the scene of many major slopeland disasters in recent years. Although the concept of a Central Mountain Range conservation axis was not specifically presented in the previous national land development plan, the Council of Agriculture, the Ministry of the Interior, and other central government agencies have long been active in carrying out a variety of land conservation work in this area. In the future, work within the boundaries of this axis will mainly be focused on ecological conservation and protecting indigenous people’s culture. The pertinent development concepts are as follows:

- Applying the concept of continuity of ecological corridors, top priority will be given to incorporating areas at and above an elevation of 1,500 meters into the boundaries of national parks, for active conservation as rare and precious national resources. Other parts can be demarcated into national scenic areas, nature conservation zones, primeval forests, protection forests, important habitats and protection areas

for wild animals, and other kinds of protection and conservation areas, with the linking up of systems to form a Central Mountain Range conservation corridor.

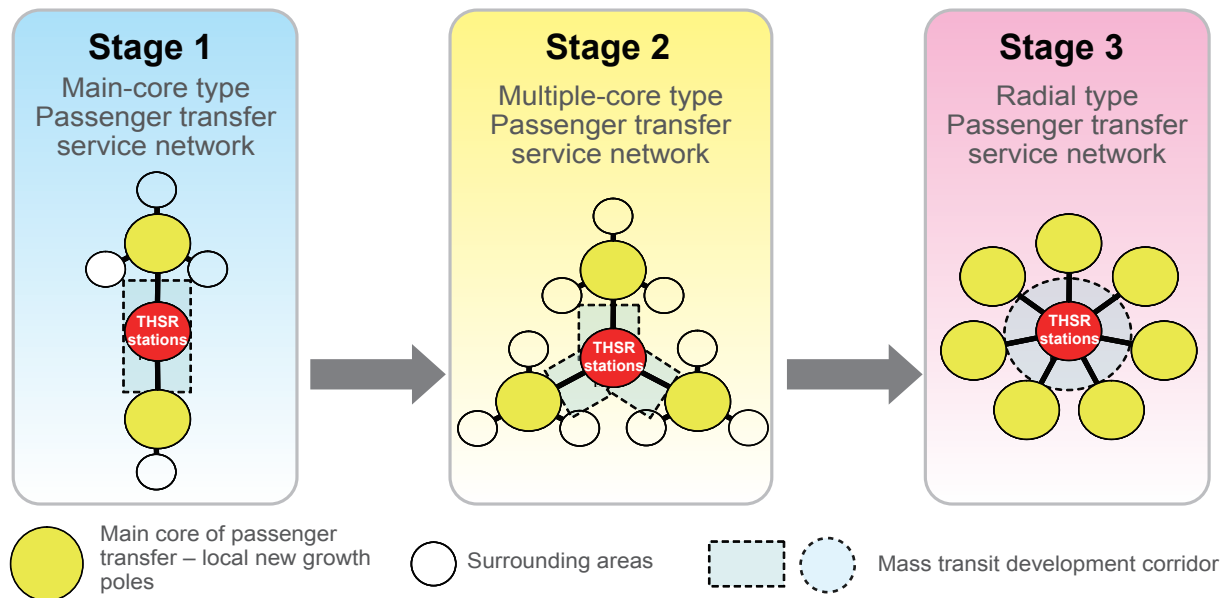
- All environmentally sensitive areas should be managed on a zoning and grading basis, with application of near-natural engineering methods to continuously carry out slope management, flood prevention, forestation, ecology and habitat restoration, and other such kinds of projects.
- Areas of mountain slope where major disasters or hazards have occurred in recent years will be designated as priority restoration zones, to be prioritized for the implementation of safety-preservation and restoration projects, to reinforce head-waters governance and disaster-prevention

planning.

- Attention will be paid to developing eco-tourism in mountain areas, balancing conservation and development, appropriately providing eco-tourism opportunities in the mountains, and instilling correct ideas about nature conservation in the general public.

Innovation development axis in Western Taiwan

After industry’s share of Taiwan’s gross domestic product (GDP) first surpassed agriculture’s share in 1962, Taiwan’s western plain and coastland developed rapidly, with population and socio-economic activity becoming highly concentrated in this region. When the Six-Year National Development Plan was launched in



Schematic Diagram of Using THSR Stations as Centers for Steering the Western Region Toward a Multi-Core Spatial Development Structure.

Strategic Plan for National Spatial Development (Summary)

1990, there was strong need for new infrastructure and intense private demand for land for industrial development, which profoundly affected land acquisition and land prices. Hence, the second national land development plan embodied the idea of a “western growth management axis” with the aim of managing growth by steering the western region on a course of orderly, high-density development.

During the last decade and a half, with the successive completion of the national highway system, the West Coast Expressway, and east-west expressways, and the development of high-tech industrial parks such as the Southern Taiwan Science Park, the Central Taiwan Science Park, and the Nangang Software Park, a concentrated industrial corridor has developed in the west of Taiwan, propelling Taiwan’s economic growth toward a new peak. However, with the advent of the 21st-century era of the knowledge economy, Taiwan’s population growth has slowed, and could even turn into negative growth, while much of industry has moved offshore in pursuit of lower costs. Against this background, the main problems that Taiwan is likely to face in the future will no longer be problems of quantity control and management, but rather of quality enhancement and value-adding, the arrangement of spatial order, and the reduction of environmental, transport, and other external economic costs. These problems not only reflect the issues of industrial transformation and upgrading, but also reflect that, half a century after the retrocession of Taiwan, its western cities have begun to show

signs of degeneration, its industrial zones have aged, and developmentally disadvantaged areas need opportunity for change and endowment with new vitality. Therefore, in the future, creativity and innovation will serve as the core values for urban-rural transformation and development in western Taiwan, with the aim of developing the region into an innovation development axis. The pertinent development concepts are as follows:

- With the Taiwan High Speed Rail (THSR) having come into full service in 2007, full use should be made of its speed, punctuality, and the spatial effects it has brought, to carry out spatial restructuring and adjoining of the western corridor. Since the specially designated zones around the THSR stations will possess the three main developmental advantages of transport mobility, transport accessibility, and high environmental quality, drawing on these advantages should enable them to become new growth poles in their localities. Also, effort should be expended on providing seamless transport services between the station zones and old urban districts, industrial parks, international air and sea gateways, and other important development zones, and to position compact, mixed-development units along transport arteries, to gradually steer development pressure in the western corridor to within the range of THSR and public transport services. This will prevent spatial development from continuing to sprawl in disorder along roadways and nibbling further into farmland, while compacting development will raise the investment and use efficiency of infrastructure.

National Spatial Structure



Strategic Plan for National Spatial Development (Summary)

- Strengthening the competitiveness of regional growth poles and industrial development corridors, establishing the designation of leading sectors and development axes, enhancing infrastructural investment in regional growth poles and industrial development corridors, and improving the industrial investment environment, to ensure that they play an optimal role as regional growth pivots and spur the development of surrounding areas.
- Adopting integrated strategies and methods, and establishing mechanisms for rebuilding and innovatively transforming urban and industrial zones, to effectively and actively utilize land resources and guide development toward new green-energy, new cultural and creative, new-flavor or ecological cities.

Prime living and industrial axis in eastern Taiwan

Taiwan's eastern region has long been renowned for its prime environmental resources, so while promoting the region's development, it is vital to prevent any possible occurrence of conflict between industry and the conservation of environmental resources. Hence, the second national land development plan embodied the idea of a "strategic development axis in eastern Taiwan," with the aim of adopting development strategies that balanced the introduction of industries and location of industrial zones with due regard for the conservation of local natural ecology.

