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Sustainable Development and Smart and Green Cities

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التنمية المستدامة والمدن الذكية والخضراء

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Abstract:
The smart cities and intelligent solutions were not available to us in the past, but now smart approach keeps us new ways to solve environmental problems, and whether or not the same can stimulate new thinking smart to solve these problems. They are urban green areas or to better understand the benefits of green infrastructure and the need to communicate basic information - Guidelines for Green City "project, practitioners and taken for targeted intervention decision. Practitioners globally successful implementation of green infrastructure should be based on the content - the goal of this project is more than just a good way into the mainstream of this information, but at the same time is supported by evidence. Healthy successful and gaps in city plan activity - Green City in the heart of the green element of movement is very important for long-term confidence. Statistics UN 50 percent of the world's population is approximately 70 percent for 2047 is therefore expected to live in urban areas, urban green space and understanding the true value of global decision-makers have the means to ensure their place in Infrastructure projects are a lot of trees and other green space (both above ground and below ground) and provision of new roads, transit agencies and other green early in the project description. With this context, the new buildings certified under the LEED program in the United States. Developers and government agencies, although their efforts in real estate marketing. Forests and pollution were there before it reaches the city, especially to reduce background concentrations. An area larger than the size of the leaves, can improve overall air quality. This area of town and traffic and other local sources of pollution of the air filter capacity. The average tree in a mature tree Netherlands captures as much as 1.4 kg 100 g particles (PM10). 100 g 1.500 km PM10 emissions of particles travelling in a private car. 1,4kg PM10 20.000 km. Leaves can also help in the ceiling so that the cap should be above 50% porosity. All levels of effective leaves are on trees with shrubs and herbaceous plants and underground factory.

Key words: Environment, Sustainable Development, Smart and Green Cities.

الملخص
لم تكن المدن الذكية والحلول الذكية متاحة لنا في الماضي، ولكن الآن يوفر لنا النهج الذكي طرقًا جديدة لحل المشاكل البيئية، وسواء كان ذلك ممكنًا أم لا، فيمكنه تحفيز التفكير الذكي الجديد لحل هذه المشاكل. إن المناطق الخضراء الحضرية أو المناطق الحضرية هي المناطق التي يجب أن يفهم فيها الممارسون بشكل أفضل فوائد البنية التحتية الخضراء والحاجة إلى توصيل المعلومات الأساسية - المبادئ التوجيهية لمشروع "المدينة الخضراء"، والممارسين، واتخاذ قرار التدخل المستهدف. يجب أن يستند التنفيذ الناجح للممارسين على مستوى العالم للبنية التحتية الخضراء إلى المحتوى - إن هدف هذا المشروع هو أكثر من مجرد وسيلة جيدة لدخول التيار الرئيسي لهذه المعلومات، ولكن في نفس الوقت مدعوم بالأدلة. إن النجاح الصحي والفجوات في نشاط خطة المدينة - المدينة الخضراء في قلب العنصر الأخضر للحركة مهم جدًا للثقة على المدى الطويل. إحصاءات الأمم المتحدة 50 في المائة من سكان العالم حوالي 70 في المائة بحلول عام 2047 ومن المتوقع أن يعيش صناع القرار العالميون في المناطق

الحضرية، والمساحات الخضراء الحضرية وفهم القيمة الحقيقية لديهم الوسائل لضمان مكانهم في مشاريع البنية التحتية هي الكثير من الأشجار والمساحات الخضراء الأخرى (سواء فوق الأرض أو تحت الأرض) وتوفير الطرق الجديدة ووكالات النقل وغيرها من المساحات الخضراء في وقت مبكر من وصف المشروع. في هذا السياق، تم اعتماد المباني الجديدة بموجب برنامج *LEED* في الولايات المتحدة. المطورون والوكالات الحكومية، على الرغم من جهودهم في تسويق العقارات. كانت الغابات والتلوث موجودين قبل أن يصلا إلى المدينة، وخاصة للحد من تركيزات الخلفية. يمكن لمساحة أكبر من حجم الأوراق أن تحسن جودة الهواء بشكل عام. هذه المنطقة من المدينة وحركة المرور وغيرها من مصادر التلوث المحلية لسعة فلتر الهواء. تلتقط الشجرة المتوسطة في شجرة ناضجة في هولندا ما يصل إلى 1.4 كجم 100 جرام من الجسيمات *(PM10).* *100* جرام 1.500 كم من انبعاثات *PM10* من الجسيمات التي تسافر في سيارة خاصة. 1.4 كجم *PM10 20.000* كم. يمكن أن تساعد الأوراق أيضًا في السقف بحيث يكون الغطاء أعلى من 50٪ من المسامية. جميع مستويات الأوراق الفعالة موجودة على الأشجار مع الشجيرات والنباتات العشبية والمصنع تحت الأرض.

