

Forming of Sustainable City Competitiveness in the PRC

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ABSTRACT. The article describes theoretical principles of international competitiveness of cities. The main methodological grounds of modern models of countries sustainable competitive development are studied. Taking into account the key trends in globalization, the main determinants of forming high competitive status of cities are comprehensively described. Benchmarking of sustainable competitiveness of PRC cities and provinces has been performed, and up-to-date priorities of balanced development of the People's Republic of China PRC have been analyzed. Chinese competitive development strategies has been investigated, and the benchmarking of sustainable competitiveness of Chinese cities has been accomplished. The nature and scale of urbanization processes in China are revealed. The main priorities in the structure of contemporary urbanization strategy of the PRC are defined, being focused on such areas as demographic planning, land management, financial security, residential construction in cities, ecology and environmental protection. The essence of smart cities in the context of their role in formation of local competitive development systems is determined. On the basis of qualitative indicators, the balanced competitiveness of cities of the PRC and the development of smart cities in Chinese provinces has been analyzed. The principles of government influence on the growth of sustainable competitiveness of Chinese megacities is investigated. The supporting evidence is provided for that the main objectives of Chinese megacities development for the next 5 years are to maintain sustainable rates of economic development, to increase the living standards of a specific city population, and to modernize the industrial sector. The strategic priorities for developing individual plans of competitive development for certain cities of the PRC and forming the sustainable competitiveness thereof, are specified.

KEYWORDS. Competitiveness of cities, sustainable competitiveness, balanced development, competitive advantages, competitive status, megapolization, urbanization, smart cities

Introduction

Escalation of competitive struggle in the context of the fourth industrial revolution in progress caused the uneven economic and social development of not only individual countries, but also regions and cities. In these conditions, the formation and implementation of effective competitive strategies of megacities aimed at ensuring high competitive status of states is a priority task in international politics of all developed countries. Competitive environment of countries and its megacities is accordingly determined by competitive advantages of

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economic entities, quality of life and safety of citizens. However, it is also obvious that country competitiveness depends directly upon the structure and effectiveness of its cities and regions, which should be systematically reflected in the state programs and strategies on increasing the competitive advantages within global economy. Among the scientific papers investigating theoretical grounds of competitiveness of countries and cities, as well as directions for ensuring balanced development thereof, it is worth mentioning the investigations of such foreign scientists as: T. Burton, Beatley, McKenzie Sutterwhite, Braine, Haggins, Clifton, Martin, Simmie, Eyck, Wolf, Thomson, Ward, Budd, Hearn, M. Porter, Turock, Martin, Kamagni, Rodgeron, Begg, P. Cresl, Nee Pengfey, and such domestic scientists as A. Poruchnyk, D. Lukianenko, O. Bilorus, L. Antoniuk and many others. The most significant investigation of international competition and theory of competitive advantages of countries, factors determining competitiveness on micro- and mesolevels has been accomplished by an American scientist, M. Porter. Sustainable development of cities was studied by such foreign scientists as Ch. Andersen, E. Burton, T. Beatley, M. Breheny, S. Wheeler and U. Sutterwhite and many others. Research of competitiveness of cities and megacities was highlighted in the papers of G. Albert, L. Budd, I. Begg, A. Belkit, R. Kamagni, C. Kern, N. Clifton, M. Porter, A. Roberts, P. Thompson, I. Turock, R. Huggins, A. Hirmis and many others.

At the same time, many aspects of this scientific problem remain insufficiently discovered and grounded. Further research is required on theoretical and methodological principles of the phenomenon of balanced competitiveness of countries and megacities within global environment. For developing effective strategies of balanced development of countries, rather important is also the experience of countries having achieved significant competitive advantages within short period, supplemented by competitive leadership in certain cases.

The research object is contemporary processes of competitive interaction of countries and localities thereof, affecting international competitiveness of the PRC. The subject is the conditions, factors and mechanisms of balanced competitiveness of the PRC. The aim is to study national strategies and programs for building sustainable balanced competitiveness of Chinese cities, to accomplish benchmarking thereof and to analyze the current priorities of balanced development of the PRC.

At present, China possesses one of the most competitive world economies, the national model of the PRC development until 2020 is described in long-term strategic development documents enabling to

utilize the Chinese economy potential and global resources, to overcome threats hampering the economic growth through, first of all, introducing of land, financial and labour reforms aimed at improving economy competitiveness; secondly, building of a national innovation system integrated into the global one; thirdly, ensuring social protection of the population by promoting equal access to jobs, finance, high-quality social services and social insurance; and, fourthly, ensuring sustainable balanced development by means of employing green technologies and through employing market incentives, rules, public investment, industrial policy, and increasing energy efficiency and environmental protection. These strategic ways may be classified into such major groups as industrialization, intellectualization, digitalization, modernization of agriculture and urbanization.