At present, tourism, organic farming, cultural

and creative enterprise, and marine biotechnology have formed the eastern region's brand features, and the concept of sustainable development has already taken deep root in the region. The aim for the future is to further blend new lifestyle concepts such as LOHAS, slow living, and health-enhancing recreation into the region's industry, to form a development model that, differing from the development model for western Taiwan, effectively taps into the eastern region's rich and diverse cultural features, slow tempo of life, beautiful natural scenery, clean land resources, and other advantageous conditions, to develop the region into a prime living and industrial axis. The pertinent development concepts are as follows:

- Applying the concept of "prime-living city and countryside" to build a living-industry belt incorporating transport, entertainment, work and housing, with Hualien, Taitung and Yuli-Chenggong as its three development cores and the East Rift Valley and coast as its two development corridors, as a means of driving the variously themed all-round development of all parts of Hualien and Taitung.
- Building green user-friendly transportation services, with rail as the main and road as the secondary transport links with the outside world, and with internal transport based on the form and nature of local development. This involves drawing on local public participation and expert guidance to conduct bottom-up planning for the provision of green, user-friendly transport

services with local features (such as mini-transit vehicles, bicycles, and walkways), to create people-friendly transport environments in city and countryside, and to establish pleasant residential living environments that are comfortable, unpolluted, and people-centered.

- Employing an integrated development model for the region, with prime living and the tourism industry as the main axes, and strengthening networks and mechanisms for participation by industry, academia, research institutions, and local residents, with a view to attracting internationally renowned hotel chains to develop industry cluster effects, gathering together new immigrants and international tourism investment, and developing the eastern region into a “Pacific Ocean Left Bank” hotspot for living and tourism.

The sea belt

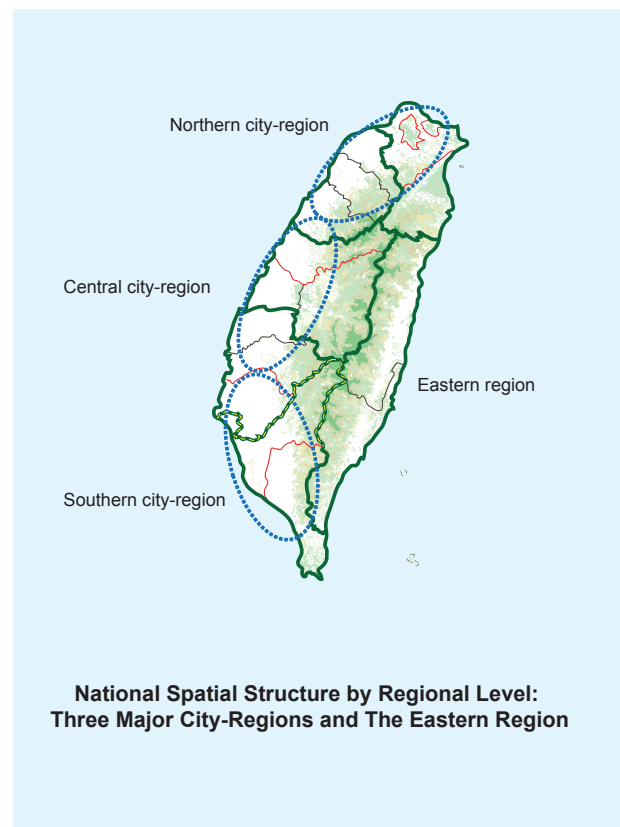
Taiwan is an island nation. The coastline of its main island alone is nearly 1,240 km long, equivalent to 3.3 times the length of the island from north to south. In the past, its exploitation of marine resources was largely limited to fishery, but in recent years it has begun to actively pursue R&D and applications in respect of ocean thermal energy conversion, seawater extraction, and various areas of biotechnology.

In view of the increasing deficiencies of energy and water resources in today’s world, greater importance must in future be attached to this expanse of blue territory. Properly balancing conservation with development of industrial potential, we must explore the marine resources

around us and focus on making the most of our unique locational advantages as an island nation.

The offshore islands

Taiwan, Penghu, Kinmen and Matsu are made up of more than 80 islands, with the “offshore islands” smaller and less populated than the main island of Taiwan. In view of the fragility of their ecosystems, the development of offshore islands should stress the protection of their cultural and natural environments and focus on the promotion of tourism. Emphasis should be placed on environmental conservation and cultural preservation spaces, with the development of unique ecological and cultural experiences as the main aim.



4.1.3 Regional level: Three major city-regions and the eastern region

If we analyze the competitive profile of city-regions that have formed around the world, we find that their international competitiveness requires the integration and creation of the following characteristics:

- Hi-tech R&D capabilities.
- High-quality living and work environment
- High-efficiency spatial development and industrial activities.
- Effective infrastructural investment.

The basic requirements are:

- International connection – having international airports and seaports.
- Possession of central metropolitan and learning districts.
- Sufficient industrial and commercial hinterlands.
- Fast and convenient intraregional transport systems.

The current situation of development in western Taiwan is that, under the influence of high-speed-rail journey times and station locations, there is already conspicuous movement toward the future formation of three major city-regions in the north, center and south. Therefore, the government should work to strengthen integrated governance within the boundaries

of these city-regions, and put full effort into establishing urban-rural partnerships, to avoid a zero-sum mode of competition within the regions. Moreover, the city-regions should adopt strategies of cooperating with each other within the national hierarchy, with each making the most of its particular regional advantages and, through integration of labor division and mutual complementation of strengths, all combining to raise overall national competitiveness.

The northern city-region development concept

- **Scope:** The region from Ilan to northern Miaoli (north of and including Tongluo).
- **Status:** Encompasses the main national gateway, Taiwan’s economic and trade core, an international metropolis with strong creative research capabilities and substantial cultural assets, and a high-tech industrial belt.
- **Core city:** The Taipei metropolitan region (the two special municipalities of Taipei City and Xinbei City, also known as New Taipei City)

Urban-rural development within the northern city-region has already largely taken shape, though there is still a need for gradually strengthening the regional core function of the Lanyang Plain. Within this city-region, industrial activity is flourishing, and all kinds of industrial and commercial services are well advanced. The region also has fast and convenient international air and sea transport, is gradually putting the

finishing touches to rail transport systems, and boasts increasing refinement in a broad array of cultural facilities. With these attributes enabling the Taipei metropolitan region to gradually complete the acquisition of comprehensive service functions, the main task of the future for the region's overall development is quality enhancement.

In view of the competition from cities elsewhere in Asia (in Japan and Korea) and the rapid development of key cities in mainland China in the wake of the mainland's economic rise, the future emphasis of development policy for the northern Taiwan city-region should be placed on accentuating its unique strengths as the basis for differentiating it from regional rivals, to highlight its distinctiveness and present its international competitiveness.

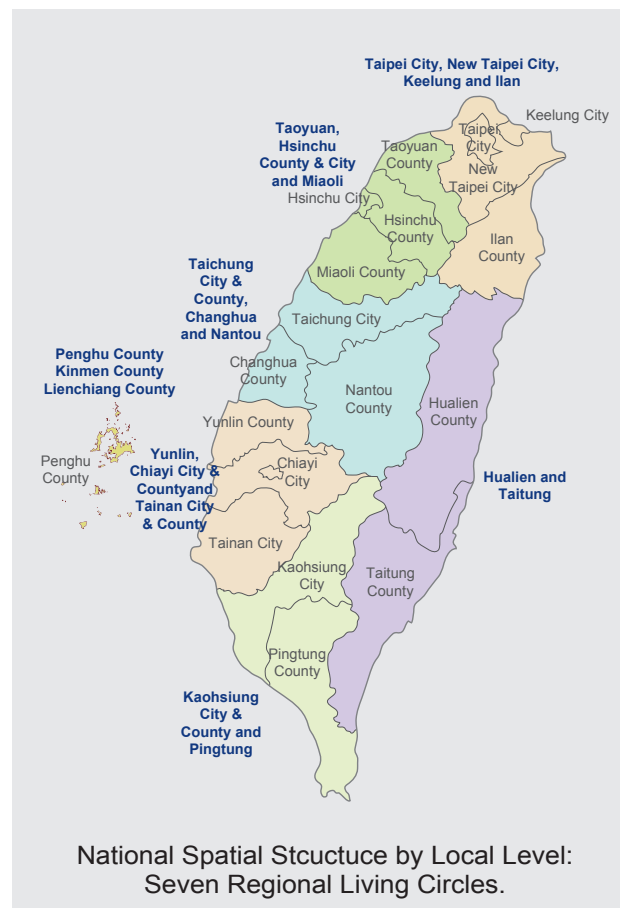
The central city-region development concept

- **Scope:** The region from southern Miaoli (south of and excluding Tongluo) to Yunlin
- **Status:** An international metropolitan region with prime cultural and living centers and an emerging sci-tech corridor
- **Core city:** Taichung metropolitan region (the future Taichung special municipality)

The urban-rural development domain of the central city-region is not so large and has a relatively loose structure. In the future, under the precondition of not substantially expanding

the development region, numerous new sub-regional cores can be developed on the basis of planning for THSR stations, themed industrial parks, seaports and airports, etc. This should be accompanied by the improvement of transport services between the cores and the growth poles, to strengthen the overall network structure within the city-region, and to maintain a suitable small to medium scale of development.

