

Swiss Cooperation Office in Vietnam







Report on Sustainable **Urbanization in Viet Nam: Recommendations to Improve** the Legal Framework



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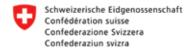
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List of Abrreviations

EERF Energy Efficiency Revolving Fund

EIE Eco-Industrial Estate

ERAV Electricity Regulatory Authority of Viet Nam

Esco Energy service company

FUAs Functional Urban Areas

GGGI Global Green Growth Institute

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

GoV Government of Viet Nam

IoT Internet of things

ISO International Organization for Standardization

KPIs Key performance indicators

LCCDP Low Carbon City Development Program

LOLG Law on Organization of Local Governments

LUP Law on Urban Planning

MEPS Minimum energy performance standards

MoC Ministry of Construction

NLDC National Load Dispatch Centre

NUDP National Urban Development Plan

OECD Organization for Economic Co-operation and Development

PC People's Committee

UNDESA United Nations Department of Economic and Social Affairs

UNDP United Nations Development Programme

UNHABITAT United Nations Human Settlements Programme

WB World Bank

ADB Asian Development Bank

SDG Sustainable Development Goal

PGGAP Provincial Green Growth Action Plan

VGGAP National Action Plan on Green Growth

ISET Institute for Social and Environmental Transition

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1.1. Background

This report has been prepared as part of GIZ support to the Ministry of Construction (MoC) under the Mekong Urban Flood Proofing and Drainage Programme, which has overall objectives to improve the capacity of national and local authorities on urban resilience through the development of nation-wide standards and policies relevant to urban drainage and reduction of flood risks; and to reduce urban flood risk and improve early warning in three cities in the Mekong Delta. The report has been prepared at a time when there are significant changes happening to the urban planning and management systems in Viet Nam. The introduction of a new Law on Planning in late 2017 has necessitated a fundamental rethink of planning approaches in all sectors. At the same time, in the urban sector new legislation in the form of a Law on Urban Management and Development is being prepared and will be submitted to the National Assembly in 2020 and further initiatives in relation to smart cities, green growth and climate resilience indicate the direction of urban development that is a priority in Viet Nam.

Urbanization is one of the dominant features of the development of Viet Nam in recent times. In 2016, 36.6% of the population lived in urban areas, with this proportion expected to increase to 50% by 2025. This represents an increase from just 19.6% in 1999 and reflects the twin processes of demographic change (with a major move of people from rural to urban areas) and structural transformation of the economy as the rapid growth of industry and the service sector is creating a boom in higher paid jobs and far better prospects for the future in the cities.

The Government of Viet Nam (GoV) is clearly aware of these changes and is, as we shall see, introducing a series of policy and legislative reforms that are intended to guide the rapid growth of cities along efficient and sustainable pathways. The GoV recognizes the need to be proactive in this, so that cities are not overwhelmed by the needs for houses, services and infrastructure of rapidly growing populations. They recognize that the quality and sustainability of growth is as important as the speed of growth and are determined to ensure that Viet Nam develops a policy and regulatory framework to ensure sustainable urbanization (a concept discussed in detail below) that uses advanced technologies and planning approaches, is able to respond to and mitigate potential disruption from climate change and natural disasters and ensures that growth is benign and sustainable in the long term.

As part of this process, the GoV understands the need to have good quality information available at the right time and to the right people so that all levels of government and local communities and businesses can understand what is happening as cities grow rapidly and, where necessary, adjust the direction of growth away from potentially damaging directions and towards sustainability. A central part of the information will be a framework of key sustainable urbanization indicators. This paper reviews international experiences on sustainable urbanization and on key indicators and presents an indicator framework that is intended to stimulate discussion and promote a consensus on what forms of indicators should be integrated into new legislation and procedures on urban management and development.

1.2. Policy and Legal Framework

The policy and legal framework relating to urban development in Viet Nam is both complex and rapidly developing. It includes a number of laws, decrees, decisions and other provisions that are directly related to the urbanization process. It also includes a wide range of measures that are concerned with more general issues such as budget management, investment financing, the provision of essential services,

infrastructure development, climate change and disaster management and other issues. A recent report¹ identified 67 Laws, 111 Decrees, 11 Decisions and 154 Circulars (see Annex 1) that are in some way relevant for urban development and management in Viet Nam, and this is just at the national level. Many cities also issue their own regulations for different aspects of urban management in their areas of responsibility. Understanding the key responsibilities, the areas of overlap and the most significant gaps in this policy and legal framework is a major challenge for urban planners and managers at all levels.

The 2009 Law on Urban Planning (LUP) acts, at the time of writing, as the overall framework for urban planning and management, though as we shall see this law will soon be replaced by a new legal framework for the urban sector. It included provisions for an 'orientation master plan' for the national urban system but it is not clear about what the content or implementation mechanisms for this plan would be an in particular there is no clear relation between the national plan and the financial resources available for implementation of any activities identified in it. Further details were included in the Prime Minister's Decision No.758/QD-TTg dated 8 June 2009 which specified that the Government will approve the National Urban Upgrading Program for the period 2009-2020.

The Prime Minister issued Decision 1659/QD-TTg dated 7 November 2012, which approved the preparation of a National Urban Development Plan (NUDP) for the period 2012-2020 with a vision to 2050. The NUDP was intended to provide a basic policy framework for urban development that would guide individual cities and provinces in the preparation of activities to achieve national urban development goals in the period up to 2020. This was further reinforced by the issuance of with Decree No.11/2013/ND-CP and Circular No.12/2014/TT-BXD which further elaborated on the roles and responsibilities of province-level and city-level urban development programs in the NUDP period.



View of Hanoi towards Southwest, Hoan Kiem District. Photo © Michael Waibel

The 2016 Resolution on Urban Classification (Resolution No. 1210/2016/UBTVQH13), discussed in more detail below, is a key measure as it provides a basis for the classification of cities into different classes (5 classes plus a special class), based on a series of defined indicators. It is a key document in that the classification of cities is in turn used as a basis for defining the levels of budget support for which they are eligible. The movement of cities between categories in the classification system is consequently instrumental in their development.

¹ Review of the Viet Nam Legal Framework and Experience Related to Urban Development and Management, a report prepared by the Mekong Urban Flood Proofing and Drainage Program dated September 2018.

Currently, urban development investment is managed mostly based on provisions of Law on Urban Planning, Law on Public Investment, Law on Investment, Construction Law, Housing Law, Law on Real Estate Business, Land Law, and especially Decree No. 11/2013/ND-CP (Decree 11) on Management of urban development interest. In addition, the Law on Organization of Local Governments (LOLG) stipulates that the Government exercises its power of State management in urban planning in the whole country, and People's Committees (PCs) at different levels execute their functions of urban planning within their local area.

In addition to the general measures on urban planning and management, there have in recent years been a number of measures that are intended to guide the nature of urban development along a sustainable development and green growth trajectory. These measures are of key importance in determining the decisions to be made on urban management and development and are an important link to the overall framework of national development in Viet Nam. The measures include: Decision No.1393/QD-TTg dated 25 September 2012 of the Prime Minister approving the National Green Growth Strategy; Decision No.403/QD-TTg dated March 20, 2014 of the Prime Minister approving the National Green Growth Action Plan 2014-2020; Decision No.622/QD-TTg dated 10/5/2017 by the Prime Minister on the National Action Plan to implement the 2030 Agenda for Sustainable Development; Decision No.1670/QD-TTg dated October 31, 2017 on approval of the National target for responding to the climate change and for green development for the 2016-2020 period issued by the Prime Minister; Decision No.84/QD-TTg dated 19/01/2018 approving the Green Growth Viet Nam Urban Development Plan until 2030; and Decision No.950/QD-TTg, issued on 01/08/2018, on approving the project of sustainable urban development in Viet Nam in 2018-2025 and orientation to 2030.