Experts of the Swiss-Korean consulting company SolAbility published a rating of the Global Sustainable Competitiveness Index, comparing different countries of the world according to the levels of development and economies sustainability. The rating includes 180 countries of the world, and has been compiled with due account of all the parameters of balanced growth – efficiency of country management, intellectual capital, social capital, resource management, availability of natural capital. The Global Sustainable Competitiveness Index assesses the current and future ability of countries to create and maintain financial and non-financial income and wealth of population thereof. Experts from various international organizations agree on a common point of view on balanced competitiveness as the ability of a country to meet the basic needs of present generations, preserving or increasing national and individual wealth in future, without exhausting its natural, intellectual and social capital. Balanced competitiveness of countries and megacities is the contribution of countries governments to the most effective usage of resources, development of ecological and social components (Fig. 1)

The first places in the rating belong to four Scandinavian countries – Sweden (60.5 points), Norway (58.2), Iceland (57.4), Finland (57.8) and Denmark (57.2). The top ten also include Ireland, Switzerland, Austria, Latvia, Estonia. Yemen (31.0) and Iraq (30.2) occupy the last positions. These countries possess better instruments capable to stimulate economy growing in future. In this rating, China appeared ahead of Australia, Spain, Hungary, Israel and others. In this respect, of 100-point scale, the PRC with its 48.9 points stands on 30th place, while Ukraine is ranked as the 91st (43.0). Thus, there appears a new sustainable competitive development dynamics in

the world, notwithstanding the remaining deep and sustainable social and economic inequality in this aspect between different countries and regions.

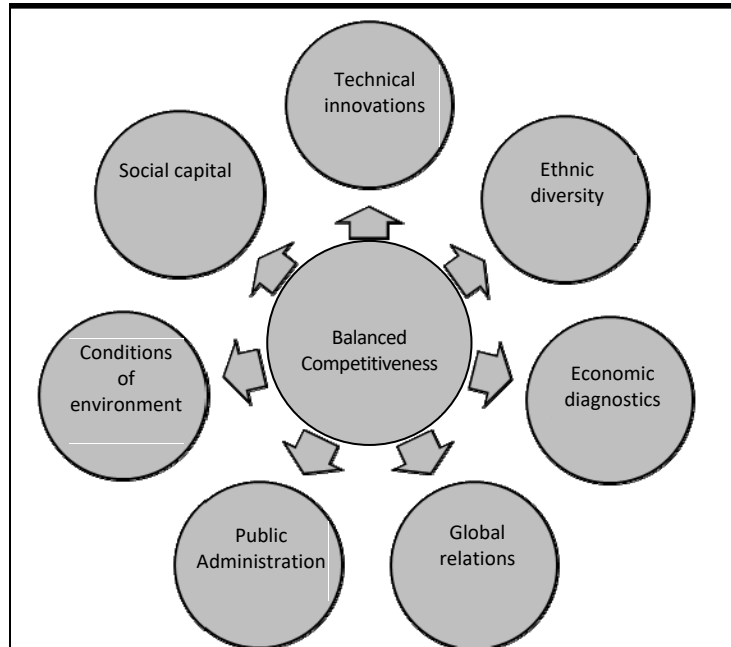


Fig. 1. The Main Components of Sustainable Competitive Development of Countries and Cities²

At the same time, it is worth emphasizing the fact that one of the global trends, being decisive for development and enhancement of competitiveness of regions and entire nations, is the rapid development of megacities. According to latest studies, in today's global economy thousands of initiatives are being implemented to increase the competitiveness of cities and megacities in different countries of the world. In the 21st century, these are cities that will be one of the driving forces stimulating further growth, prosperity and global competitiveness of countries and mega regions³.

² *The Sustainable Competitiveness Report 2017*. <http://solability.com/the-global-sustainable-competitiveness-index>

³ Of particular interest is the South Korean experience of using "scientific cities" for innovation development

Competitiveness of Cities and Megacities

Experts of the McKinsey Global Institute⁴ define a megacity as a city with a population exceeding 150,000 people. These are classified as small medium-sized cities of up to 5 million people, cities of up to 10 million people, and megacities with population exceeding 10 million people. City competitiveness is defined by experts of the World Economic Forum as a set of factors – policies, institutions, strategies and processes determining the level of balanced productivity of the city as the established level of well-being and living standards of the population, remaining stable within a specified period of time. Sustainability or balance involves economic, environmental and social issues.