The central city-region is located in Taiwan's geographic center. The coastal belt has long been predominantly occupied by heavy industries,



including the Changhua Coastal Industrial Park, the 6th Naphtha Cracker Industrial Park in Mailiao, and the Taichung Harbor Special District, with the Changhua Dacheng Petrochemical Park now under planning.

The region's main cities are distributed further inland. None of these cities has developed to a dominant position, which has helped foster a relatively low-intensity, easy-paced way of life with a more humanistic atmosphere. However, in recent years, Taichung City has been gaining in prominence ahead of the others, and as it continues to rise in power and influence in the future, it will need to bolster the development of innovative industries related to living and leisure.

The basic industries in the Changhua-Yunlin coastal area, the development of the different bases of the Central Taiwan Science Park, and the research resources of the planned Advanced Research Park in Zhongxing New Village and other research parks form the embryonic shape of the central city-region sci-tech-corridor, an area with great future potential.

The southern city-region development concept

- **Scope:** The region from Chiayi to Pingtung.
- **Status:** An international port city and an international metropolis with cultural and maritime dual cores.
- **Core cities:** Kaohsiung and Tainan metropolitan regions (the future Kaohsiung and Tainan special municipalities)

The southern city-region has the distinctive feature of incorporating dual core cities. Tainan's particular strength is in marketing its fine historical and cultural spaces, while Kaohsiung's main strength is in creating economic, trade and logistical networks. These two city cores are not far apart, and both are undergoing expansionary trends. There is a need to enhance and guide the urban-rural growth belt between these two cores, to ensure that the city-region develops more compactly.

There is a long history of industrial development in the region, with manufacturing industry maturely developed. However, there has been a severe exodus of manufacturing industries, which has heavily impacted the region's manufacturing and logistics sectors, and has speeded up the process of deindustrialization in Kaohsiung. But in recent years, urgent endeavors have been made to transform Kaohsiung into a city of creativity, digital software, and waterside tourism. At the same time, sights have been set on linking Kaohsiung Port with the rising ports of southeastern mainland China, to form a group of competing and cooperating ports to support the formation of industrial chains across the Taiwan Strait.

The eastern city-region development concept

- **Scope:** The region from Hualien to Taitung.
- **Status:** Prime-living city and countryside.
- **Development concept:** Blending new lifestyle concepts such as LOHAS, slow living, and health-enhancing recreation into the region's

industry, to form a development model that, differing from that for western Taiwan, effectively taps into the eastern region's rich and diverse cultural features, slow tempo of life, beautiful natural scenery, clean land resources, and other advantageous conditions, to develop the region into a prime living industry axis.

4.1.4 Local level: Seven regional living circles and city-county cooperation regions

Seven regional living circles

As can be seen from the relevant international competitiveness rankings issued by the IMD and the WEF in recent years, Taiwan's main competitors in the Asian region are Japan, Hong Kong, South Korea, and Singapore. Among these four, Hong Kong, with a population of 7 million and an area of 1,104 km², and Singapore, with a population of 4.99 million and an area of 693 km², are both small and beautiful economies. This demonstrates that the market scale supported by such land areas or populations has potential to create GDP growth.

Besides developing cross-regional cooperation among the three main city-regions, the government will also conduct spatial planning on the basis of dividing the country into seven regional living circles, mapped out with reference to Hong Kong and Singapore's population and land scales. These seven living circles respectively encompass: Taipei City, Taipei County (Xinbei City, also known as New Taipei City), Keelung and Ilan; Taoyuan, Hsinchu and Miaoli; Taichung, Changhua and Nantou; Yunlin,

Chiayi and Tainan; Kaohsiung City, Kaohsiung County and Pingtung; Hualien and Taitung; and the offshore islands. The aim is that each of the regional living circles will encompass sufficient population and hinterland to support its development and consumer markets, and that this division will enable greater economic effects to be gained from infrastructural investment. Each region can establish its own status and create its own distinctive competitive advantages in accordance with its particular industrial and geo-environmental characteristics. In the case of the Hualien-Taitung and offshore island regions, other special measures, plans or schemes will need to be adopted to bolster their development. This supplementary support will be essential for achieving the gradual balancing of development across all regions, and for advancing toward the ultimate goal of each region developing into an independent economy.

Cross-regional platforms of city-county cooperation regions

Many administrative issues are tackled across administrative boundaries or through a cross-sectoral approach. This is often essential for the optimization of benefit, for example in respect of water resources management, waste-disposal problems, disaster prevention and rescue, industrial development, regional transportation, etc. Hence, it is necessary to actively encourage neighboring cities and counties to engage in cross-regional cooperation, and an issue-oriented approach can be taken to forming cross-boundary city-county cooperation of various kinds and scopes.

Population and Land Scale of Seven Regional Living Circles

County/city	Population (persons)	Cross-regional cooperation development regions	County/city	Population (persons)	Cross-regional cooperation development regions
Whole country	23,086,441		Yunlin County	722,607	Yunlin, Chiayi City & County and Tainan City & County
Taipei City	2,608,596	Taipei City, Taipei County (Xinbei City, also known as New Taipei City), Keelung and Ilan Population: around 7.32 million Area: 4,600 km ²	Chiayi City	273,876	
Taipei County	3,862,640		Chiayi County	547,185	
Keelung City	388,476		Tainan City	770,244	
Ilan County	461,203		Tainan County	1,104,068	
Taoyuan County	1,972,635	Taoyuan, Hsinchu County & City and Miaoli	Kaohsiung City	1,526,797	Kaohsiung City & County and Pingtung
Hsinchu County	508,883		Kaohsiung County	1,241,920	
Hsinchu City	409,911		Pingtung County	882,511	
Miaoli County	561,097		Hualien County	340,875	Hualien and Taitung
Taichung City	1,071,117	Taichung City & County, Changhua and Nantou	Taitung County	232,235	
Taichung County	1,560,064		Penghu County	95,445	
Changhua County	1,311,529		Kinmen County	91,890	
Nantou County	530,755		Lienchiang County	9,882	

Source: The Ministry of the Interior, current resident population as per household registration, September 2009.

4.2 Concepts of national spatial governance

Governmental modes of spatial governance in Taiwan can be roughly divided into two main types. One is local government control, based on the boundaries of administrative jurisdiction, including division into special municipalities, counties and cities, and urban and rural townships. The other is control of

certain spaces by designated agencies according to nature of use, such as the management of national parks by National Park Administration Offices, the management of national highways by the National Freeway Bureau, and the management of science-based industrial parks by the respective park administrations. From the standpoints of regional balance, sustainable development, and national competitiveness, national land governance will in future progress

along two main lines as described below.

Adoption of a cooperative development model across the boundaries of administrative districts

Taiwan currently has 2 special municipalities and 23 counties or cities. But in July 2009, in accordance with the provisions of the Local Government Act, the Executive Yuan approved a plan to upgrade or merge and upgrade certain cities and counties, so that with effect from December 25, 2010, Taiwan will have 5 special municipalities and 17 counties or cities. Of these, only Taipei City can lay claim to listing as a world city, while the other cities and counties all lack sufficient resources for development into internationally competitive international metropolises. GDP growth needs and city-region development trends will make it essential in the future to actively promote the development of cooperation across administrative boundaries, with the eventual possibility of carrying out further merger of administrative districts.