At the time of writing, a further law was under preparation, and indeed had been for some time: a new Law on Urban Management and Development. It is anticipated that this draft law will be submitted to the National Assembly for review and approval in 2019. One of the main objectives of this draft law is to bring a measure of clarity and coherence to the whole urban management and planning system, along with updating the present system to reflect changes to the overall national system for planning, budgeting and management. The detailed content of the new law is yet to be agreed but what is clear is that it will include provisions on the requirement to prepare indicators of sustainable urban development that will be intended to be used to guide key decisions in urban management and development. The analysis of indicators presented in this paper is intended as a contribution to the establishment of these provisions in the law.

1.3 Key Concepts

Sustainable Urbanization Definition

The importance of having a clear definition of sustainable urbanization that is nationally agreed and is integrated into the new Law on Urban Development and Management is recognized. It is recommended that the definition should have a prominent place in the first articles of the Law and that it is taken as a unifying concept around which national approaches to urban development are built. Based on a careful review of established international definitions, it is recommended that the national approach to urban development is based on the concept of sustainable urbanization, which is defined as follows:

Sustainable urbanization promotes sustained urban growth and economic development whilst improving the long-term social and ecological health of cities, towns and areas surrounding them.

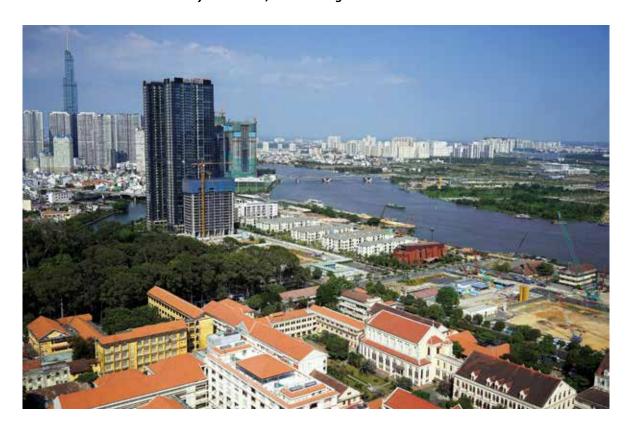
A sustainable urbanization approach will maximize the benefits from urban development but will do so in a way that minimizes the use of natural resources, ensures environmental protection and minimizes the release of pollutants into the air, water and soil.

It reflects the overall national approach to sustainable development, to balance economic development, social equity and environmental sustainability and national priorities in areas such as green growth, environmental conservation and climate change as well as international commitments, including the Sustainable Development Goal 11: make cities and human settlements inclusive, safe, resilient and sustainable

There are three linked components of a sustainable urbanization approach for Viet Nam: resilient cities, green growth cities and smart cities. These components are defined as:

- A **resilient city** is one that can secure the provision and operation of the urban infrastructure system for the inhabitants under the circumstances of natural disasters due to climate change impacts.
- A green growth city is one that can achieve economic growth and development through policies and urban activities in order to reduce negative impacts on the environment and the natural resources.
- A smart city is one that efficiently applies science and technology to improve the quality of planning, construction, management and provision of urban services, ensuring sustainable development.

Different cities will have different immediate opportunities and priorities that will mean they initially focus on one of these dimensions of sustainable urbanization but their inter-linked character should be remembered: *a sustainable city is resilient, smart and green.*



View of Ho Chi Minh City towards Saigon river. Photo © Michael Waibel

Urban Classification

The 2016 Resolution on Urban Classification (Resolution No. 1210/2016/UBTVQH13) sets out detailed criteria for the classification of cities into different classes (5 classes plus a special class), based on, among other indicators, their size, place in the national system, development characteristics and functions in relation to the area in which they are located. A comprehensive set of five criteria and over 50 standards and a scoring method are set out in the Resolution for deciding which class individual cities are assigned to, but these criteria are largely "conventional" and do not reflect urban development characteristics associated with resilience, green growth and smart city development. These urban classification criteria will be reviewed and, where appropriate proposals to amend them will be made to ensure that they reflect a sustainable urbanization approach for Viet Nam.

A preliminary analysis of the existing urban classification criteria shows that it includes a number of measures that are likely to also be appropriate for inclusion in a sustainable urbanization indicators framework. This includes measures such as the number of public open spaces, the availability of flood control measures, water supply availability and solid waste disposal. The implication of this is that it may potentially be possible to define an urban sustainability criterion for inclusion in the urban classification system that is based on measures from the existing urban classification framework in Resolution No. 1210/2016/UBTVQH13.

This would have the great advantage of not necessitating changes to the existing framework or the collection of new data. If this can be achieved it would mean that the classification of cities, and the consequent allocation of budgets from central government, could include sustainability as a core, sixth criterion. This would include the key elements of sustainable urbanization, resilience, green growth and smart city development.



Da Nang: the area between Han river and the sea. Photo © Michael Waibel

Functional Urban Areas

One key issue for sustainable urbanization planning and development is the relationship of cities, as defined by administrative boundaries, to the areas surrounding them. In many cases, many areas of resilience and sustainability planning and management need to include these areas, with issues such as flood protection, water resources and ecosystems management, waste disposal, land-use and population planning, service provision and many others by necessity crossing administrative boundaries if they are to be done effectively.

The OECD 2018 Viet Nam Urban Policy Review recommends that there is a need to foster collaboration mechanisms for urban planning by adopting a **Functional Urban Areas** (FUA) approach that includes collaborative planning and investments in key services such as transport, water and waste disposal and energy between local governments. The OECD definition of a FUA can be understood as the harmonized economic definition of "city": a functional economic unit that reflects reflecting the economic relation between urban centres and their neighbouring communities.

The report provides data to show that the functioning cities are in most cases significantly larger than the administrative cities in Viet Nam. For example, the FUA of HCMC in 2013 had a population of 9,764,000 whilst the official city population was 6,479,000, whilst the FUA of Hanoi contained 6,743,000 people as opposed to the official population of 2,827,000. In total, the report estimates the real 2013 urban population to be 37,084,000 (41% of the total population) while the official urban population was only 28,875,000 or 32% of the population.

This collaboration between cities and their surrounding areas is particularly important in key issues related to sustainable urbanization such as resilience to natural disastersp; sustainable natural resource (such as water) and ecosystems management; efficient, sustainable service provision for transport, energy, water supply, waste disposal and other key services.

The Law on Urban Development and Management should contain provisions that enable and encourage neighbouring local authorities to plan collaboratively in key areas. This could include, if appropriate, financial incentives, capacity-building measures and regulations to provide simpler, transparent procedures, contracts and budgetary forms for collaborating local authorities and between these authorities and private sector entities such as investors in renewable energy power generation, waste disposal companies and public transport provision.



Drainage canal in Can Tho City. Photo © GIZ

2. International Experiences: Legal and Policy Mechanisms

Sustainable urbanization and smart city initiatives are becoming widespread globally, but in most cases these initiatives are either still at a pilot phase or are done at the individual city level rather than in the framework of national laws and regulations. There are some examples of where these approaches have resulted in new legislation that are intended to guide future urbanization but such examples are the exception rather than the rule. There are a number of reasons for this. New laws take a long time to prepare and approve and then are fixed: any provisions in a law (for example, defined indicator frameworks) will be extremely difficult to change as experience is gained and new information or options become available.