الكلمات المفتاحية: البيئة، التنمية المستدامة، المدن الذكية والخضراء.

Introduction

This system of modern urban life, innovation, social cohesion and stability of the connection can be grown through a targeted strategy. Adaptation to the new reality of the city not unprecedented, demographic, economic, social and environmental pressures facing the city can be fatal. United Nations, further complicating the urban mobility of the urban population in the world and also puts enormous strain on public services, increasing the number of densely populated cities in 2050, this exodus is expected to grow by 75% [1]. McKinsey Global Institute recently 600 largest cities in the world in growth of global gross domestic product (GDP) of 65%, income inequality, mass unemployment, which is associated with problems such as illiteracy, social conflicts and east club will be exacerbated, backgrounds. Such rapid urbanization and environmental impact are not a good thing. Cities planet occupies a modest 2%, they have energy consumption 60 percent to 80 percent and 75 percent of carbon dioxide emissions. Increased costs for traffic, pollution, waste and energy is no doubt that human health and will continue to provide stability to the growing threat. The main problem for local authorities and cities can be sustainable ecosystem. Almost certainly, investment, tourism and job opportunities for talent able to pull off a road leading to the city [2]. Long-term stability of life in the city designed to improve the quality of management and long part of the strategy and measures - the concept of intelligent city includes a wide cross.

In any case, the reputation of city life and technology, natural disasters and waste management, including a whole range of factors associated with drinking water, green areas, public transport, health, education and social security, access to clean. ICT must not forget that just means to an end. Ultimately, improving the people life quality. The private sector has to contribute to more than one area - the most important thing, therefore, the development of smart cities, thus increasing the efficiency of management in a comprehensive vision of integrating all these components. There is no limit as an integrated system design, such as South Korea, Songdo is relatively easy for a newly built business center - beyond the usual financial constraints - what urban planners devise. Instead of traditional urban change very great difficulty [3]. Emerged in recent years, most intelligent business opportunities, given the scope and size of the proposed project, clarity of information and communication technologies (ICT) and stability first. Consulting firm IDC, billion dollars, 57 in 2014, according to the revenue generated by ICT can be used in smart city projects [4,5].

Progress by planning

Planning process is expected to grow exponentially over the next few decades, the global urban space, cities and their strategic and regulatory scenario. Only after they define priority areas for innovation and development of future opportunities and to be able to think of new ways. The uniqueness of the capital and the visibility of the action plan for sustainable development: this purpose, flexible, and participate in the development process. But two different recipes for success of the company, systematic way to solve their own model of development must come up with a unique set of challenges and opportunities facing, which is the reason for all real sea o 'change concerns municipal authorities [6]. Many cities are still targets are met or not, whether methods fail to control urban development. Instead, they tend to deal with problems as and when they occur, but rather an integrated, holistic approach. They are a fact approach to urban planning, industrial policy. They always more interested in their power to protect the foundations of the state against brick walls erected by the authorities. Take the long view of the big cities and to improve services to improve the efficiency and sustainability of their projects, local people should be used to encourage further innovation. To do this, cities need to consider all the factors in the development of intelligent control systems. Just so that they will be sustainable. Developed in partnership with the private sector and local citizens long-term strategic projects. During long-term

strategy must take into account the full range of its constituents. After diagnosing the situation of measures to develop a strategic plan, and finally, offer a three-step process [7].

Economics

That's part of local development plans, business strategy, the formation of industrial clusters and innovation and entrepreneurship, including in the presence of all factors contributing to the economic development of a city. Suwon, South Korea center on the economic development has the strategic plan, given new prominence of the economy. Biotechnology and nanotechnology, specializing in the IT SMEs to finance the government of the city extending from each of the three companies that now operate in the field of high technology and economic landscape. To establish itself as the capital of the Netherlands technologically Hove - similar approach Eind. R & D and innovation has decided to bet its future. Since then, the network of the leading companies in the automotive, design, food and nutrition, technology, and medicine - not a religion. The influx of new projects is that stimulates the local economy. Like countless examples of urban development in the 21st century is largely thanks to the cooperation shows the possibility for stimulation the recovery and revitalization [8].