As to the scope of cross-regional cooperation, its scope of adoption can be that of the three main city-regions, the seven regional living circles, or neighboring counties and cities as described above, depending on the issues or functional nature of the cooperation.

Setting up an ecological governance zone model for river basins

River basin planning and management should be conducted from an overall perspective, treating upstream, midstream and downstream sections

as a single unit for the integrated governance of the whole river basin. Emphasis should be placed on employing independent and complete systems for integrating spatial development planning, catchment area governance, soil and water conservation, river management, water quality preservation, water resources engineering, habitat and ecology preservation, and other needs for managing the river basin as a whole. For this purpose, river basins need to be demarcated into spatial governance units across administrative districts. This approach should be taken with the aims of responding to global climate change, while management mechanisms for water, soil and forest resources on national land should be integrated with a view to achieving fundamental solutions to long-term problems of water resources allocation, flooding, water pollution, and slopeland hazards.

The following explains industrial spatial development concepts and transport network development concepts that also have a bearing on important issues of national spatial governance:

Industrial spatial development concepts

In the last fifty years, the development of industrial zones, science parks and other such locations has enabled Taiwan to become an important supply base for global science and technology industries, especially the ICT industry. But to cope with the growing intensity of global industrial competition in the future, Taiwan's manufacturing and service industries

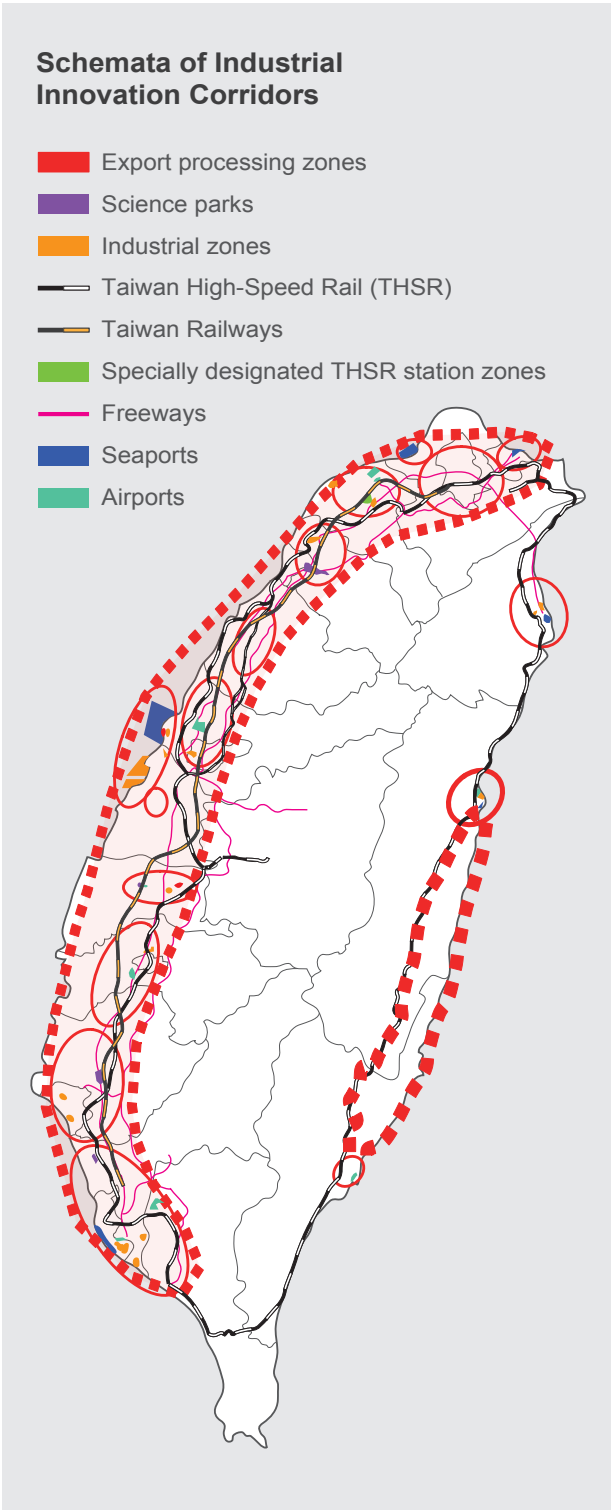
need to rise to the upper levels of the value-adding scale, for which they are already clearly positioned. The core competitiveness of high-value-added industries comes primarily from innovative R&D capabilities, which depend on those industries being able to recruit high-caliber R&D and technical personnel. To aid the flow and settlement of such personnel, it is necessary not only to comprehensively enhance the living quality of urban and rural environments, but also to position industrial space to optimum effect. Toward this end, emphasis will in future be placed on integrating regional industrial clusters, and establishing new regional development nodes centered around the stations along the high-speed rail line. The aim will be to develop western Taiwan into an “industrial innovation corridor” that can attract R&D and innovation-based industries with a core of R&D and technical personnel. The pertinent development concepts are as follows:

- Taking the distribution of existing industrial parks as the basis, and maximally utilizing the high accessibility and mobility provided to all parts of the land by the rapid transport network of the high-speed rail and national freeways, to enable the fast circulation of creative knowledge capabilities. Then forming an industrial cluster belt in Taiwan’s western corridor, and incorporating the Ilan region as a development hinterland via the connecting artery of the No. 5 National Freeway. In the

eastern region, industries will form two almost parallel development corridors, as shaped by the topography of the East Rift Valley and the coastal mountain range.

- Promoting the renewal of urban and industrial zones and the rejuvenation of farm villages, to shape and improve the urban-rural landscape and vitalize existing urban-rural functions. Also, widening the flexibility of land use in these areas, taking measures to enhance and transform them, and improving their accessibility by means of public transport. This approach will be aimed at providing plenty of the space needed for industrial transformation and development, to promote the co-prospering and symbiotic development of cities and countryside along diverse and specialized paths.

- Strengthening or building industrial clusters on the basis of each region’s strong industries, and taking into consideration the development needs of budding strategic industries that will propel national development in the future; establishing regional innovation systems, and bolstering mechanisms for exchange and cooperation among industry, academia and research institutions, to spur innovative value-adding to products and services; and planning and promoting the development of “industrial innovation corridors,” and enhancing intercommunicating networks among industrial clusters, to expand the synergies of innovation clusters.



Transport network development concepts

Transport networks are the blood vessels and nerves connecting national space together. National rail and road systems can closely interconnect important development centers of varying size and composition within a country, to form national land into a “one-node, multi-center” developmental layout. The pertinent concepts for the future development of transport networks are as follows:

- Future consideration can be given to the southward extension of the THSR, as the backbone of western Taiwan. This backbone, supplemented by Taiwan Railways, MRT, and other local rail systems, and connecting to the network of freeways and expressways, provides the foundation for building function-dividing, intercomplementing, efficient networks for the movement of people and goods, in accordance with the national spatial development structure. For example, the West Coast Expressway can be positioned for taking in traffic from industrial zones along the west coast, to become a special thoroughfare for goods transportation. Emphasis will be placed on comprehensively raising the mobility, accessibility and local connectivity of transport, to increase industrial and land development opportunity.
- Bolstering international sea and air transport, to enhance Taiwan’s positioning in international transportation; and establishing flexibility of organization, by setting up an aerotropolis airport

Strategic Plan for National Spatial Development (Summary)