In most cases legal requirements are uniform across all cities in a country (unless specific clauses in the law apply to different types of cities) but the needs and potentials of individual cities will vary greatly, and themselves change over time. This is particularly true in the modern era of climate change as well as rapid social and economic change and technological development. For example, the recent very rapid decline in the costs of renewable energy technologies such as solar power means that what is economically rational in electricity generation now was not possible five years ago.

One country that has introduced a legal framework for smart city development is the **United Arab Emirates**, with legislation passed to regulate the formation and operation of the Dubai Smart City Office and Board and the introduction of a range of smart city initiatives such as electric car charging points, free wifi on public transport and the development of smart and green building standards and regulations. The legislation is far from comprehensive but it is an example where a legal and regulatory framework to encourage smart city development has been established. It includes regulations to encourage the development of the "internet of things" (IoT), an approach that includes connected technologies from traffic and transport to energy management systems, with key functions equipped to provide real-time and actionable data to inform the operation of city-wide systems and services.

In the **United States**, legislation has been passed to ensure funding for smart city initiatives with a focus on the introduction of smart city technologies, building capacities and facilitating the coordination of initiatives between cities in different parts of the country. In 2017 a bipartisan bill, the Smart Cities and Communities Act, was introduced to channel \$220 million of federal funds annually for five years to smart city initiatives and to support the development of smart city technologies.

In **Brazil, Rio de Janeiro** has, in 2016, introduced a Strategic Plan to promote good governance, attract foreign investment and ensure that international companies work within a sustainable development framework. A key part of the strategy has been to improve degraded infrastructure to make the city attractive for investments, but also to ensure that the development of the city's economy was on a trajectory towards low carbon, sustainable urban development. International support, especially from the world Bank, was central to the development of the Rio de Janeiro Low Carbon City Development Program (LCCDP), which seeks to help the city government to identify and finance climate change mitigation opportunities. The LCCDP has acts as a framework for ISO Certification that gives international investors confidence in the transparency and legitimacy of the investment opportunities identified by the program.



Da Nang City. Photo © Tran Quang Hung

Amsterdam has long been at the forefront of a number of sustainable urbanization initiatives, including the deployment of solar power to provide energy for street lights, billboards, bus stops and other public space utilities, the widespread use of electric vehicles for functions such as garbage collection, the widespread adoption of green building technologies such as double glazing and insulation and the development of partnerships between the city and technology companies such as Phillips and IBM. These initiatives are not based on legislation but reflect a sustained and flexible strategy to make Amsterdam a model of green and smart development.

Similar partnerships are found in **Tokyo**, which is working with companies such as Panasonic, Mitsubishi and Sharp to introduce sustainable technologies and make the city smarter with the aim of reducing energy demand, carbon emissions and pollution. The initiatives include the progressive introduction of renewable energy and the encouragement to the adoption of electric and hybrid vehicles. Fujisawa, a Panasonic smart-town outside of Tokyo, produces no carbon emissions and 100% has of its electricity sourced through sustainable processes.

A number of **Canadian cities** have introduced strategies to develop a **climate-resilient build environment**, with these including both actions in specific areas such as the adoption of building standards and the creation of eco-districts and, crucially, actions to create a city governance structure that is supportive to a resilience approach to urban development. This governance structure emphasizes a number of characteristics of a resilient city, including wide consultation and participation in decision-making, flexible and responsive decision-making systems and an integrated approach to urban development. One of the key objectives of the approach is to strengthen disaster preparedness and emergency management at a time where such risks are of increasing concern.

There are specific areas where legislation can be required to enable the introduction of sustainable urbanization initiatives. One such area is in **urban transport**. One of the most urgent challenges facing Viet Nam in building sustainable urbanization is to promote sustainable transportation and, in particular, manage the rapid transition from motorbikes to cars found in most cities. Expanding the road infrastructure is necessary but is also very expensive, disruptive and can have an adverse impact of encouraging more car use as other forms of transport become more difficult. More and more cars make cities become less livable, more polluted and more expensive to live and work in. Cities across the world, and especially in Europe and East Asia, have active strategies aimed to do two things: restrict car use and promote other forms of transport such as bicycles and public transport.

Cities should be required to prepare sustainable transport plans that contain a wide range of options to promote alternatives to cars and limit car usage, especially in central areas. The following is a list of some of the most successful and widely used ones, with indications where necessary where legislative measures are needed to enable them.

Congestion Charging Schemes are where cars have to pay to enter defined zones of the city, typically central areas. This is done electronically, with entry points having sensors and cameras that automatically charge the car users a set fee (and identify the registration number of cars that are not eligible, with heavy fines imposed for non-conformity). Certain categories of vehicle can be exempt, for example workers in vital services such as hospitals or the fire brigade who are stationed in the charging zone.

Two long-established and successful examples are London and Singapore. In London a 21km² area in of the centre of the city has a daily congestion charge applied, with residents receiving a 90% discount and emergency services, taxis and others exempt. The impact has been dramatic: within 5 years of its introduction traffic volumes had fallen by 15% and congestion by 30% and large parts of Central London are now being pedestrianized (see below). In Singapore an Electronic Road Pricing Scheme charges per entry into defines zones and again has reduced traffic flows by 44% and more-or-less eliminated congestion in many central parts of the city. A feature of both schemes, and of successful schemes elsewhere, is that they are part of an overall transport plan that includes improvements to public transport.

Similar schemes in Stockholm, Milan, Gothenburg, Rome and elsewhere show similar results and a recent GIZ/ADB report² demonstrated that these schemes greatly reduced air pollution from traffic and significantly improved road safety. The schemes, through the charging (for example, \$350 million a year in London in 2014), provided income for other transport improvements (which further improved the sustainability of the transport systems) and the wider economic effects (in terms of time saved, productivity improvements) added to economic growth and sustainability in the cities.

The introduction of such schemes requires enabling legislation to permit cities to invest in the infrastructure needed for their operation, to charge drivers and to enforce penalties for non-confirming drivers. It is recommended that such enabling provisions should be included in the new Law on Urban Development and Management and that the Government should collaborate with one or more cities to introduce a pilot scheme to adapt the approach to Vietnamese conditions and to define further any regulatory measures that may be needed.

The improvement of **public transport** is a central part of any sustainable urbanization strategy and is especially important if people are to be persuaded to leave their cars at home. Public transport must be reliable, affordable and safe and must be available at times and in locations that people need it. Investments in vehicles and infrastructure is needed but on its own is not enough. Measures such as bus lanes that give preference to public transport can be effective: for example, in Buenos Aires, Argentina they have reduced travel times by more than 50% and in Lanzhou, China, a rapid bus corridor is integrated with a bike sharing scheme and bike parking.

In the Netherlands, the timetables and ticketing of trains, light rail schemes and buses are coordinated, services are regular and reliable and prices are kept at an affordable level. All cities also have extensive networks of bike lanes and Amsterdam and others have a range of car restriction measures to provide a fully integrated transport system based around public transport.

The use of **electric vehicles** is growing exponentially around the world and they will substantially replace conventional cars within the next decade or so. Their use in cities will not reduce congestion but will have substantial environmental benefits in relation to reduced noise and air pollution. Schemes to encourage their use are part of an integrated transport approach. This includes the requirement that certain types of vehicle are electric: for example, in many Indian cities electric rickshaws have replaced traditional two-stroke petrol ones. Electric public transport, delivery vehicles, vehicles owned and operated by city governments and other categories of vehicle can make a major impact on urban environmental health. One important measure to encourage electric vehicles is found in Paris, where many streets give preferential parking and contain charging points that drivers can plug in to.