The main determinants for forming a high competitive status of cities are institutions, politics and regulation, infrastructure and social capital. Experts believe that it is the efficiency of state policy and regulation that forms city competitiveness, and the main factors of reforms include the following: macroeconomic policy related to city financial policy, policies and regulations related to markets of goods, services, capital and labour forming a favorable business environment. Foreign economic policy is also important allowing to position the city in the global economy through international trade, finance, foreign direct investment, foreign specialists and tourism.

Among the features of ensuring competitiveness of megacities, there should be highlighted the synergistic effects achieved by companies through their own local activities, associated with global value added chains within clusters and cluster networks usually located near large cities, which, in its turn, contributes to acceleration of innovative development of economic entities. Global trends demonstrate that innovation is an imperative for urban economic competitiveness. Local system of innovation and competitiveness includes: number of entities in the innovation chain and the interrelations between them; commercialization of ideas; soft infrastructure, including creativity and added value of culture; financing; sales and marketing, where new ideas turn into new products and services, however, subject to proper regulation at the national level and while being exported to foreign markets.

These factors are included into the Global Urban Competitiveness Index Rankings, developed by the Center for City Studies and Competitiveness of the Chinese Academy of Social Sciences (CASS). It found top 10 cities having reached the highest competitive positions: New York, Los Angeles, Singapore, London, San Francisco,

⁴ *The Competitiveness of Cities* The World Economic Forum. Report 2003-2004. www.weforum.org

Shenzhen Tokyo, San Jose, Munich and Dallas. The reported data is based upon the following indices: GDP, GDP per capita, labour productivity, number of multinational companies in the city, number of patents received, employment rate, level of economic growth, price advantage. The research covered 500 global cities. The experts found that North American cities retained their positions, while leading European cities lost their rating positions to a certain extent, and Asian cities were increasing their potential.

In 2017, Shenzhen ranked sixth, ahead of a number of competitive cities in the EU and the US and Asia. When analyzing Chinese Urban Competitiveness (2017) report, among the leaders there occur such Chinese megacities Shenzhen, Hong Kong, Taipei, Guangzhou, Beijing, Macau, Suzhou, Wuhan, Foshan, Nanning, Wuhu, Dongguan and Chengdu. Such impressive result was achieved due to Chinese government policy.

Chinese megacities possess a huge potential for development, as evidenced by the Innovation Cities Global Index 2013, reporting the following 4 Chinese megacities to be among the world top 100 innovative cities: Hong Kong, Shanghai, Beijing, Shenzhen. It is worth mentioning that the first 2 positions belong to the US cities of Boston and New York, the top 10 includes as many as 4 cities of the US, and the other 6 cities of the top 10 represent the European continent – Vienna, Paris, Munich, London, Copenhagen, Amsterdam.

At the same time, the history of Chinese economy evolution shows that all strategic documents related to the country competitive development have contained important recommendations on strategic development of its cities and megacities. Furthermore, the modern competitive cities of China were positioned as favourable places for living, where the production process and human activities functioned as parts of the natural cycle, the economy was based on low carbon development model, environmental construction.

According to experts assessment, the scale of Chinese urbanization is unprecedented in human history in terms of increasing consumer demand, restructuring the economy and advancing national development. Therefore, it is not a coincidence that today the Chinese government is paying so much attention to sustainable competitiveness of the PRC. According to the research, Hong Kong possesses high competitive position under this indicator (Fig. 2).

Factor analysis of this indicator enabled to isolate the strengths of Hong Kong megacity, namely, smart governance, global connections and relatively high environment quality (15th position in the world) (Table 1).