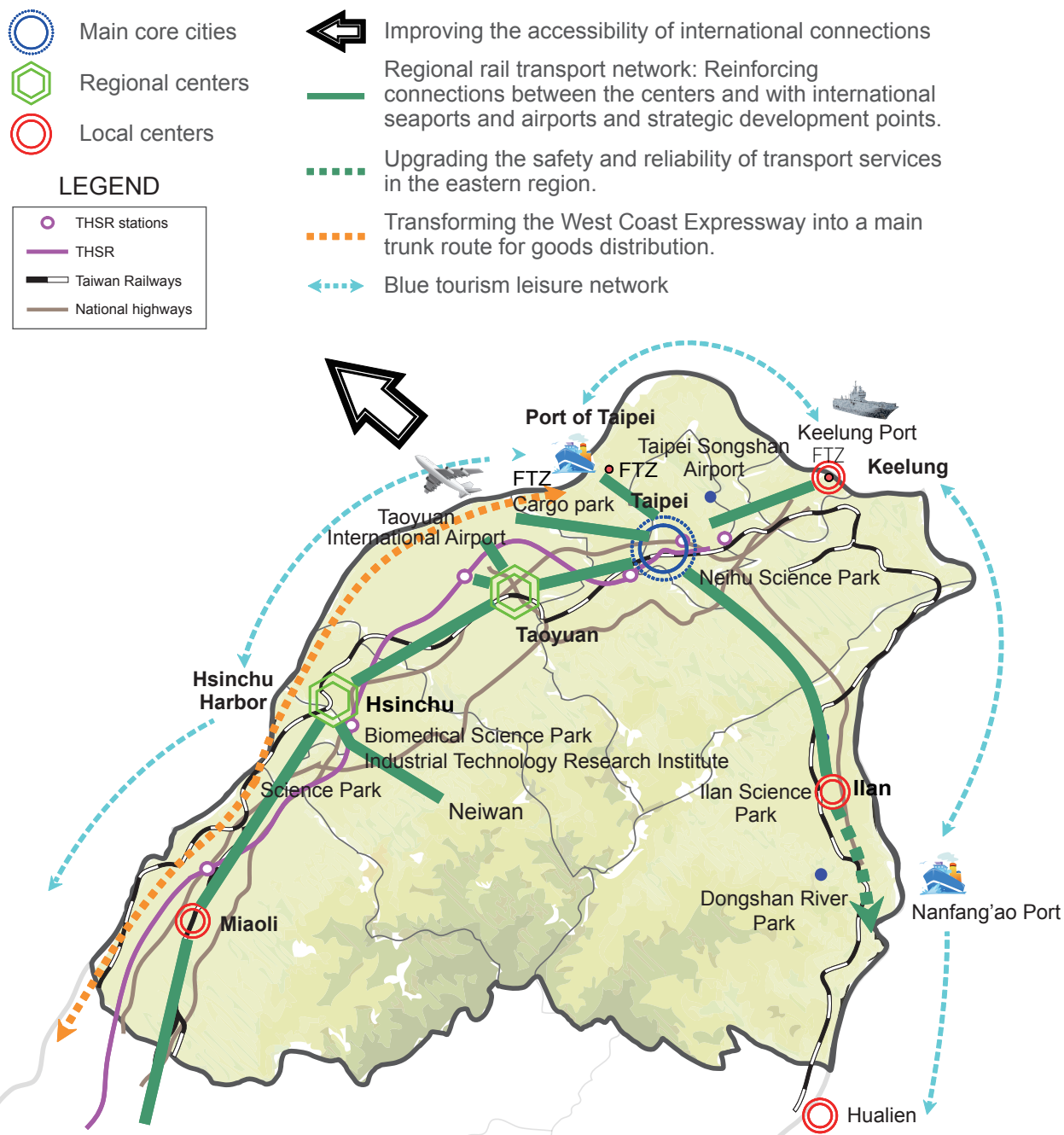
company to undertake airport development and operation, and bringing in local and foreign investment for the company's transformation into a chartered corporation. A similar model can be adopted for harbor bureaus, with central and local governments jointly operating ports on a partnership basis.

- Building a seamless transport system, with every main transport node, including airports, THSR stations, metropolitan transport hubs, and transfer points for two or more modes of

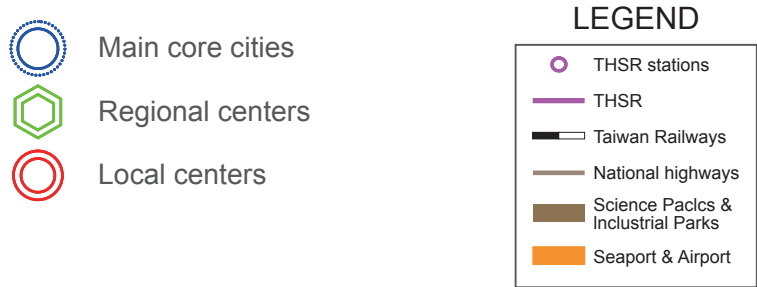
mass rapid transport, providing transport that is seamless in time, space, information and service, to eliminate bottlenecks and seamlessly interface with road networks.