² Amelsfort, D. (2015) **Introduction to Congestion Charging: A Guide for Practitioners in Developing Cities** GIZ, Bonn, Germany

Green Transport Infrastructure: rapidly expanding cities such as those in Viet Nam require substantial expansion of their transport infrastructure, both to connect new areas as the city expands and so that existing areas can cope with increased traffic flows. This infrastructure expansion can be done in ways that minimize environmental impacts and improve accessibility for all forms of transport, including especially pedestrians and cyclists.

One approach is the green highways and pathways, transport routes that are planned to encourage ecological diversity and minimize environmental damage. Margins are covered with diverse plants from local ecosystems and wildlife is encouraged to inhabit them, an approach that is particularly effective when built into regulations: for example, in India 1% of highway construction and maintenance budgets is earmarked for planting and maintaining vegetation along road margins. The construction of new roadways can use permeable materials that prevent metals and toxins from seeping into watersheds; utilize recycled materials to reduce landfill use; and control invasive species and promote the health of a natural, native habitat. These materials can also be retrofitted to existing urban areas as they are redeveloped as the use of permeable pavers are a big benefit when it comes to managing rain and storm water runoff in such a way that it returns underground or collects in pools where it can be reused instead of running off and being lost or polluting watersheds

Pedestrian Bridges should be constructed in as many places as possible as they provide opportunities for alternative, environmentally friendly transportation modes such as biking and walking and can ensure that road expansion does not isolate communities from each other. Bicycle use can be made safer and quicker through bike lanes and other infrastructure measures, with countries such as the Netherlands having extensive networks of measures that results in some of the highest levels of bike use in the world and a consequent lower level of car usage. Other measures can also encourage this; for example, in the Netherlands many companies (including government ministries) make sure they have bike parking, restrict car parking and even give income supplements to workers who commute on bicycles.

Pedestrianization, where central streets in cities are reserved for pedestrians and no vehicles are allowed, is becoming a widespread means to encourage the use of public transport, revitalize central city areas and improve the urban environment. In some cities, such as Stockholm and York and Oxford in the United Kingdom, almost the whole central city area is now pedestrianized. This has great economic benefits such as increased shopping turnover and greater tourism and also results in reduced traffic accidents and greatly reduced air and noise pollution.

There are many other policy options for improved and sustainable transport development. In many cases the earlier they are done the lower the costs and greater the benefits: if authorities wait until urban transport problems are so severe that they demand answers then it is much harder and more expensive and disruptive to address them. In Viet Nam, city governments (where appropriate in collaboration with neighboring authorities in the FUA) must be required to prepare sustainable transport plans and should be supported in the development of the types of green transport options discussed here.

Sustainable Urban Energy is one of the main areas where there are opportunities to move towards more sustainable patterns of production and consumption in urban areas but, as with transport, in a number of cases sustainable urban energy initiatives will need policy or regulatory changes to encourage their development. Cities are where most growth in energy demand is happening and more efficient, sustainable energy use can bring enormous benefits to the urban economy and individual households and businesses as well as significant environmental benefits. There is a lot of discussion on **sustainable urban energy planning** worldwide and many cities are moving to implement different types of sustainable energy measures. In most cases these come in two forms: (i) measures to improve energy efficiency and manage energy demand; and (ii) investments in cheaper and more sustainable forms of energy production, and in particular electricity generation.

Energy efficiency measures in Viet Nam, as in most countries, are governed by national policies and programs, including the 2010 Law and 2011 Decree on the Economical and Efficient Use of Energy. For **renewable energy**, the 2015 Decision in the Renewable Energy Strategy and several further decisions on individual renewable energy technologies. Similar approaches exist in neighbouring countries and further afield: for example, Malaysia's 2010 National Renewable Energy Policy and Action Plan. The Plan identified five coordinated action areas to promote renewable energy: a) an effective legal and

regulatory framework for renewable energy, b) a supporting business environment, c) human capital development, d) R&D enhancements in related sectors and e) public awareness and renewable energy policy advocacy programs.

These documents provide a framework to guide the preparation of **city-level energy efficiency strategies** and build **institutional structures** that will be the basis for sustained city level energy efficiency improvements. Many examples of such approaches exist, including the Amsterdam's 2040 Energy Strategy, the London Energy Partnership, the Sunlight City project in Seoul, the Toronto Solar Neighborhoods Initiative and Vancouver's Greenest City 2020 Action Plan. All of these initiatives are based on a pro-active approach by the city government and the establishment of partnerships with local communities and private companies to improve the city's energy economy by improving efficiency and developing renewable energy.

One part of such as strategy should be for **city governments** to take the lead in improving energy efficiency and develop renewable energy within their own operations. They should undertake **energy audits** in all of their facilities and should take steps to reduce their energy use to the lowest reasonable level. There are numerous examples of cities that have adopted this approach. For example, Toronto has placed solar panels on most of their municipal buildings and has introduced 'solar neighborhoods' where financial incentives are provided to install solar hot water systems, while in Amsterdam most bus stops, city lights, advertising boards and other instillations operate using solar power.

Toronto offers financial incentives for solar hot water installations and improved energy efficiency. As of 2012, the city administration had cut its emissions by close to 50% against 1990 levels via a variety of measures such as retrofitting city-owned buildings, collecting methane at city landfills or installing solar PV on city properties.

One important approach to improve energy efficiency is through **an energy service company (ESCO)**, which provides a range of energy solutions including the design and implementation of energy conservation and retrofitting plans and energy infrastructure, including power generation, development. The approach is for the ESCO to design energy efficient solutions, install the required elements and maintains the system to ensure energy savings during the payback period. Cost savings from reduced energy consumption are used to pay back the capital costs and service fees and, if the project does not provide returns on the investment, the ESCO is often responsible to pay the difference. This approach has been developed effectively in Thailand, China and the Philippines as well as extensively in Europe and North America.

This approach can be linked to financing mechanisms that reduce the risks associated with such investments. For example, Thailand's Energy Efficiency Revolving Fund (EERF) was established in 2003 and aimed to stimulate energy efficiency investment in large-scale energy consuming industrial sectors. The EERF engaged the Thailand commercial banks to develop and streamline procedures for appraising and financing energy efficiency projects.

One of Chinas most significant energy efficiency program in industry is called Top-10,000 Energy-Consuming Enterprises, implemented in the framework of the 12th Five-Year Plan. Within the framework of that program, the designated enterprises are required to appoint energy managers; measure and report on energy consumption; prepare energy conservation plans; and reach energy consumption reduction targets.

An important policy mechanism is the introduction of mandatory **building energy codes** that include **minimum energy performance standards** (MEPS). This approach was first developed and is widely applied to electrical and other appliances but is now also applied to construction standards: for example, European Union regulations now require all rented properties to obtain MEPS certificates based on the 2012 Energy Efficiency of Buildings regulations. These standards can apply to both new construction and existing buildings. For the latter, they can be linked to incentives to retrofit to improve the energy performance of existing buildings.