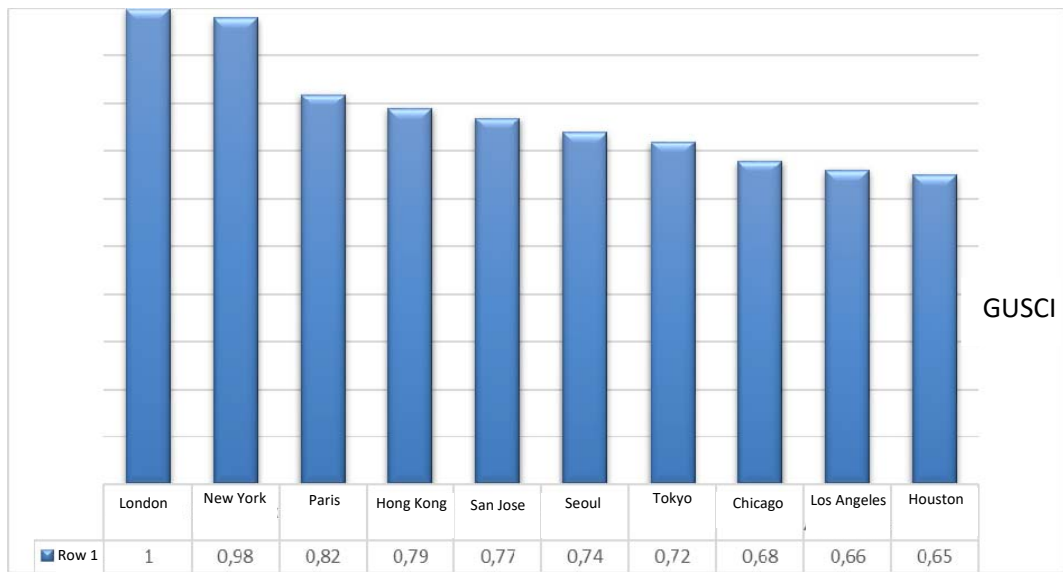


Fig. 2. Top 10 cities in the Global Index of Sustainable City Competitiveness

Table 1 Top 5 Cities in Global Sustainable Competitiveness Rating⁵

City	Economic efficiency	Social cohesion	Environment quality	Technological innovations	Global relations	Cultural diversification	State management
London	6	154	119	4	3	1	6
New York	16	339	2	6	1	5	22
Paris	53	137	120	1	7	110	177
Hong Kong	139	70	15	50	4	33	2
San Jose	2	418	171	2	67	33	22

⁵ Pengfei, N. Y. Wang «Urban sustainable competitiveness: a comparative analysis of 500 cities around the world»

According to the China Environment Report of the Ministry of Environmental Protection of the PRC, only 16 of 161 cities comply with environmental standards, and the quality of ground water in almost 60% of cities is classified as "poor" or "very poor".

These environmental problems have already injured the health of urban residents. As assessed by the OECD, air pollution problems ensue 350,000 deaths per year. The consensus was reached between the public and the government on that the environment should be prioritized while developing megacities.

Chinese Strategic Priorities in the Balanced Development

Having faced a number of the above mentioned problems, the Chinese government developed a new urbanization strategy laying the foundations for urban development. National new urbanization plan (2014-2020). The main priority tasks include, firstly, the migration of rural population to cities and urban areas, and, secondly, the use of the latest information technology for modernization of urban infrastructure and efficient use of land resources. Furthermore, specific importance is vested in preserving the unique natural and cultural features of each city. The Chinese government has foreseen that the incentives for a new urbanization will originate from reforms in key sectors, such as finance and agriculture. These shall be supported by seven year investment amounting to approximately USD 6.75 trillion.

The generated forecasts of Chinese urbanization by 2020 indicate that permanent urban residents will comprise 60 percent of the population of China, and 45 percent will be subject to registration as permanent urban residents. As well, forecasts have been developed by Chinese scientists on the development of urbanized regions of the PRC, specifying the ones expected to have the largest urban population and to require the largest investment funds for development (Table 2).

At the same time, it is worth emphasizing that the PRC National Urbanization Plan focuses on protection and preservation of the environment. Therefore, this plan emphasizes the need for a balanced urbanization process to achieve these goals over a short period of time, being one of the main tasks for the government (Table 3).

At the same time, the "roadmap" for urban development in the PRC, generated as a result of cooperation between different ministries of the country, encourages cities to adopt an approach focusing on balanced development and "green growth".

Table 2 Forecast of development of PRC urban regions⁶

No.	Province	Total population in 2030, million	Urban population in 2030, million	Rural population against urban population, million	Increase of urban population, ten thousand	New urbanisation construction funds, CNY trillion	GDP, CNY trillion	Urbanisation funds, % to GDP
1	Guangdong	14,470.67	13,901.97	5,381.01	6,306.46	17.17	164.42	10.44
2	Henan	9,494.06	5,635.67	1,584.68	1,959.84	5.36	83.78	6.4
3	Shandong	9,799.01	7,315.94	2,079.85	2,566.88	7.01	141.5	4.95
4	Jiangsu	8,170.34	7,363.93	2,209.68	2,699.9	7.37	157.33	4.68
5	Szechuan	7,785.76	4,853.64	1,289.88	1,613	4.7	69.93	6.31

Table 3 Main Quantitative Indices of Chinese National Urbanisation Plan⁷

Indicator	2012	2020
Urbanisation level		
population urbanisation level, %	52.6	60%
population urbanisation level under hukou registration system	35.3	40%
Main state services		
education level of children of rural migrant workers, %	0	99%
insurance coverage level of city residents, %	95	98
lodging availability level of permanent urban residents, %	12.5	23
Infrastructure		
rate of public transport utilization in cities with population over 1 million, %	45	60
coverage of public water supply system in cities, %	81.7	90
speed of sewage processing in cities, %	87.3	95
speed of recycling of waste per day against total detoxification in cities, %	84.8	95
coverage of households by broadband Internet, %	4	50
Resource environment		
Renewable energy consumption level in cities, %	8.7	13
Proportion of green architectures to new architecture in cities, %	2	5
Proportion of green areas in built-up areas of cities, %	35.7	38.9