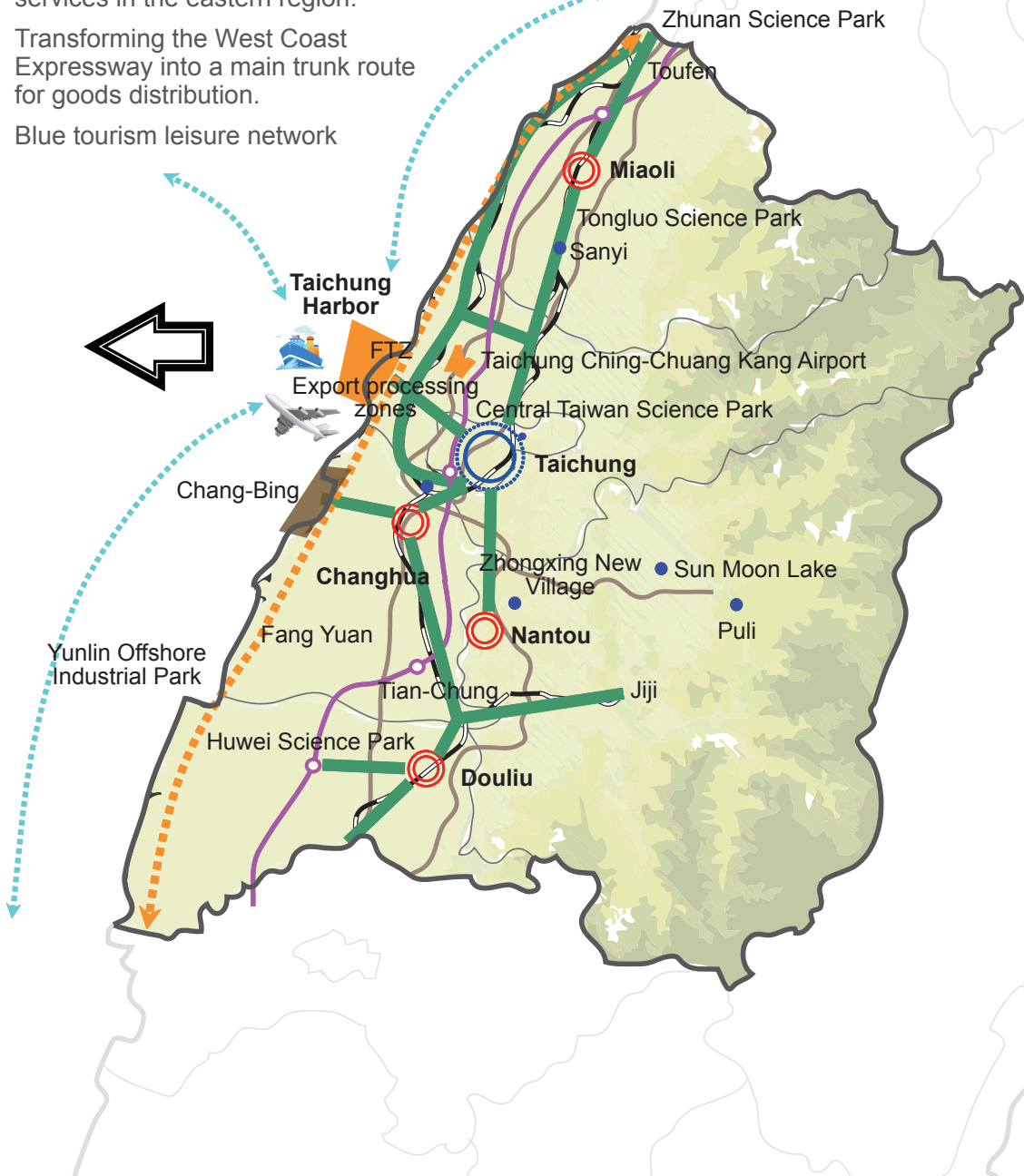
Northern City-Region Transport Network



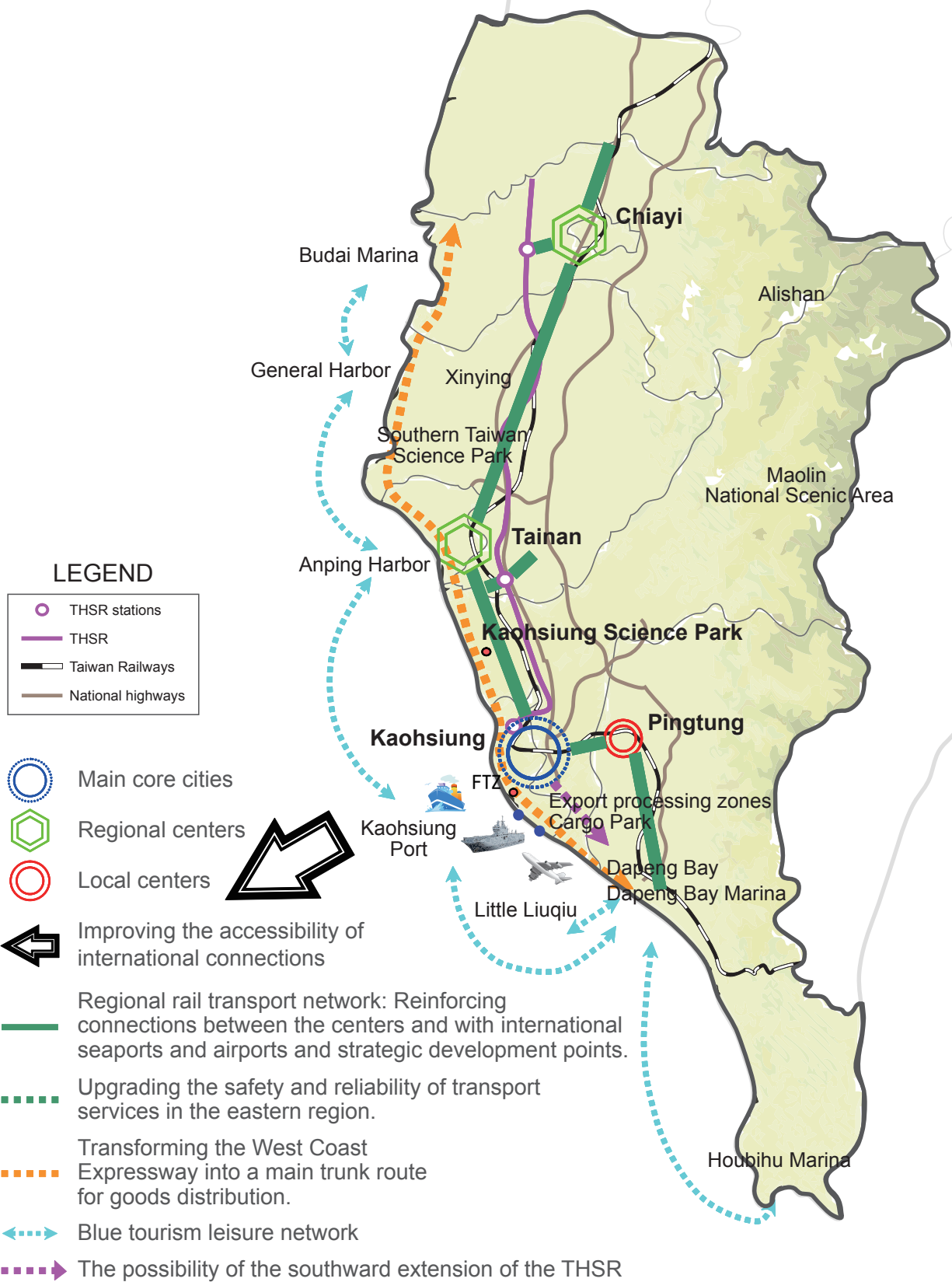
Central City-Region Transport Network



- Improving the accessibility of international connections
- Regional rail transport network: Reinforcing connections between the centers and with international seaports and airports and strategic development points.
- Upgrading the safety and reliability of transport services in the eastern region.
- Transforming the West Coast Expressway into a main trunk route for goods distribution.
- Blue tourism leisure network



Southern City-Region Transport Network



5.1 Problems of implementing national land planning and development
5.1.1 Conflict between departments

Comprehensive planning of Taiwan as a whole unit should rank at the highest level of status. However, if its implementation mechanisms are not well monitored by strict control of an equivalent level of government, and if policies are repeatedly debated and their details manipulated this way and that, it will have a minimal formalistic effect. In the past, Taiwan’s different cabinet agencies, especially those in charge of transport, economic affairs, agriculture, internal affairs, and science & technology, all submitted sectoral plans or major individual projects to the Executive Yuan, which are referred them to the CEPD

for review. For a line time past, this system has generated inter-sectoral conflicts that have needed to be harmonized and resolved by the CEPD or ministers without portfolio before resubmining plans to the Executive Yuan. However, when there are conflicts between, for example, environmental protection and the petrochemical industry over issues involving micro and macro perspectives, such as procedures for changing land use (urban or non-urban planning), environmental impact assessment review, the timely supply of water and electricity resources, external roadways, and other ancillary measures, it is essential to have a higher level of guiding principles to refer to in making policy decisions.





5.1.2 Prioritization of budget execution

National development needs funds. Each year, at all levels government, at all government levels, funds are allocated through ordinary budgets, fund budgets, or special central government budgets, for major development projects with a bearing on national spatial development. All central government agencies and city and county governments have over time accumulated large numbers of development projects. Many of these have been delayed due to fluctuations in material prices, environmental impact assessment reviews, and plan modification. Therefore their budgets could not be executed smoothly, which has caused even greater squeezing of funds. In particular, local governments incessantly propose a great number of plans to vie for their development budgets. However, since these projects inevitably lack a cross-regional perspective, they result in the construction of similar facilities that end up having poor use efficiency and wasting resources.

5.1.3 Problems of organization and regulation

There is a relative lack of capacity for prompt response from a macro-developmental mentality and actions that government agencies and regulation present toward national spatial development. Consequently, government agencies form many internal committees or task forces that recruit the participation of outside members, which often creates a cramping effect on policy correspondence. At the same time,

laws and regulations also become elastically fatigued and unable to respond to new trends of perspective.

5.1.4 Rigidity of land circulation

The constitution of the Republic of China protects private ownership of land, and private land needed for public works projects must be acquired according to the law. However, public land is owned by small number of large agencies. For example, the National Land Administration controls a lot of urban land, Taiwan Sugar Corporation possess large swathes of farmland, the military forces hold many pieces of land for military use, and the Veterans Affairs Commission administers farms and land reserved for indigenous people. Much public land, such as land-holdings of state-owned enterprises and old industrial zones, is used inefficiently, while some land used for railway and port facilities also faces a need for the renewal or replacement of old facilities. However, the use of these lands is heavily restricted by regulation and departmentalism, causing land-use to lack liquidity and renewability. This has a considerable impact on the timely sustenance of national development, and creates the contradictory phenomenon that many investments are unable to find land even though there is plenty of land that has lain in disuse for a long time.