Human resources

One of the main goals of the city is the development of human capital. Attracting and retaining talent, and increasing the level of local education, and the need to foster creativity and research is mandatory. Vancouver, for example to promote biotechnology research after the decision of the British Columbia University in the city of foreign skilled labour to attract a steady stream of highly specialized biotech companies. To retain talent, the company has established a number of flexible policies in the sector; they are very attractive bonuses and incentives offered. A similar vein, Suwon to improve the educational infrastructure and the training of more than 350 million euros in capital and strengthen its competitiveness [9].

Environment

Increasingly scarce natural resources and environmental protection, the city no longer affords to ignore the issue of environmental sustainability. In fact, efficient water management and the environment by supporting renewable energy and green buildings, the city at the same time significantly reduce their energy expenses, and live cleaner, more pleasant places to be. Yokohama, Japan, the question is. Renewable energy and commitment helps reduce carbon emissions and dependence on fossil fuels, a pioneer in this field. Ottawa, the Canadian government, among other things, has public transport and bicycles, which aims to promote the use and handling of large green municipal projects. LED lights have been installed throughout the city, and city services for the electric car. In addition, water management for irrigation of hard and tree planting campaigns. In order to reduce the more than 6000 tons of carbon dioxide emissions per year, shifting to renewable and efficient city in Europe, in the Spanish city of Malaga eco trying to be pretentious [10].

City planning

To make their life more than many urban green areas and public places oriented local plans feature. They usually include a firm commitment to smart growth. Easily accessible public services related to the city - most importantly, the new compact urban planning methods and to think about. Smart cities built from scratch, it is easier to perform, although there is a call for the revitalization of urban areas abandoned. € 180 million investments from the state-backed project, Spain's second city in Europe, the most significant change projects in the city. A former industrial area with parks and facilities through the construction of 4,000 new homes is going to be turned. Related industries since 2000, the area attracts many technology companies in 4500. Until now, the scheme has helped to create more than 56,000 new jobs [11,12].

Governance and Civic Participation

To address the problems faced by the citizens of the city will be the main point. As consideration, the level of participation in e-government and business leaders and local residents should enable the authorities involved in implementing the plans. Singapore is one of the pioneers in this field. "80 years ago, the Singapore government, civic and business organizations to facilitate communication and collaboration between a number of initiatives supported. Today, the victims of the city are among the most advanced in the world. Its citizens are now mobile devices by 1600 to have access to interactive services bureaucracy should be minimized and the procedure can be carried out. Experience of Singapore reveals the truth about smart cities another prominent project in New York to exchange ideas and then move that G 'ideas encouraging neighbors to establish working groups to New York. City with a platform of change. Participants of public services for the implementation of the plans and their associations with the tools and resources for coping [13].

Public management

Many cities in terms of the design of the new organizational and management models, in particular, efforts will be made to improve the efficiency of public institutions. Demand in this area in order to

optimize the experience of the private sector, basic facilities. City Council consortium of private companies and local roads, sidewalks, bridges, lighting and maintenance of green areas entrusted to the example of Birmingham, the second largest city in England. These companies, but only a few million pounds a year to maintain the city, not just a good job [14].

Technology

Cities live by technology alone, ICT an important driver of economic and social development of society. Cities around the world as it should be have many of the new generation have tried to harness the benefits of ICT. Major operations center, police, fire fighters and ambulance control, fiber optics and other technologies the Chinese city of Chengdu. In addition, the Internet will be available soon at any point in the city. Songdo, South Korea so soon, buildings, hospitals, transport, and business for all its integration of information systems. The locals quickly - South Africa, Johannesburg, to build a broadband network technology company in the group. This is not to say that this is the largest exclusive domain of ICT. Transportation equipment, waste management, including remote maintenance, the Council for the management of multiple sensors network, the box is equipped with one of the secrets of outer Sant Cugat del Valles Barcelona, for example, a satellite town Let dishes, environmental control, lighting, Wi – Fi [15].