⁶ Composed by Pengfei N. Y. Wang «Urban sustainable competitiveness: a comparative analysis of 500 cities around the world»

⁷ Composed by China's new Urbanization Plan 2014-2020, 2014. <https://dilemma-x.net/2014/03/17/china-national-new-type-urbanization-plan-2014-2020/>

Implementation of the objectives of urban development of the PRC was performed in accordance with the four main missions established:

- increasing the sustainability of urban development;
- promoting and facilitating the settlement of the status of rural migrants in cities;
- optimizing the infrastructure and use of land in urban areas;
- encouraging the integration of urban and rural areas.

According to results of research performed, it may be argued that the strategic directions of the PRC reforms are concentrated around such areas as demographic planning; land management; financial security; residential construction in cities and ecology and environmental protection (Fig. 3).

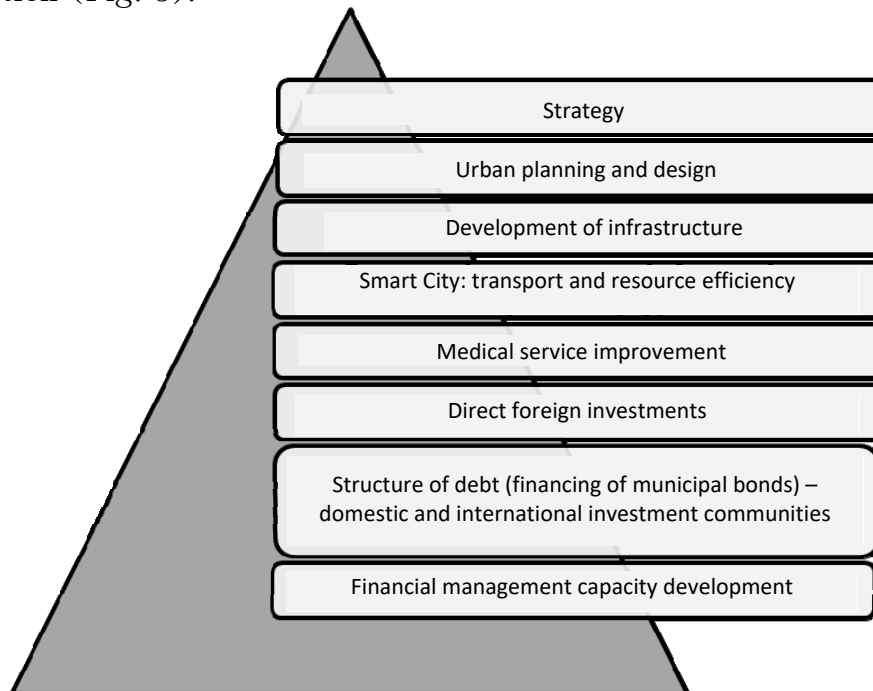


Fig. 3. National New Urbanisation Plan (2014-2020)⁸

Objectives of new urbanization are extremely close linked to the development of infrastructure and municipal transport. This important task involves significant funding and social and environmental requirements for sustainable development. The "Environmental

⁸ World Bank. *Development Research Center of the State Council, the People's Republic of China. China 2030*
<http://www.worldbank.org/content/dam/Worldbank/document/China-2030-complete.pdf>

protection" section summarizes all problems related to air pollution, water pollution and waste management.

As the PRC aims to ensure the global competitiveness of its state, where the population will be increasing on annual basis, this urges for creation of an ecologically friendly environment, and the quality of life shall be one of the key factors in the country competitive status. Therefore, Chinese experts find it the most important task in this context to increase the effectiveness of "green" management through incentives and tools allowing effective environment management.

The application of principles of green government in sectoral policies shall contribute to structural reforms required to achieve resource efficiency in low-polluted cities and megacities. Firstly, the long-term environmental policy refers to the Ministry of Environmental Protection, secondly, at megacities and regions level the Environment Bureaus have been established responsible for strategic directions of balanced development of the territories, and, thirdly, the increased taxes against the level of reimbursement of expenses for water supply, sewage and waste; fourthly, significant subsidies have been provided in the energy sector; fifthly, the ecological courts have started their full functioning.