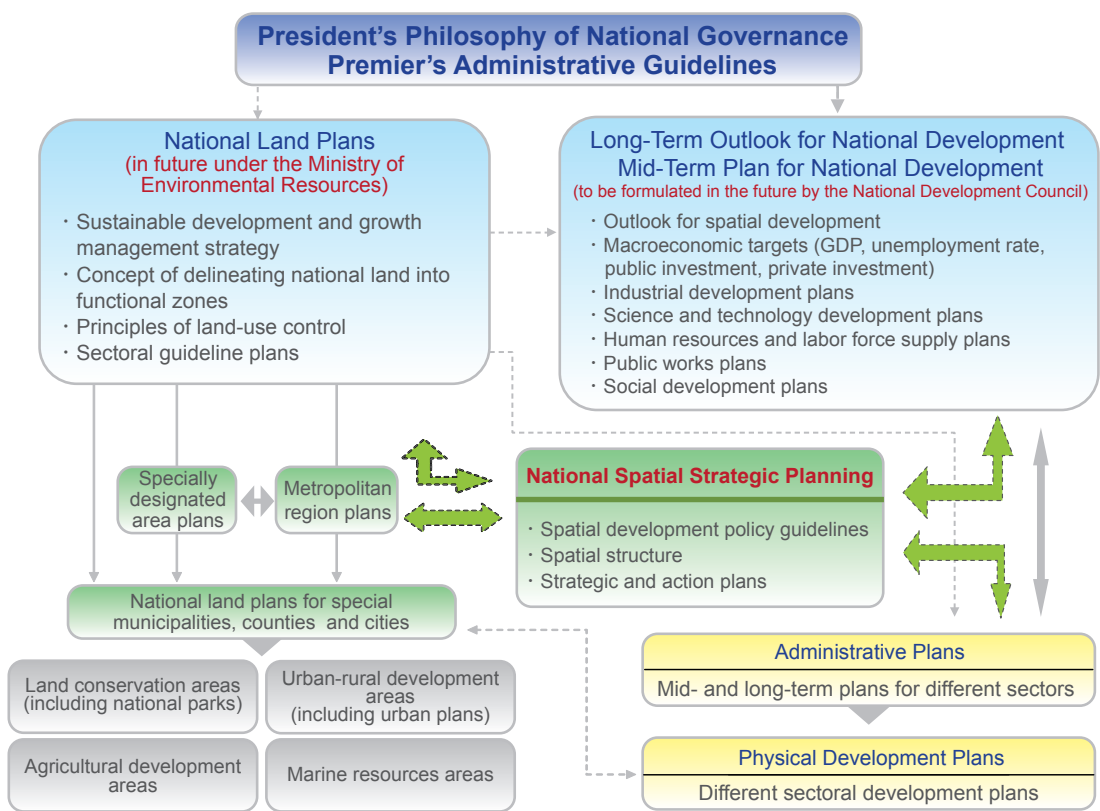
5.2 Concrete strategies of spatial governance

At present, the difficulties Taiwan is facing in regional governance include: an inability to achieve fitting correspondence between national land development and the legal procedures for planning review; a lack of cohesion between the content of administrative plans and national land development visions; and the need to enhance cooperation mechanisms for cross-regional governance. These shortcomings prevent the efficient integration and utilization of resources, and severely impede overall development at the local level. In the 21st century, our

most important task for enhancing national competitiveness is to clear away constrictions in our political system, and pursue good governance as a means of dealing with all kinds of cross-regional problems.

Establishing an legal binding top-level guideline for national land development

The CEPD or the future National Development Council will need to be able to quickly revise the Strategic Plan for National Spatial Development in response to changes in the domestic or international environments, so that the plan can serve as the basic policy guideline for national spatial development. This can direct land



planning at all levels, including at the national, metropolitan region, specially designated area, special municipality, county and city levels. Land plans for special municipalities, counties and cities will also be divided into four kinds of functionally delineated areas – conservation areas, urban-rural development areas, agricultural development areas, and marine resources areas – as the basis for conducting differentiated management of land use.

The CEPD also should follow the Strategic Plan for National Spatial Development in carrying out integrated cross-regional development plans, flagship plans, and development plans for the three main city-regions (such as overall guideline plans for the greater Kaohsiung region, the Taichung metropolitan region, and the Taipei metropolitan region, guideline plans for the sustainable development of the eastern region, and development projects for the offshore islands), as well as national land security and restoration plans, adaptation to climate change, and other plans, in order to achieve the national land development vision.

Establishing a national land research institution and national land database

After the future reshaping of government organization, the National Development Council will be in charge of formulating, overseeing, reviewing and coordinating national spatial development policy, and should consider the establishment of a land-

related research institution to conduct long-term research and data collection on issues concerning spatial development. At the same time, a Ministry of Environmental Resources will be set up to integrate the planning, utilization and management of all kinds of environmental resources. This new ministry will take a comprehensive approach to national land conservation, giving consideration to all facets of water, soil, forest, coastal and marine conservation. The ministry will also set up a national land resources data base matching the powers and responsibilities of the various competent authorities, to help achieve the goals of resource integration and data sharing.

Promoting platforms and mechanisms for regional cooperation

After the central government replace most of the functions of the provincial government, it came into direct interface with Taiwan's 23 counties and cities, which resulted in the abrupt loss of mechanisms for conducting cross-regional affairs within a certain space. Now, to use the governments of the special municipalities, counties and cities in the seven main regions to jointly participate in setting up platforms for developmental cooperation in each of the regions, such platforms will be positioned as regional planning organizations (RPOs).

Common affairs within a region, such as overall development planning and major public works, should first be discussed and coordinated via

these platforms to establish consensus. The matters under consideration should then be reviewed, before the final formation of joint proposals and the implementation of the development scheme. Central plan subsidies should conform to the overall development planning reviewed and approved by the platforms, or regional plans reviewed and passed by the platforms should be prioritized for subsidization. When considering local applications for central government subsidies, priority should also be given to regional plans that cross city and county boundaries and on which consensus has been reached after review by the platforms, to achieve the effect of shared prosperity among all the counties and cities within a region.

Aiding the development of offshore islands, the eastern region, and indigenous people's tribal areas

- Setting up assistance mechanisms for disadvantaged areas
 - Relatively disadvantaged areas: Implement locally differentiated preferential measures and use local public investment as incentives to guide and bolster their development conditions.
 - Absolutely disadvantaged areas: Studying the use of equitable income-transfer measures to help maintain the quality of life, avoiding inappropriate development, and using innovative thinking to encourage them to develop their own unique resources.
- Continuing to strengthen care for the development of the eastern region and offshore islands

The central government should actively improve the external transport connections of the eastern region and offshore islands. It should also maintain the initiation and implementation of various development plans and public construction projects to carry out necessary income subsidy and transfer measures that satisfy the real and psychological needs of local adaptive development. At the same time, the government should draw upon statutes for the development of the eastern region, which matched to its particular characteristics, as a basis for effectively promoting the region's development.

- Respecting indigenous peoples' right to autonomy

The use, control and development of the land in the indigenous peoples' tribal areas should respect the voices of the indigenous peoples, to protect their right for autonomous development. There should be studies conducted on important natural assets in indigenous peoples' protected areas, a public goods system established with tribal settlements as the units of common property, and create funds as means of enabling settlements for aboriginal peoples to share enjoyment of the benefits of developing their protected lands, and to promote pacts for nature conservation.

Comprehensively reviewing the central government's public works subsidy mechanisms and project finance estimations

- Adjusting the national budget compilation and allocation system

All government agencies should adhere to the national land development vision and concepts in planning and drafting mid-term and long-term sectoral development plans. They should act from the perspective of the macrocosmic development of regional space, with the aim of integrating all related public works and strengthening the all-round integrative synergies of regional governance and cross-regional cooperation. Budgets should be reviewed according to indicators for assessing their levels of contribution to the vision and goals of national land development and cross-regional integrative synergies. This should be incorporated into the review principles for the preliminary process of prioritizing expenditure for annual public works and plans.

- Budget and plan integration and allocation among each level of government

Relevant basic infrastructure should be planned in accordance with local conditions to match local development needs, with funding divided rationally between different levels of government. The order of priority for the use of budgets and resources should be fine-tuned to encourage and prioritize the subsidization of cross-sectoral,

cross-regional integrated public works and projects, so as to maximize the benefit from resource utilization.

- Establishing a system to integrate development plans and financial plans

In order to ensure that government investment and local development achieve the optimum benefit, cross-sectoral integrated development plans should be established by combining public works with local development to raising the self-liquidating ratio of public construction plans.