Mobility & transportation

Easier for people to get around the city and the main difficulties in the use of public services in the future especially in urban population over the next explosion. Fortunately, many cities are on the front foot. Curitiba, Brazil, for example, a fleet of 2,160 buses to improve mobility has already been determined for smart, integrated transport system. Capacity, high - the main city center with high speed, high ring roads and more traditional lines, the neighborhood is filled with other lines of activity between the frequency of buses. In addition, the city bike lanes were built 120 km. Singapore Government to facilitate the mobility of the city on the other side of the planet to determine the most effective and useful technology, are working on a project. The government of the city now allows you to predict traffic jam motion sensors installed in the system [16].

International presence

Given the violence and the international scope of competition between the major cities of the first known map of the world based on the need to achieve salvation. Foreign representatives of the city to build a presence in the international and global positioning require bold initiatives to increase tourism and attract foreign investment. The activities of a number of strategic tourism plan developed in Barcelona, for example. Quality tourism segments - the ultimate goal of the plan to increase the attractiveness of the city, especially in the international positioning. For this purpose, the establishment of the state of the city council works with the Chamber of Commerce of Barcelona - information campaigns, exhibitions and forums. In many ways, Barcelona already has long-standing strategic commitment to sustainable tourism development as an international role model for the city, following the example of Vancouver [17]. In recent years, the local government Oceans Blue Foundation, BC Hydro and the nature of these associations, in support of stability and works closely with companies to improve their energy efficiency programs.

Asia's urban environmental challenge

Asia will be the fastest urbanizing course. In particular, local and global are depending on the ambient pressure. Some of the most polluted cities of Asia have rapidly growing greenhouse gas (GHG) emissions in the world. And the most distinctive features of urbanization in Asia tend exacerbates environmental problems. Despite these difficulties can help address environmental protection as urbanization, there are reasons to be optimistic. Global cities occupy 2% of the total area of land on Earth is only 75% of the total use of resources. Waste generation is approximately parallel to the consumption of resources; the city attaches great proportion of the total waste generated. Carbon dioxide, methane, nitrous oxide and GHG emissions for urban areas alone contain about 80% of total global emissions [18]. According to these statistics add environmental damage associated with the expansion of the city in forest cover and vegetation of the effects of air pollution mentioned above, in particular, it has contributed to a number of climates. In the long run, given the above, countering the impact of urban growth on the environment in developing countries, can be fatal. This scale is resulting in no doubt that the level of gross domestic product (GDP), as compared to any meaningful measure will bring substantial economic costs [19]. Or 4% more for some countries - in fact, only about 2% of the cost of air pollution can reduce annual gross domestic product. Diseases and deaths due to air pollution in urban areas in China, the economic value of gross domestic product, which is equivalent to about 5%. Austria, France and Switzerland A World Health Organization study of traffic pollution resulting health costs alone, and found that it is equal to about 1.7 percent of gross domestic product. The cost of treating seriously injured in road accidents more the figure. Ontario region of Canada, which has a population of pollution 12 million air, the total annual cost of hospitalizations, emergency room

visits and worker absenteeism accounts will be at least $ 1 billion. These numbers more than 1 billion dollars in Jakarta, Indonesia, pollution of air and water, the findings of the annual cost estimate, $ 2 billion in Bangkok, Thailand. China climate change parameters of the urban population in Asia will be the subject of special attention. During the 21st century to the 88 cm [20].

In addition to increasing sea levels, associated with increasing the quality of housing and is likely to affect the urban population live in informal settlements, their number in urban areas in Asia. After all, the rapid growth of Asia is an important ecological value, and will fall disproportionately on the poor quality of the environment and reduce the negative effects of climate change on the most vulnerable part of the population of the city. Asia's economic growth in urban areas has brought millions of people from poverty and improves living standards. In the longer term to achieve sustainable growth in living standards in urban areas in Asia will require continued increase in the overall economic advance, but at the same time the growth of such environmental damage related repairs. In particular, production, consumption and waste generation require solving two services for waste. So far, the rapid development of the city has reduced the amount of waste generated by the results of the specific measures to be ideal [21]. These measures reward environmentally responsible behaviors in clean coal and other fuels to replace natural gas and the use of public transport and subsidies to promote combustion. Equal to the frustration of these rules try to limit the activity of specific pollutants and contaminants, such as command and control measures for the collection of fees or tax consequences. In this regard, energy and other pollutants measures to reduce the demand for results, in particular, were disappointing. However, inevitably improve the quality of life in cities in Asia lawns and reduce air pollution and water as well as to expand the emissions of the greenhouse significantly reduce the demand for fossil fuels and technological change, good planning can be done by. This will ultimately improve the quality of life for economic growth requires a change of heart by politicians [22-23].