In addition, the PRC is performing significant work on managing the quality of air and water and trading of rights for water usage by farmers and businesses. A huge importance is vested in the development of green transport, enabling to reduce the use of petrol/gas and to abate the emissions. The basis for sustainable development of cities in the PRC is the use of clean energy aimed at reducing the use of coal in activities of enterprises/factories, increasing the production of clean natural gas as a replacement for coal, complying with emission control measures as provided by the Paris Agreement, and developing of renewable energy sources. Importance-bearing are the measures for stimulating business entities to reduce energy consumption in industry through increased taxes on emissions, for the usage of alternative energy sources and the introduction of "blue angel" special ecological label. The main focus of the Chinese government covers the integration of water supply and environment pollution management system, as well as the control of chemicals and hazardous materials. Above that, experts suggest introducing incentives to promote "green local government".

The current Chinese state policy in the field of competitiveness provides for compiling individual plans for competitive development for specific cities, taking into account strengths and weaknesses thereof. While investigating the strategies of sustainable development of cities in the PRC, it is worth noting the features of the competitive progress of Changsha megacity, one of the most competitive cities in central and

western part of China. The state council started stimulating the development of the Changsha-Chuzhou-Hunan city cluster back in 2007 in order to create an environmentally friendly, energy-saving and ecologically clean megacity with more than 7 million residents. This city was proclaimed as World green city. Following the government initiatives, a new ecological city of Yanyu was created, based on the development of environmental technologies and the integration of sewage processing, with artificial and natural pools to reduce pollution. In 2008, Changsha also established a pilot area as a new growth driver for Hunan city and province. It is oriented on ecologically clean and innovation-oriented development, and is expected to be accomplished in 2017. The major importance is given to developing the cluster of high-tech manufacturing, and creating a model for urban and rural integration compliant with high standards of environmental sustainability.

Zhuhai City was one of the first four Chinese Free Economic Zones (FEZs) open to the outside world, relying upon three major strategic development stages. At the first stage, the city was initially focused on infrastructure development, improvement of the investment climate, attraction of foreign investments and the latest production technologies. At the second stage, Zhuhai concentrated itself on high-tech industries with intensive technologies and high added value, and at the third stage, this city is striving to achieve further progress on environmental sustainability and become an exemplary city of scientific development through transparent and efficient state electronic services and implementation of innovative strategy of city development. There was developed the relevant Regulation on Promoting Science and Technology in Zhuhai City as a Free Economic Zone of the PRC.

Smart Cities in China

The new urbanization in China reflects the definite intention to continue its economic growth in the future. In recent decades, the concept of "smart cities" has become increasingly used to ensure balanced development in the system of enhancing state competitiveness. In the PRC, modern cities play a decisive role in the social and economic development of the territories, and have a huge impact upon ensuring high competitive status of the country.

International experience suggests that as urbanization reaches 50% - 70%, there occurs an outbreak of social problems. There arise unemployment issues, the gap between the rich and the poor is increasing, there appear problems with lodging shortage, road congestion, lack of energy resources, environment pollution. According

to the world experience, the development of smart cities helps not only to overcome the existing problems, but to prevent occurrence of new ones.

In the contemporary global world, a smart city is a highly competitive, developed urban area providing sustainable economic growth and high standards of living in such key areas as: economy, mobility, environment, people, quality of living, and government. While investigating the concept of "smart cities in Europe" developed by Vienna Technical University, there may be formed a comprehensive and objective picture of successful local competitive development systems evolution scenarios.

The concept developers emphasize that assessment of smart city evolution efficiency should include 6 main indicators, namely: smart economy, smart mobility, reasonable environment, smart people, high-quality living and smart management. By its very nature, the smart cities concept consists in creating and combining human, social capital and information and communication technologies in order to achieve more sustainable economic development and improve the quality of living. Thus, a smart city is a city employing modern information and communication technologies to provide high standards of quality of living in it. Technologies used in smart cities are integrated into the appropriate structures to improve the quality of service delivery, reduce resource cost and consumption, and enhance communication among citizens. Experts of the Spanish Business School IESE developed the Cities in Motion Index to create effective strategies for smart city development. According to the latest research⁹ of this institution covering 181 global cities, the key factors for sustainable competitiveness of urban areas are as follows: human capital; social cohesion; development of urban economy; efficiency of state and city administration; ecology; transport and mobility; urban planning; international cooperation; technology development level etc.

A famous Chilean professor B. Cohen suggested a methodology for assessing smart cities, and compiled the relevant international rating. In his opinion, the best smart cities are Vienna, Toronto, Paris, New York, London, Tokyo, Berlin, Copenhagen, Hong Kong and Barcelona. Vienna has the highest competitive position in the rating among such sub-indicators as: quality of living (1st place), innovative city (5th place), regional green city (4th place), e-government (8th place).