A major innovation to improve the overall efficiency and sustainability of a city's (and region's) energy system is the development of a "Smart Grid" for the power transmission system. A smart grid is an electricity supply network that uses digital communications technology to detect and react to local changes in usage. It will include a variety of operational and energy measures such as smart meters,

renewable energy, smart appliances and energy efficiency measures to regulate the distribution and use of electricity. At its most developed and to facilitate renewable energy expansion, this will include real-time and accurate forecasting of power demand and availability from different sources so as to optimize the operation of the distribution system. The benefits associated with the Smart Grid include:

- More efficient transmission of electricity
- Quicker restoration of electricity after power disturbances
- Reduced operations and management costs for utilities, and ultimately lower power costs for consumers
- Reduced peak demand, which will also help lower electricity rates
- Increased integration of large-scale renewable energy systems
- Better integration of customer-owner power generation systems, including renewable energy systems
- Improved security

In 2012, the Government of Viet Nam approved the "Smart Grid Development Project in Viet Nam" which outlines a Smart Grid Roadmap for Viet Nam. The Project is aimed at the integration of new monitoring, protection and control systems to improve grid reliability and make efficient use of infrastructure while facilitating the increased integration of renewable energy in the generation capacity. Support from GIZ and the World Bank has facilitated this process but progress has been slow. There is significant potential for city governments to collaborate with national authorities such as the National Power Transmission Corporation, the Electricity Regulatory Authority of Viet Nam (ERAV) and the National Load Dispatch Center (NLDC) to facilitate smart grid development at the city level. There is scope for collaboration with an ESCO to further facilitate this process.

One area where there have been a number of international initiatives is to introduce green development approaches for **parts of the city** such as industrial or economic zones or residential eco-districts. One example is **China's Green Special Economic Zones Policy**, which reflects the central role economic zones play in economic development but also the many sustainability problems such areas can generate. Several policies and pieces of legislation dating back to the Eco Industrial Parks initiative in 2003 have been introduced and the concept of a green industrial transition is now central to national economic plans. The policies combine incentives to adopt energy saving and low pollution technologies and production processes with measures to restrict credit to highly polluting and energy consuming activities.

A similar approach is found in **Thailand's Eco-Industrial Towns**, which promotes industrial development in program areas based around the concepts of "reduce, recycle and reuse". The policy is a response to problems associated with pollution from industrial zones along with community concerns and court rulings that required a clean-up from industrialists. One of the main purposes of the program is to restore investor confidence in these areas. The program envisions three levels of industrial transformation: (1) Green Industry (GI) at a factory level; (2) Eco-Industrial Estate (EIE) at an IE level; and (3) ultimately, EcoIndustrial Towns (EIT) at a community level. The program works through a collaboration of government, local communities and industrialists and has been effective in moving from conflict to consensus on industrialization at the local level. The Government of Thailand has introduced a certification system with five accreditation levels where companies can take actions to demonstrate the degree of sustainability of their operations.

In **South Korea**, special economic zones have played a key part in the country's economic transformation but were also recognized as the location and source of severe environmental degradation. In 2003, the government responded to public concerns over these problems by launching the National Eco-Industrial Parks (EIP) Program, based on the national policy of balancing economic growth with environmental sustainability. The EIP aimed to introduce green production technologies and environmental management systems in industrial enterprises and special economic zones. The program took time to be effective but, by 2015, had initiated 595 projects, some of which were very substantial in size.



3.1. Approach

The preparation of the sustainable urbanization indicators framework presented here reflects two things: (i) international good practice as reflected in indicator frameworks from international organizations and different countries in the region and beyond; and (ii) existing Vietnamese experiences, including those from a number of pilot projects undertaken in Viet Nam and, most importantly, existing indicator lists embedded in three key policy documents: the 2016 Resolution on Urban Classification (Resolution No. 1210/2016/UBTVQH13), the January 2018 Circular No. 01/2018/TT-BXD on Urban Green Growth Indicators and the August 2018 Decision No. 950/QD-TTg Approving Scheme for the Development of Smart Sustainable Cities in Viet Nam in the 2018-2025 Period with Orientations to 2030. Care has been taken, in preparing the indicators framework presented below, to ensure that these existing indicator lists are fully incorporated in the approach advanced here.

As has been noted, an important point of departure for the full development of the indicators framework will be to ensure that it is compatible with and reflects existing Government of Viet Nam policies and approaches. Of particular importance in this are the 2016 Resolution on Urban Classification, discussed below, as well as the January 2018 Circular on Urban Green Growth Indicators (see table 1) and in particular the August 2018 Decision Approving Scheme for the Development of Smart Sustainable Cities in Viet Nam in the 2018-2025 Period with Orientations to 2030. The Decision requires the identification of **key performance indicators** (KPIs) that are intended to measure the performance of smart cities.



View of Hoan Kiem Lake, the heart of the capital city. Photo © Michael Waibel

The Decision states that the KPIs must be in accordance with international standards but must also reflect Vietnamese conditions. Care has been taken to ensure that the indicators framework developed by this project is fully compatible with and reflect the content of Resolution No. 1210/2016/UBTVQH13, Circular No. 01/2018/TT-BXD and Decision No. 950/QD-TTg. This includes, where it makes sense, including indicators from these documents into the framework developed here and, should it be appropriate, providing recommendations for consideration to amend the indicators included in Circular No. 01/2018/TT-BXD and presented in Table 1, below.

Several factors were taken into account in preparing the indicator framework presented here. The first is that the indicators should have a dual function: for use in decision-making on urban planning and management and to be the basis for monitoring and reporting progress on the development of sustainable urbanization. For these purposes, the indicators need to be collected regularly within the resources available to local authorities in Viet Nam at city or province level which, in turn, means that they need to be based, as far as possible, on data is already available within the GoV system. In the consultations with MoC and other stakeholders undertaken in preparing this report it was also agreed that there may be a few cases where "soft" indicators (i.e. indicators for which data is at present not yet available but which would significantly add value to the monitoring and decision-making systems) should be included with the intention that their identification at this stage would be a basis for extending data collection for the future.

Table 1: List of Green Growth Indicators from the Circular on Urban Green Growth Indicators

(Promulgated together with the Construction Ministry's Circular No. 01/2018 / TT-BXD of January 5, 2018 on the regulation on building green urban centers)

No.	Code	Group, name of indicator			
1. Eco	1. Economy				
1	0101	Rate of electricity use compared to total household expenditure			
2	0102	Clean water loss rate			
3	0103	Ratio of state budget revenues from using natural resources			
4	0104	Investment rate of new projects to build green growth urban centers			
5	0105	Proportion of completed construction works certified for green building			
2. Env	ironment				
6	0201	Area of public green area per capita in inner city			
7	0202	The area of urban water surface is decreasing			
8	0203	Proportion of urban roads using energy saving equipment or technologies or using renewable energy for lighting			
9	0204	Rate of public transport			
10	0205	Proportion of private means of transport to limit emissions			
11	0206	Ratio of roads reserved for bicycle			
12	0207	The rate of solid waste being collected, transported and treated up to standards and technical regulations			
13	0208	The rate of wastewater being collected and treated up to standards and technical regulations			
14	0209	Number of commune and ward administrative units directly affected by climate change			
15	0210	Number of seriously polluted areas to be treated			

3. Soc	ial	
16	0301	The rate of urban population growth in comparison with the rate of non-agricultural land area
17	0302	Percentage of households with permanent housing
18	0303	Proportion of urban population provided with clean water supply
19	0304	The amount of public space
4. Inst	itution	
20	0401	General urban planning is integrated with green growth and climate change objectives
21	0402	Specific strategies, action plans and policies are issued towards green growth and climate change response.
22	0403	Proportion of public services
23	0404	The rate of urban managers at all levels has been trained on green growth
24	0405	Public awareness programs on green growth and climate change

A further factor in the development of the indicators was that they should have a hierarchical structure, with the highest level being a set of aggregate indicators on key issues (such as water resources, transportation and disaster and risk management) for sustainable urbanization in Viet Nam that are focused on the national policy level (and will be suitable for incorporation into the Law on Urban Development and Management). These aggregate indicators will be compiled from a second tier of several, more specific indicators on different aspects of the generic issues identified in the highest-level indicators.