Energy

Urban consumers, they are usually in remote areas of energy efficiency. Lighting, heating, air conditioning and electric vehicles and other forms of quarter consumer energy consumption more than half of the world [24,25]. 75% of energy consumption is more important than changes in the global pollution of cities. Renewable energy technologies, the newest urban potential energy sources and more independent, they are energy producers may be whether or not. Wind, renewable energy and micro-generation of electronic devices, or solar electric technologies and applications for combined heating (or cooling) plants decentralized. China Rizhao city is already home will use the power of the sun to heat water to 99%. Office buildings and green lifestyle in order to promote cooling of shopping centers, operational innovation - Malaysia, you can find many examples of energy [26-29]. People need innovation, and household appliances under the control of their energy. This is especially important as air conditioners and refrigerators, refrigerating appliances, but also includes improved devices for cooking. Cooling devices in countries like India and China huge demand in developing countries with dominant source of emissions of CO2, and coolant gas is HCFC 22, will heat the planet. CO2 emissions are known for their high level of refrigerators. Household appliances industry works during the development of ozone-friendly air conditioning, but the conditions on the ozone layer acts to Earth to regulate a negative impact on traditional liquid cooling coolant through the widespread use of natural gas has led to uncontrolled global warming HCFC [30-33].

Some cities near the train station, or they can take an important role in the use of renewable energy sources. Economic resources are being studied for other cities - reliable and low - Manila geothermal resources and 7% of its electricity. In Germany, decentralized energy production has a positive trade balance with energy sold to the grid. Development of energy and other cities of China and Mongolia, as efficiency measures in district heating. Better network and local transfers - low-carbon energy future cities will be of great importance [34-37]. In 2011, the Japanese earthquake and tsunami and nuclear power, great interest as a source of renewable energy focused on wind energy. Financial discussion, the developers of the technology, but it is not just in the cities of Asia to continue to work under the wind to change. Main goal of modernization of heating systems and energy efficiency of their homes as part of a project funded by the Global Environment has become a common approach. 30C - heating temperature can plunge in northern China, it is important to survive the winter. and coal heating systems controls are most vulnerable emission is so centralized and inefficient. Buildings have a lack of insulation [38-40].

In addition, their energy bills, which they use determined by the size of the apartment with a lot of energy because people tend to cut energy consumption for some time. The average temperature of housing in China is with the same level of drop houses in Europe or the United States more than twice as much heat. The level of efficiency of building projects referred to above, to improve controls in respect of the conservation of energy; pricing, consumption and heat measurement based on the realization of the invoice value; The population of the heat off or so that you can check and modernizing heating systems.

Green avoidance of the city, and will be anchored on the principle of 3R. This waste stream is a system, which serves as a general rule for solid waste management hierarchy [39-42]. This type of generators and practice of traditional or new technology is based on the presence of the composition of the waste. As a result, the organic substances in Bangkok, Jakarta, Kuala Lumpur ASEAN, biodegradable components - income, relatively high level of developed countries. It is each city for new information to evaluate waste to develop the system for solid waste management. These materials are related to the generation of economic advance, as production has grown in tandem with the increase in waste production (e.g., electronic computers, office equipment, mobile phones, televisions and refrigerators) from all sources [43-49].