Reforming government land-use review mechanisms

- Review side

Powers and responsibilities for reviewing change of land use need to be clearly divided between central and local government. In principle, changes proposed by local governments should be reviewed by the local governments themselves, and changes for large-scale or special development projects proposed by the central government should be reviewed by the central government. To simplify the review process, a “one level, one review” system should be put into effect. Environmental impact assessments should be entrusted to local government for review in conjunction with land use change and to be carried out in joint-meeting form. Reviews by the authorities in charge of the industries concerned, water and soil conservation, and agriculture should be conducted as parallel procedures, in order to enhance efficiency. But based on

Strategic Plan for National Spatial Development (Summary)

consideration of the broader national interest, the Ministry of the Interior should still retain power to “call-in” cases that have passed local review.

- Control side

The various enforcement rules of the Urban Planning Act should be gradually consolidated. Regulations on land use should be simplified and made more flexible to match local conditions.

- Other ancillary measures

The modes of review and the powers and responsibilities of members of various kinds of committees should be clearly stipulated by regulation. To create an integrated national land data system that focuses on key basic environmental information, should be set up, to provide applicants with a swift information inquiry resource.

- Vitalizing public land to support development

A survey should be conducted to clearly identify land owned by the government, the military, and state-owned enterprises. If the land is idle or underused, it should be changed to non-public use property or deducted from the capital assets of the holder and transferred to the National Property Bureau. A database should be compiled for idle and underused land reserves held by the state or state-owned enterprises, and a land supply and demand matching mechanism used to assist the acquisition of land for public works. Research can be conducted on using various government-operated funds to bring the development benefits

of such idle land into circulating use by means of urban renewal or co-development. A dedicated planning and development institution can be set up, and research conducted on establishing a mechanism for including urban brownfield sites in the land reserve database.

- Reviewing the establishment of a system for reasonable giveback to society and development burden-bearing

Relief, giveback, and compensation for restricted development areas

In areas where development is restricted due to their hazardous conditions, effort should be made to enhance their disaster-resistance capacity by means of reconstruction work and social relief. In areas where development is restricted due to public interest, emphasis should be placed on strengthening basic environmental works to enhance the carrying capacity of the local ecology, or incentives or subsidies should be provided for resource-conserving activities. In addition, the land reserve system and the National Environmental Trust can be used to acquire such land for the provision of public benefit.

Areas affected by NIMBY’s facilities should be compensated by assisting the development of local public amenities, subsidizing education, medical insurance or water and electricity fees, prioritizing the hiring of local residents, and other such means. Financial resources to pay for this can be raised by imposing supplementary local taxes or charges on those within the ambit

of benefit from the facilities, or by putting into practice the principles of beneficiaries or polluters paying and those adversely affected or furnishing benefit receiving compensation.

- **Development obligation-bearing**

There should be a review of the methods, amounts and payment time of urban plan giveback and burden bearing, to devise a rational and flexible development obligation-bearing system that gives overall consideration to such factors as the environmental impact and economic development contribution of the development activity.

- **Setting up a fund and reimburse payments to support the implementation of integrated development plans**

In order to raise the self-liquidating rates of public works, the implementation of integrated development plans will receive not only government investment but also collect local development reimburse payments. Combined with the establishment of a revolving-use fund, this will serve to improve the soundness of public works funding mechanisms and balance the benefits of land development.

5.3 Execution of the Plan

5.3.1 Execution mechanisms

Implementing the "Strategic Plan for National Spatial Development" into effect will require the combination of five sets of tools in the spheres of organization, law and regulation, finance, land, and governance. Just as computers need programs to drive their operation, spatial planning systems and sectoral administrative plans need to depend on these five sets of tools, as well as the implementation of focal development plans and flagship plans that cut across sectoral and regional boundaries.

- **Organization**

Establishing the Ministry of Environmental Resources and the National Development Council.

Setting up regional (functional) organizations for city-county cooperation.

Gradually and sequentially adjusting administrative districts, to enhance resource integration and raise the competitiveness of metropolitan regions.

Establishing a national land planning and research institution under the National Development Council.

- **Laws and regulations**

Reviewing and drafting (or amending) laws and regulations related to national land development.

Carrying through the enactment of laws related to national land plans.

Steering the development of disadvantaged

Strategic Plan for National Spatial Development (Summary)

areas, drafting and enacting a statute for the development of the eastern region, and amending the Offshore Islands Development Act and laws and regulations concerning the development of indigenous peoples' tribal areas.

Bolstering the application of the draft National Land Planning Act in combination with the Administrative Division Act, the Act Governing the Allocation of Government Revenues and Expenditures, and other laws.

Responding to civil society by enhancing information openness and public participation.

• Finance

When drawing up major public construction projects, greater emphasis on considering and examining national spatial development aspects should be incorporated into the review and budget-allocation mechanisms.

When setting up systems for the review and approval of plans and the allocation of financial resources, the central government should provide incentives, promote budget allocation review systems, and work in collaboration with local governments.

Assessment of the performance of administrative plans should be combined with national land development.

• Land

Establishing a review system that is efficient and balances rights with responsibilities.

Reviewing and improving the reasonableness of the giveback and burden-bearing system.

Integrating the planning and utilization of land held by the government, the military and state-owned enterprises.

• Governance

Confirming the status of spatial development.

Evening regional development opportunities, and balancing employment opportunities and living environment quality (balancing the quality and quantity of basic social service facilities)

Enhancing regional policy instruments, bringing sectoral mid- and long-term administrative plans under the umbrella of regional governance mechanisms, and, in particular, taking regional considerations into account in deciding the allocation of public construction resources.

Suitably dispersing the location of subsidiary units of central government agencies, to create new regional energy.

• Plans

Plans for promoting the development of the three main city-regions (e.g., the overall guideline plans for the greater Kaohsiung region, the Taichung metropolitan region, and the Taipei metropolitan region).

The guideline plan for the sustainable development of the eastern region, offshore island development projects, etc.

National land security and restoration plans, adapting to climate change, etc.

5.3.2 Action plans

Implementation of the "Strategic Plan for National Spatial Development" requires the further detailing of development strategies, specific measures, execution items, the main responsible and assisting authorities, modes of undertaking, and completion deadlines, set out in the form of "action plans." These action plans will govern the conduct of business both laterally between different central government agencies and vertically between the central and local governments. Their content will be divided into five planes of execution, namely: national

land preservation and sustainable resources management; innovative and industrial economic development; urban and rural sustainable development; green and intelligent transportation; and national spatial governance. They will be reviewed on a rolling basis according to the results and benefits of their execution, with a view to sustainably achieving the goals of national spatial planning.

For the detailed content of the action plans, please refer to Chapter 12 of the full version of this Plan.



Strategic Plan for National Spatial Development Summary

-1st Ed-Taipei City: Council for Economic Planning and Development, June, 2010

P; CM

Serial Number : (99)021.301

GPN 1009901948

ISBN 978-986-02-3780-1

1. National Development

554.07

國土空間發展策略計畫 摘要

Strategic Plan for National Spatial Development (Summary)

Strategic Plan for National Spatial Development (Summary)

Published Agency: Council for Economic Planning and Development of the Executive Yuan

Tel: 02-23165300

Address: No.3 Baoqing Road, Taipei City 10020, Taiwan(R.O.C.)

Web: <http://www.cepd.gov.tw/>

Manufacture: The Central News Agency

Art Editor: Fan, Yu-Jing & Kuo, Chih-Lung

Tel: 02-25051180

Address: 209 Sungkiang Road, Taipei (104), Taiwan(R.O.C.)

Web: <http://www.cna.com.tw/>

Published Month: June, 2010

Edition: 1st Published: 1st

Serial Number: (99)021.301 (Paperback)

GPN 1009901948

ISBN 978-986-02-3780-1

(Cost. NT\$ 200)

Special Thanks To Taipei County and Tainan Science Park for provicling pictures to use for this plan.



Council for Economic Planning and Development

June 2010

Serial number : (99)021.301
GPN : 1009901948
Cost. NT \$ 200

ISBN 978-986-02-3780-1