3.2. International and Vietnamese Experiences: Indicator Frameworks

This section presents a review of some of the main international indicator frameworks. The approaches presented here are all established international models of good practice, but all would need to be adapted to fit to Vietnamese conditions. A point of departure for this is the international commitments made by the Government of Viet Nam, and in particular, the **Sustainable Development Goals (SDGs)** as they relate to urbanization. The key for this is SDG 11: "make cities and human settlements inclusive, safe, resilient and sustainable" and, ancillary to this, SDG 11.3: "by 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management". In elaborating on this, **UNDP**'s 2016 Sustainable Urbanization Strategy outlines an approach based on three main criteria: Sustainability, Inclusiveness and Resilience and for each of these sets out the following lists of key issues for understanding urban sustainability processes:

Sustainability

- · Transportation and mobility systems
- Energy systems
- · Environmental protection and waste management

Inclusiveness

- The geography of urbanization: compact cities vs. sprawl
- Spatial equality and social equality
- Public space and land development
- Governance systems: openness and participation

- Migration
- Job creation, informality and entrepreneurship

Resilience

- Managing risk and investing in resilience
- Urban conflict, violence and crime

The three main criteria in this framework reflect general principles rather than specific planning or management objectives and will be reflected throughout the indicator framework presented below. One concern about the UNDP list is that in some cases the indicators cannot be isolated in relation to one of the three criteria: for example, environmental protection and waste management is certainly a sustainability issue but also relates closely to the enhancement of resilience. Nevertheless, this model does provide important insights that are reflected in the framework for urban sustainability in Viet Nam presented in this report.



Ho Chi Minh City: canal upgrading, between District 1 and District 4. Photo © Michael Waibel

An important global framework of indicators is that of the **International Standards Organization**, as set out in ISO 37120 (2014) Sustainable development of communities — Indicators for city services and quality of life. The ISO defines a total of 102 indicators in the following categories:

- Economy (7 indicators)
- Education (7)
- Energy (7)
- Environment (8)
- Finance (4)
- Fire & Emergency Response (6)
- Governance (6)
- Health (7)
- Recreation (2)
- Safety (5)

- Shelter (3)
- Solid Waste (10)
- Telecommunications & innovation (3)
- Transportation (9)
- Urban Planning (4)
- Wastewater (5)
- Water and Sanitation (7)

This is an extremely comprehensive list and the ISO are explicit that it is not intended that all cities should adopt all indicators. Rather, the approach is that individual cities and countries should adapt and adopt the indicators as appropriate for their needs and as reflects data availability, which varies greatly from place to place. The list, with 17 categories and over 100 individual indicators, is too long and generic for easy adaption to a Vietnamese context but it is extremely valuable in another way: considerable effort has gone into the identification of the individual indicators and they are important in providing a standard against which the indicators for Viet Nam can be measured. They have been used in this manner in the analysis presented in this report.

The **UN Habitat** published the New Urban Agenda in 2017 after it was adopted by member governments in the United Nations Conference on Housing and Sustainable Urban Development in Quito, Ecuador in October 2016. This authoritative source presents in Appendix 1 a set of 40 "Global Urban Indictors that are grouped into five categories and 18 goals (Table 2). Both the status (as the Habitat framework adopted by member countries) and content of this framework are important as they reflect wideranging international consultations and experience and build on and adapt a similar Habitat framework from 2004. It does reflect Habitat's mandate, with a strong emphasis on shelter, service provision and social development, but there are a number of the indicators in the framework that are very relevant for a Vietnamese context and in most cases the indicators are specific and measurable, which in itself is valuable. This Habitat framework has again been instrumental in informing the sustainable urbanization indicators framework for Viet Nam discussed below.

Table 2: Global Urban Indicators

The Habitat Agenda: Global Urban Indicators			
1.Shelter			
Goal 1 : Promote the right to adequate housing	Indicator 1.1: durable structures		
	Indicator 1.2: overcrowding		
	Indicator 1.3: housing price and rent-to-income		
	Indicator 1.4: right to adequate housing		
Goal 2: Provide security of tenure	Indicator 1.5: secure tenure		
	Indicator 1.6: authorized housing		
	Indicator 1.7: evictions		
Goal 3: Provide equal access to credit	Indicator 1.8: housing finance		
Goal 4: Provide equal access to land	Indicator 1.9: land price-to-income		
Goal 5: Provide access to basic services	Indicator 1.10: access to safe water		
	Indicator 1.11: access to improves sanitation		
	Indicator 1.12: connection to services		

2. Social development and eradication of pover	ty	
Goal 6: Provide equal opportunities for safe	Indicator 2.1: under-five mortality	
and healthy life	Indicator 2.2: homicides	
	Indicator 2.4: HIV prevalence	
	Indicator 2.4: urban violence	
Goal 7 : Promote social integration and support disadvantaged groups	Indicator 2.5: poor households	
Goal 8: Promote gender equality in human	Indicator 2.6: literacy rates	
settlements development	Indicator 2.7: school enrolment	
	Indicator 2.8: women councilors	
	Indicator 2.9: gender inclusion	
3. Environmental Management		
Goal 9: Promote geographically-balanced	Indicator 3.1: urban population growth	
settlement structures	Indicator 3.2: planned settlements	
Goal 10 : Manage supply and demand for water	Indicator 3.3: price of water	
in an effective manner	Indicator 3.4: water consumption	
Goal 11: Reduce urban pollution	Indicator 3.5: wastewater treated	
	Indicator 3.6: solid waste disposal	
	Indicator 3.7: regular solid waste collection	
Goal 12: Prevent disasters and rebuild	Indicator 3.8: houses in hazardous locations	
settlements	Indicator 3.9: disaster prevention and mitigation instruments	
Goal 13: Promote effective and	Indicator 3.10: travel time	
environmentally sound transportation systems	Indicator 3.11: transport modes	
Goal 14 : Support mechanisms to prepare and implement local environmental plans and local Agenda 21 initiatives	Indicator 3.12: local environmental plans	
4. Economic Development		
Goal 15 : Strengthen small and microenterprises, particularly those developed by women	Indicator 4.1: informal employment	
Goal 16: Encourage public-private sector	Indicator 4.2: city product	
partnership and stimulate productive employment opportunities	Indicator 4.3: unemployment	
5. Governance		
Goal 17 : Promote decentralization and strengthen local authorities	Indicator 5.1: local government revenue	
	Indicator 5.2: decentralization	
Goal 18 : Encourage and support participation and civic engagement	Indicator 5.3: voters' participation	
and civic engagement	Indicator 5.4: civic association	

The **World Bank** have been very active at all levels in sustainable urbanization and in recent years have developed an urban sustainability framework that includes the following issues, each of which has appropriate sets of indictors that are similar in many cases to those presented by UNDP, Habitat and others (Figure 1).