In present global economy, smart cities are not only an important strategic direction for Chinese megapolization within the thirteenth five-year plan, but also a key source of competitive advantage for both

⁹ The study was conducted by the IESE in 2016.

individual companies and entire nations. Smart cities are intended to solve the problem of inadequate quality of public services in megacities and low standards of living. In this regard, according to the thirteenth five-year plan, urbanization in China should reach 70%, meaning that other 350 million residents will become urban population. At present, China has 654 cities, of which more than 80 have the population exceeding 1 million residents. In the previous five-year plan, the Chinese government allocated approximately CNY 1.6 trillion (EUR 230 billion) for intellectual upgrade of utilities and implementation of smart grids, smart transport, smart water supplies, smart land management and smart logistics. In 2013, 193 pilot projects were approved in Chinese cities. The rapid development of smart cities in China is significantly relies upon collaboration between the IT sector and the government. As of September 2013, around 311 cities in China started implementing "smart city" strategy to promote industrialization, informatization and urbanization.

An important step in smart cities evolution was the cooperation between China and the European Union, especially in the field of digital economy, research on urbanization issues, training of high-skilled specialists, etc. As a result, a number of important steps were taken, among which: extension of cooperation on smart and green cities, creation of expert structure on smart cities issues, including strategic management committee, group of technical experts and the secretariat, and forming of a platform containing a database for identifying problems and opportunities for establishment and development of smart cities, incorporating the experience of such cities as Riga, Budapest and Shanghai, Pudong.

Furthermore, the cities of the EU and China were selected, in which pilot projects will be implemented aimed at ensuring sustainable social and economic and innovative development. The cooperation between the EU and China is extremely effective in the field of urban planning and design, upgrading of utilities, development of green buildings, smart transportation, while the parties have also agreed upon launching new joint programs involving Chinese and European cities and enterprises, with expanding the number of regionstaking part in the pilot studies.

At the same time, analysis of social and economic development of the PRC shows that solving all important country problems of social and economic development for the period until 2020 is provided for in the 13th five-year plan. As a result of its implementation, it is expected to build a middle-income society and accomplish national renaissance of China on the basis of principles of innovation (targeting improvement of production quality); coordination (management and control over internal and external markets); "green" growth (challenging

environmental problems, protecting environment); focusing (ensuring balanced development both in urban and rural areas, as well as in various industries); accessibility (ensuring availability of social services to general public).

The main targets of the thirteenth five-year plan are:

1. Sustainable economic growth
2. Abating poverty and stopping aging of the nation
3. Improvement of ecological situation in the country
5. Development of education and science
6. Improvement of medical service quality
7. Agriculture sector modernization
8. Promotion of innovative development of the PRC
9. Establishing and optimizing industrial structure
10. Strengthening of the PRC international role.

In respect of priority urbanization directions of the thirteenth five-year plan, the major projects include the development of megacities and small towns and villages, as well as the expansion (Table 4)

Table 4 New Type Urbanisation Priority Projects of the Thirteenth Five-Year Plan¹⁰

Urbanisaztion	Promoting the process of urbanization of 100 million rural migrants and other permanent residents; accelerating the reconstruction of buildings and urbanized villages intended for 100 million people; promoting urbanization of urban residents in the Central and Eastern regions, mainly in cities of small or medium size.
Small and medium-sized cities growth	Accelerated improvement of full set of functions for specified small cities, as well as creation of appropriate conditions depending upon the size and density of permanent population of urban areas and economic capacities thereof
Development of small cities with unique features	Development of small cities with unique resources, advantageous location, cultural features, and creation of small towns with unique components, including recreation and tourism, trade and logistics, availability of information technologies, "smart production", scientific and technical basis, transfer of ethnic cultures through enhanced investment support
Green cities	Creation of green and woody urban clusters model through advancement of green architecture; expansion of environmentally friendly transport; promotion of efficient allocation of energy resources and new energy supply systems; supplies
Drain systems technologies	Implementation and development of drain and irrigation systems and water storage facilities in urban areas through penetration, storage, accumulation, purification, usage of water, and providing support for construction of "sponge" architecture, residential complexes, roads, parks and green areas

¹⁰Composed by Xi expounds on guideline for 13th Five-year Plan, 2015. <http://english.cntv.cn/2015/11/03/ART11446559744633822.shtml>.