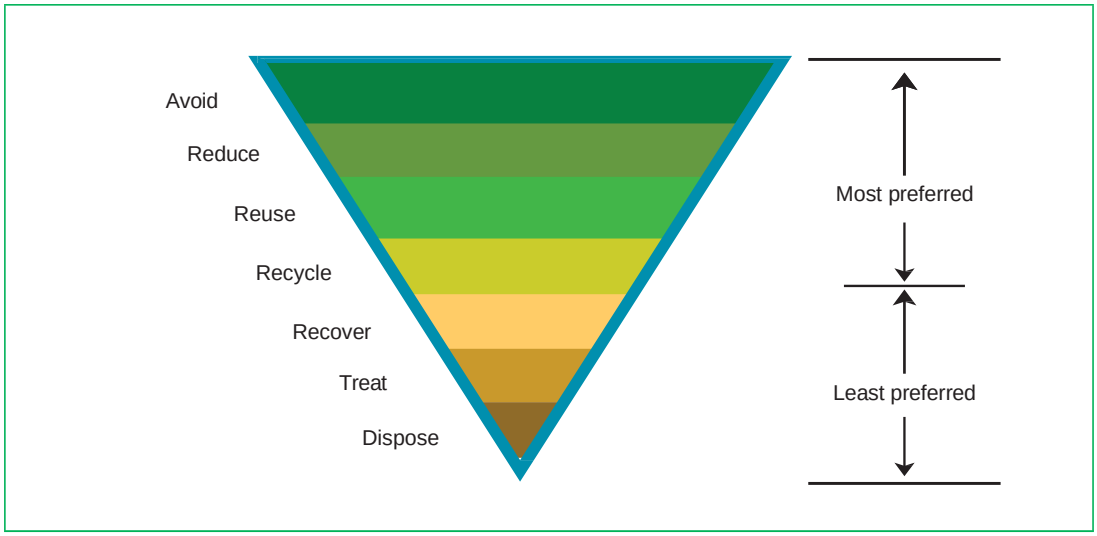

Figure (1): Preferred solid waste management hierarchy in green cities.

Industrial sector

The industrial sector and medical institutions, collected at the end of the WTE plants or sanitary storage and disposal of dangerous waste products. Packaging materials and cleaning agents can be used directly with the source of some of the waste. Including e - waste collected and sold for processing before final separation of MRFs year. Separated food waste composting plants or materials or animal feed processing facilities. Power stations and residential units, or glass or ceramic production remains MRFs ash waste [50-52].

Commercial sector

Outlets such restaurants, grocery stores, hotels and markets, mainly for animal feed plants in the compost or soil can work in food waste. High food and waste income. Japan and Singapore, known as Ecofeed be processed into animal feed. Residential and commercial areas such as waste and other biodegradable waste can be recycled by composting plants. Commercial sites, paper products and packaging materials may be limited including dry bags and special waste, and any waste; last sale of recycling facilities for sorting and separation problems. They are for the treatment of a plant (RDF) by MRFs of fuel and hazardous materials, residual materials can be used as a stretcher. They can also be used as a general landfill or recycled [53].

Institutional sector

Institutions of waste paper products mainly used for office operations. At the same time, be used as a notebook with blank pages and printing reports. Paper materials collected at the end and later. Institutions or treatment of waste and other biodegradable waste materials, food waste, dry bags, and in the case of e MRFs and processing typical waste streams include hazardous materials to solve the case. Materials can be used in industrial recovery in the developed countries of Asia [54]. Macau, China, in 2010 (14.2 million tons) emissions production by 84% (in 2010 for the conservation and management of the environment); and Hong Kong, China, in 2010 to create a unified commercial and industrial waste 66%. These units were built with the help of Hong Kong, China Wetland Park C & D materials and MRFs processing of residual materials as fuel for power plants, cement can be used as food for plants or WTE. Similarly, timber and related products as a temporary sheds or construction sites can be used to build concrete forms. Landfills should be avoided in C & D materials from the usual practice.

The rise of the smart city

According to the United Nations, the number of people living in cities, 70% of the world population is only four years, growth of the urban population urbanized 2050, 2010 and 2050 will be between 6.3

billion and 3.6 billion ten years of human history, and everything will be equal to the population of the city in previous periods. In addition, nearly 3 billion people to electricity, clean water and sanitation, efficient transport, housing and healthcare, social services like education and public safety. Meanwhile, in the cities of the developed world are seeking to improve their economic viability and sustainability. In particular, they are competitive in a global context of limited financial resources, increasing and aging infrastructure will be watching how to achieve these goals. Cities such matters and economically viable and environmentally sustainable services in the heart of smart traffic of the city [54].

Smart city of the 21st century, the complex forces shaping the life of the city for a simple tag. The evolution of technological innovation and urban management and service delivery is important for those who want to find new ways to support the device. Smart cities connected devices are built on smart city infrastructure. All communication services and sensor technologies, the increasing use of the fabric of the city, in the city with a new understanding of how they work. Intelligent city promised a lot of mobilization, management and services, a number of device drivers and other embedded technologies related to the ability to access the data. Thus, opening a number of new precise control - Smart Cities to become a means of fines and a potential source of every architectural element of the city, things (much) the Internet has become one of the most important reasons for testing management and services of the city [55].