Urban Sustainability Framework

Policy Objectives & Planning

Spatial Data and Indicator Dimensions

Urban Form Economy Resource Efficiency Environment

Climate Change (Low Carbon & Resilience)

Governance

Figure 1: World Bank Urban Sustainability Framework



Da Nang by night. Photo © Tran Quang Hung

Some important features of the World Bank framework are that, firstly, it demonstrates the relationship between, on the one hand, data and indicators and, on the other hand, policy and planning, with the purpose of the indicators being to inform specific decision-making processes. It also presents climate change resilience as a cross-cutting issue that is of relevance to the five generic categories of urban form, economy, resource efficiency, environment and people. This is again relevant for Viet Nam, where issues of urban climate change resilience and low carbon development are seen as fundamental to all aspects of urban development.

The United Nations Industrial Development Organization in 2017 advanced a **China Urban Sustainability Index** based on four categories and a set of components and indicators (see Table 3). This is of particular value for our purposes because China's cities have similar challenges and opportunities to those of contemporary Viet Nam. The emphasis placed on pollution and resource utilization is higher than in many international indices and reflects the specific challenges China faces at their stage of development. The situation in Viet Nam has many similarities and indicators on these issues are similarly of great relevance.



Flooding in Can Tho City. Photo © GIZ

Table 3: China Urban Sustainability Index

Bold = indicator not in USI 2011

Category (weight = 100%)		Components (weight within category = 100%)	Indicators
		Employment (25%)	Urban employment rate (%)
		Doctor resource (25%)	Number of doctors per capita (per thousand persons)
Society (33%)	Social welfare (33%)	Education (25%)	Middle school students in young population (%)
		Pension (13%)	Pension security coverage (%)
		Healthcare (13%)	Health care security coverage (%)
		Air pollution (11%)	Concentration of SO ₂ , NO ₂ , PM10 (mg per cubic meter)
		Industrial pollution (11%)	Industrial SO ₂ discharged per unit GDP (ton per bn RMB)
	Cleanliness (17%) Built environment (17%)	Air qualified days (11%)	Days of air qualified equal or above level II (%)
		Wastewater treatment (11%)	Wastewater treatment rate (%)
Environment (33%)		Household waste management (5%)	Domestic waste treated (%)
		Urban density (11%)	Persons per square kilometer of urban area
		Mass transit usage (11%)	Passengers using public transit (per capita)
		Public green space (11%)	Area of public green space (%)
		Public water supply (5%)	Public water supply coverage (%)
		Internet access (11%)	Household access to Internet (%)
	' ABVAIANMANT	Income level (33%)	Disposable income per capita
Economy (17%)		Reliance on heavy industry (33%)	GDP from service industry (%)
(2)		Capacity investment (33%)	Government investment in R&D (per capita)
		Energy consumption (33%)	Total energy consumption (SCE per unit GDP)
Resource (17%)	Resource utilization (17%)	Power efficiency (33%)	Residential power consumption (kwh per capita)
		Water efficiency (33%)	Total water consumption (liters per unit GDP)

In the **European Union**, the 2016 application for the **2019 European Green Capital Award**, twelve indicator categories are listed: (1) Climate change: mitigation and adaptation; (2) Local transport; (3) Green urban areas incorporating sustainable land use; (4) Nature and biodiversity; (5) Ambient air quality; (6) Quality of the acoustic environment; (7) Waste production and management; (8) Water management; (9) Wastewater treatment; (10) Eco-innovation and sustainable employment; (11) Energy performance; (12) Integrated environmental management.

A Green City Index has also been prepared for the European Union, based around the categories set out in Figure 2. Although the situation in Europe is in many ways different to that of Viet Nam, the European Union has a great deal of experience in the fields of sustainable urbanization and urban sustainability indicators. The Green City Index is valuable in that it is aspirational: it demonstrates where actions in specific areas will bring benefits in terms of urban sustainability and green growth. The eight policy areas listed in the circle (air quality, water, energy, etc.) are all relevant for urban sustainability and give valuable insights for Viet Nam. The 30 measures identified in the outer boxes can be adapted to form specific indicators that reflect national conditions and data availability in individual countries.

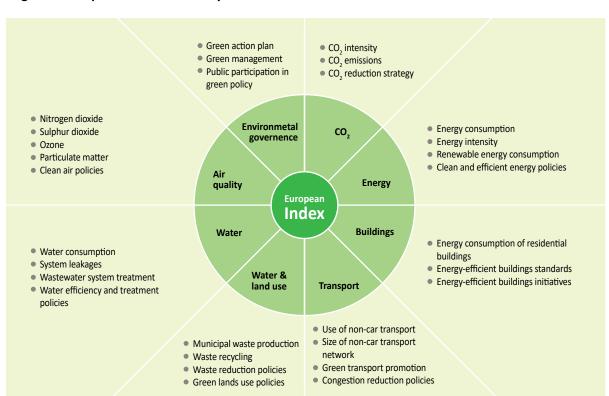


Figure 2: European Union Green City Index

A further authoritative framework is that prepared by the United Nations Department of Economic and Social Affairs (**UN DESA**) as part of the preparation for the 2012 World Summit on Sustainable Development in Rio (see Figure 3). the four dimensions of sustainable cities in the model are social development, environmental protection, economic development and effective urban governance. These are very generic in character (perhaps inevitable for a framework that is meant to be globally relevant) and indeed could apply to any sustainable development issue with modest changes. This model is valuable in that it reinforces the understanding that sustainable urbanization is centrally an issue of the interaction between a number of core issues and can only be achieved through actions in a range of areas.

Figure 3: UN DESA Urban Sustainability Framework

Sustainable cities

Social development

- · Education and health
- · Food and nutrition
- Green housing and buildings
- Water and sanitation
- Green public transportation
- Green energy access
- Recreation areas and community support

Environmental protection

- Forest and soil management
- Waste and recycling management
- Energy efficiency
- Water management (including freshwater)
- Air quality conservation
- Adaptation to and mitigation of climate change

Economic development

- Green productive growth
- Creation of decent employment
- Production and distribution of renewable energy
- Technology and innovation (R&D)

Effective urban governance

- Decentralisation and planning
- Reduction of inequities
- Strengthening civil and political rights
- Support of local, national, regional and global links

There have been a number of international approaches to sustainable urban indicators have been adapted for Vietnamese conditions as part of international multi-city programs. There are still concerns over whether some of the indicators in these frameworks are suitable for Viet Nam in terms of whether they are objectively verifiable (some indicators require subjective judgments to be used), data availability and flexibility for use in very different urban areas in different parts of the country. Despite these reservations, these studies are very significant and have made an important contribution to the final indicator framework to be prepared under the current program. The OECD, in their 2018 Viet Nam Urban Policy Review, published two tables that are relevant for our analysis. These are:

Table 4: Urban green growth indicators developed for Viet Nam

	Year	Institutions	Government counterpart	Number of indicators
Urban green growth indicators	Completed – 2016	GGGI	MOC	40
City's Resilience Index	Ongoing	The Asia Foundation and ISET	MOC	Over 50
City's Prosperity Index	Ongoing	UN Habitat	MOC	62
Green City Indicators	Ongoing	Korea International Cooperation Agency (KOICA)	MOC	177

Source: Author.