Underground pipelines	Promotion of constructing integrated underground channels, including central and branch lines, alongside with reconstructing old urban areas and expanding underground space, with an emphasis on new areas in cities and development of cluster zones; performance of construction works aimed at improving underground pipelines for clean water, sewage, rainwater, gas and heating in cities, as well as construction works for underground power transmission networks and communication networks
Competitive villages	Development of intensive water supply to farms, extension of water supply coverage in rural areas to 80%; comprehensive support of renewable energy sources development, creation of models of cities and villages employing environmentally friendly energy, restoration of hazardous residential buildings in rural areas, and creation of earthquake-resisting residential buildings in rural areas; implementation of sewage processing methods in rural areas, promotion of special projects for organization and improvement of waste in rural areas, general improvement of environment in 130,000 administrative villages, and collection and recycling of waste in more than 90% of administrative villages

It is important to note that the further directions of Chinese reforms approved at the 18th Communist Party Congress session, are, in our opinion, aimed at creating sustainable competitiveness of the PRC proper. This is pre-determined by the nature, main tasks and tools and purpose of the following reforms:

- Reduction of market barriers, involving: equal attitude to foreign enterprises as compared with Chinese ones, reduction or total elimination of barriers for entering various economy sectors, simplification of business registration processes; change of pricing processes for all goods, price establishment based upon market mechanism without government intervention.

- Reforming governmental functions, including: control over expenditures for maintaining state machinery; reducing the scale of government departments; commitment of government agencies to engage private sector services through tendering; changing the system for assessing GDP growth in order to provide a high rating for work related to environment protection and reduction of energy consumption.

- Promotion of reforming state-owned enterprises with further creation of joint ventures, i.e. those with private investors possessing their shares.

- Financial reforms stipulating promotion of creating new capital markets and developing existing ones; creation of bank deposits insurance system; liberalization of interest rates.

- Fiscal reforms concerning redistribution of tax powers between central and local authorities; improvement of transparency and efficiency of filling and utilization of budget; changes in taxation.
- Reforms related to environment protection through promotion of markets development for selling permits for harmful substances emissions.
- Refroms related to population flow, development of rural areas. The increase of urban population share in total population from 53% in 2012 to 70% by 2030 will ultimately contribute to expansion of domestic consumption.

Conclusions

Chinese national competitive development model is aimed at ensuring sustainable economic growth, modernization of industrial sector, improvement of life conditions and welfare of the population, strengthening of the PRC international position and overcoming the most burning problems of the country, as well as development of balanced competitiveness. The PRC Government fulfils the existing tasks through implementation of key reforms in the field of urbanization, industrialization, digitalization and modernization of agriculture. Innovations are interfused not only in the industrial sector, but also in citizens quality of living, medicine, infrastructure development, environment protection. The strategy of innovative development of provinces and cities of the PRC is aimed at reducing the gap between the least and the most developed regions of the country. In the backward areas, infrastructure and education extension will be targeted. In these regions, the latest technologies will be introduced to industrial and service sectors, improving the economic situation and innovative capabilities of the region. In the most developed regions, the main forces will be aimed at development of information and high-tech industries, massive implementation of the latest technologies at industrial enterprises, and achieving a new level of balanced sustainable development by virtue of green technologies.

The main objectives of Chinese megacities evolution over the next 5 years are maintaining sustainable economic development, improving life standards of urban population and modernization of the industrial sector. The same as in the whole country, the priority is vested in high-tech industries, city infrastructure development, introduction of high technologies, development of science and environment protection.

Chinese megacities have a great potential for innovation, and it is important that this potential is not yet fully unleashed. At present, the level of urbanization in China exceeds 50%, and as it is known from

world experience, such situation considerably complicates cities functioning. Chinese megacities are developed on the basis of "smart cities" concept. What this concept implies is the introduction of high technologies aimed at improving the quality and standard of living of the population and ensuring effective functioning thereof notwithstanding the high urbanization level.

Among the main tasks of the thirteenth five-year plan, the following ones may be emphasized: ensuring stable economic growth rate, overcoming the economic gap between cities and villages, and the one between regions, modernizing the industrial sector, developing high-tech industries, improving living standards and increasing incomes of the population. Furthermore, in present context of lack of energy resources and environmental pollution, a priority of the thirteenth five-year plan is to reduce energy consumption and to improve the ecological situation in the country. In order to follow the eco-friendly course, Chinese industrial enterprises will be forced to implement innovations and new technologies enabling them to reduce CO₂ emissions into atmosphere.

The strategic priorities for ensuring balanced development of the PRC correlate with the forecasts and prospects of becoming a competitive leader of the 21st century. While analyzing the horizons of China development, comparing the existing strengths and weaknesses of the Ukrainian economy, it should be emphasized that the main wealth and key potential of economy development is human capital, and the investments into science, culture, education and health and environment protection ensure the most desired result – sustainable, balanced and comprehensive growth.

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