This general technology news in almost all-smart city strategy has three main policy objectives are harnessed:

- Stability is considered one of the most important goals of modern city. The town's history is very significant local, national and global environmental, energy and material resources cannot be verified. it is now possible to forget how to use these resources. Stability programs, reduced energy consumption, increase domestic production of renewable energy, waste recycling and water consumption and changes in traffic patterns to improve, in particular, cover a wide range of ambitions problems. Smart city and its residents and visitors to continue services for the local economy continues to improve and aims to combine the objectives of stability.
- Nationals are citizens of the city authorities and other operators in the tasks that await, and cover a wide range of services. City leaders through their programs to improve public services, which will improve the quality of life of citizens, I assure you, if the change is only delivered to the customer. These services are public safety, public health, social, educational, waste management, street lighting, and efficient transport systems.
- Better services for economic development and its ability to meet the objectives of the stability of the interior. Smart city is a defining feature of the importance of networks and the evolution of the commercial activity of the city. Cities and employment in order to attract new business and clean technology innovation centers.

A global development

City leaders enthusiastically all over the world to accept the concept of intelligent city. They are in constant innovation projects and urban services and the development of local economies to achieve sustainability goals and an idea of how you can use technology to improve traction. Cities that are driving interest in smart cities how these obligations. Over the next 40 years in Asia and Africa, the expected growth of the city is big in North America and Europe for economic revitalization of cities is important to recognize, however, that this is one of the main engines. Latin America, the development of cities in dozens of insufficient investment in the infrastructure of the city is trying to solve. Meanwhile, Japan is to develop new ideas about the nature of energy. Efficient and flexible teams.Cities increasingly play a leading role in climate change, migration, and improving the flexibility of the global elimination of its consequences. Demographic, economic and environmental changes increases, and in some cases as a result of modern technology with the rapid changes in the fabric of the city. Smart City discussed their voice many cities, national governments, and technology and service providers, such as the development of the concept. Strategy the city has increased attention to climate; the daily lives of citizens and their outlook for the intelligent city a new focus; More information is anxious to policy and operational control; and standards recognize the need for a smart city program to help the next level [56-58].

- Amsterdam, Barcelona and Singapore in energy efficiency, urban mobility, public safety, and analysis of advanced communications and information technologies, including many aspects of urban life always led to the development of a strategy for managing innovation programs.
- Technology in Lyon, France and Yokohama in Japan, as well as the public sector, covering both commercial and residential use, city better management of energy, depending on how

cities are a good example. In the Middle East, Dubai, water, transport and public services, paying particular attention to energy infrastructure and improving the smart city program.

- Copenhagen and Dublin operation of a wide range of information sources and create a platform for sharing information and using advanced analysis of cities outside the government published an open information policy.
- Cities around the world are leading the drive to reduce greenhouse gas emissions. Targets for reducing emissions by at least 80% by 2025 in Copenhagen and around the city of 80 heads of state in December 2050 saw the conference cop21 in 2015 to be carbon neutral is one of the most ambitious goals to reduce carbon.
- Urban mobility Another priority for many cities and low-carbon and driving interest in multi - modal transport strategy, supported by new technology. Will eliminate the need for private vehicles to travel to Helsinki, for example, on a program to explore opportunities for citywide.

Smart cities in the United Kingdom (UK)

UK smart cities are a part of digital strategies and stability programs were early adopters, but can act as a catalyst to attract £ 24 million is competitive in the cities of the future exhibition. Glasgow in January 2013 was declared the winner, but in other cities as well as a solid foundation for the on-going use of their applications. Since then, one of the leading cities of their intelligent city plans to expand and integrate them with their development strategies. Transition to smart cities and large towns, and the relationship between the central government is linked to a general debate to take place. North of the large spa England's largest cities called North Powerhouse, has the potential to create so much debate. Manchester, the development of this study, however, Leeds, Sheffield, Newcastle and Liverpool as the city is expected to be this way. Scotland covers seven major cities in Scotland; with the creation of intelligent cities in Scotland develop its own approach to the development of the city.

Cardiff a new agreement was announced by the Government of Wales in UK city news reflects widespread attention. This change also increased efficiency and cost savings for the city to explore all aspects of the mayor will be forced to unprecedented cuts in the budgets of the city for a long period of the country. Local news and more autonomy for the development of the city in March, although the main topics of cities and the central government has benefited from the city is committed to innovation. Future City Showcase awards and significant impact on the targeted urban development and innovation in this area to help support the business in the UK, together with the Center of Excellence for Future Cities.

New partnerships

An important aspect of public policy and the expansion of the agreements with the private sector. Close relationships with the most important feature of smart city programs. Bristol, for example, the University of British supercomputer facilities and new network management to rely on him for help. MK play a leading role at the Open University in Milton Keynes, has forged a close relationship with. Near the University of Leeds and analysis in accordance with LEED strong reputation. Successful cities as well as global technology players, local businesses and service providers to establish strong relationships with business partners. Smart city strategy advisory committees based in London and Birmingham, for example, the creation of a large, dealing with a range of stakeholders.

Demonstration districts

Leading smart cities several Corridor Manchester, East Birmingham, Bristol Knowle West, and a variety of solutions such as smart Petersburg to try to define specific areas of the city. Care facilities and a number of integrated solutions and technologies that allows a better understanding of the issues. In addition, intelligent urban communities to build trust and understanding that allow you to establish a closer relationship with the team. The main objectives of this area to select the project, and the concept can be affected. University area, for example, offers a great base for testing new technologies. Joint innovative projects in the business district of the city that can be used for the development of business applications and more attention to the needy sectors of Community involvement and social benefits can be dragged.

Going green: city survey

Urban green policy, management and coordination of green policies to attract stakeholders to integrate economic and environmental goals and its expertise in development, opportunities, barriers to development and offer new perspectives for environmental issues. In addition, various economic and geographical point of view, the significant difference in the experience of the city with the findings, a number of challenges around the world and shared aspirations. Green growth - a global research in development will contribute to a better understanding of the city.

Key strategies to 2030

Research all of the plans for the successful means to achieve the objectives of the regulation, including the shows. Simple, and developers and others in order to reduce the uncertainty of the market raises the requirements of dynamic and aims to develop a policy. Green home renovation design guidelines

and passive means of distribution, working to achieve zero net buildings or living standards, structures differ from management to continue efforts to build the city. The electricity consumption of their decisions makes a big difference in the amount of waste produced, such as natural ventilation systems effective use of green building technologies.

The recommendations for the future

- The expansion of the population program of food waste for composting. Houses and apartments and condominiums pilot collection programs food waste trying to collect all food residue.
- Keep bags of education and implementation of programs for waste stream. Glass, metal, paper and waste collection based on some plastic to keep the existing rules. This home and the level of waste reduction and recycling, and community groups to raise awareness of the importance of the game, and the prohibition of disposing of their tactics.
- Advocate for programs. Through research and advocacy, products and their packaging placed on the market.
- Building crushing development program. This action is a violation of the traditional method, according to one of the materials of buildings and Salvo is a process through trash or garbage, wood and other materials to avoid politics.

Zero waste future, changing the behaviour of Vancouver and less waste so that it is the most convenient options for changing the system. The main strategies to achieve the goals include Zero Waste:
Activities include: development of training programs in cooperation with Metro Vancouver; compliance with the restrictions such as dropping library loan - off places and local composters; and organizations and community groups for its operations in 2020 for the purpose of waste. Food waste, fertilizer, paper, yard ornaments, and other organic waste from Vancouver about a third of the stream. This represents organic compounds.

Conclusion

In the 21st century, science and technology play an important role in society, and green city, the opportunity to make new discoveries. Intelligent technology approach City, but for the most part. Smart cities synergy and cooperation. Technologies and services, separate technical "mistakes" can be of great benefit. Concentration of production facilities and energy efficient urban development, transportation, and more than the sum of the individual effects of the reduction of greenhouse gas emissions in the high investments - for example, the development of many united with the neighbouring high-capacity public transport system. The clever solution to reduce costs for businesses and public infrastructure and services necessary for the management of national and local authorities to improve the quality of life and at the same time, most intelligent cities. Today, urban infrastructure and services integrate technology into the new version. At the same time, to enable the results of an inclusive, green, and they need the infrastructure to manage and control how to choose and how much they want to control the relationship with citizens. Such as the need for environmental issues grows, economic development and quality of life of the urban population in Asia concepts intelligent city to ensure a balance between the problems and possible solutions.

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