Table 5: Urban green growth Indicators developed by MOC and GGGI

Environmental sustainability	Economic sustainability	Social inclusion	Institutional responsiveness
RE % of overal consumption Energy consumption/GDP Energy intensity (per capita) Grid connectivity Carbon emission per person Carbon emission per GDP PM10/PM2.5 daily concentrations Population density Greenspace per person Area of livable space Number of green buildings rated Public transportation networks per capita	Urban vulnerability resilience index Number of households inundated at least once per year Water consumption per person Water consumption per GDP Water recycling per capita Share of wastewater treated Waste generated per person Share of solid waste collected and adequately disposed Households having access to clean water Access to improved sanitation Number of jobs requiring higher education Number of green jobs created Share of high tech sector	Average income per person Percentage of poor households Percentage of households having durable house Number of community forums Moblie phone coverage Internet connection	Urban Master Plan Climate Change Action Plan Disaster Risk Reduction Plan Policies to implement VGGAP or PGGAP Source of funds for green growth investments (e.g environmental tax) Green growth investment forums Green growth training and capacity building programmes Green growth monitoring and evaluation framework
	in GDP		

Source: GGGI (2015), Urban Green Growth Index Report, (unpublished), Hanoi.

Whilst the preparation of green city indicators being undertaken with Korean International Cooperation Agency support had not been completed at the time of writing and were not available for consideration, the information in the table above suggests that it includes a total of 177 indicators. This is a very high number and, whilst it is no doubt comprehensive, is far too many to be of practical use if the full set is to be collected. It is likely, of course, that the final list can be used selectively after deciding which are relevant for a specific purpose and for which indicators data is readily available. This will need to be considered at a later date.

The Global Green Growth Institute indicators framework presented in the table above has a structure that is similar to that of many international approaches and, with a total of 37 indicators is of a manageable size. The indicators themselves are clear and, in most cases, fairly straightforward to quantify, but there is perhaps some duplication and redundancy: for example, there are 2 carbon emission indicators and also 2 water consumption indicators whilst the utility of a mobile phone coverage indicator (which must be almost universal) is open to question. Despite these minor caveats, the overall structure and many of the individual indicators in the GGGI approach are relevant and have been instrumental in informing the sustainable urbanization indicators framework presented below.

Table 6: Viet Nam City Resilience Index: City Resilience Framework Dimensions, Goals and Indicators

Health and Well- being	Economy and Society	Infrastructure and Environment	Leadership and Strategy
Minimal human vulnerability	4. Collective identity and mutual support	7. Reduced physical exposure	10. Effective leadership and management
1.1 Safe and affordable housing	4.1 Local community support	7.1 Comprehensive hazard and exposure mapping	10.1 Effective co-ordination with other government bodies
1.2 Inclusive access to safe drinking water	4.2 Cohesive communities	7.2 Appropriate codes, standards and enforcement	10.2 Proactive multi stakeholder collaboration
1.3 Adequate affordable energy supply	4.3 Strong citywide identity and culture	7.3 Effective managed protective ecosystems	10.3 Comprehensive hazard monitoring and risk assessment
1.4 Effective sanitation	4.4 Actively engaged citizens	7.4 Robust protective infrastructure	10.4 Comprehensive government emergency management
1.5 Sufficient affordable food supply	5. Social stability and security development and innovation	8. Continuity of critical services	11. Empowered stakeholders
2. Diverse livelihoods and employment	5.1 Effective systems to deter crime	8.1 Effective stewardship of ecosystems	11.1 Adequate education for all
2.1 Inclusive labor policies	5.2 Proactive corruption prevention	8.2 Flexible infrastructure services	11.2 Widespread community awareness and preparedness
2.2 Relevant skills and training	5.3 Competent policing	8.3 Retained spare capacity	11.3 Effective mechanisms for communities to engage with government
2.3 Dynamic local business	5.4 Accessible criminal and civil justice	8.4 Diligent maintenance and continuity	12.Intergrated development planning
2.4 Supportive financing mechanism	6. Economic security and financial management	8.5 Adequate continuity for critical assets and services	12.1 Comprehensive city monitoring and data management
2.5 Diverse protection of livelihood following a shock	6.1 Well-managed public finance	9. Reliable communications and transport	12.2 Consultative planning process
3. Adequate safeguards to human life and health	6.2 Comprehensive business continuity planning	9.1 Diverse and affordable transport networks	12.3 Appropriate land use and zoning
3.1 Robust public health systems	6.3 Diverse economic base	9.2 Effective transport operation and maintenance	12.4 Robust planning approval process
3.2 Adequate access to quality healthcare	6.4 Attractive business environment	9.3 Reliable communication technologies	
3.3 Emergency medical care	6.5 Strong integration with regional and global economies	9.4 Secure technology networks	
3.4 Effective emergency response services			

The Asia Foundation and Rockefeller Foundation in 2018 published the "Viet Nam City Resilience Index" that included the indicators framework presented in Table 3. The overall structure is similar to that of many other frameworks, with four categories, 12 macro indicators and 51 more detailed indicators, ranging from three to five in number for each of the macro indicators. The approach in this table is thoughtful conceptually robust. It reflects the extensive consultations that were undertaken during its preparation and covers a comprehensive set of issues that need to be considered in the development of sustainable urbanization policies and planning approaches.

The major reservations about the approach set out in this table are, firstly, that many of the indicators would be extremely difficult to quantify in a consistent manner, the more so because in many cases the data needed to measure them is unlikely to be readily available. The indicators are qualitative and relative, with many using words such as "effective", "dynamic", "proactive", "relevant" and many other ideas that are subjective and open to interpretation. One of the main goals of indicators is to compare different places, something that will be difficult where the values submitted are a matter of judgment and open to interpretation. The strong focus on resilience is important and the table would certainly be invaluable as a tool to provoke thoughts and stimulate discussions. It is perhaps less useful as a basis for the routine collection and aggregation of indicators data within the operations of government systems.

3.3 A Sustainable Urbanization Indicators Framework for Viet Nam

The discussion presented in the sections above shows that there is a great deal of information existing on which to build an appropriate **Sustainable Urbanization Indicators Framework** for Viet Nam. The need to incorporate indicators already included in existing government documents (especially those in Circular 01/2018/TT-BXD and Resolution 1210/2016/UBTVQH13) has already been identified and the analysis shows that there are valuable lessons from international and existing Vietnamese experiences that should be reflected in the approach set out here.

The overarching concept for the indicators is sustainable urbanization but, as we have seen, discussions on this issue in Viet Nam have revolved around the three components of sustainable urbanization that are closely linked but have some differences in their character: resilience, green growth and smart city development. This provides a structure to the indicators framework whereby policy makers and others will be able to examine progress and identify measures to advance the overall process of sustainable urbanization whilst at the same time also having the possibility to assess each of the three aspects of sustainable urbanization separately.

The key **principles** upon which the identification has been based are as follows.

- The indicators must reflect and, where appropriate, incorporate indicators already identified in GoV policies and regulations.
- All indicators must be discrete and concrete, that is separate from each other and not open to interpretation or different meanings depending on individual understanding.
- The number of indicators must not be too great, limited to a level that can realistically be used, and for which the data can be collected, by central and city governments, as well as other stakeholders, in Viet Nam.
- The indicators should be quantifiable and should, as far as possible, be based on existing data that can be accessed by central and city governments.
- The indicators in the framework should relate to key elements of the sustainable urbanization process in contemporary Viet Nam. They must also reflect the basic character of Viet Nam's national development policies and priorities.

The Framework revolves around six aggregate indicator areas, which are (i) social and economic development; (ii) urban and land-use planning; (iii) water resources; (iv) energy; (v) transportation; and (vi) disaster management. The identification of these six aggregate indicators is based on two factors:

firstly, the views expressed by stakeholders, including at the provincial level³, on the key issues that they face in relation to sustainable urbanization and, secondly, the analysis of existing Vietnamese and international indicator frameworks as presented above. The local officials consulted were clear that they needed indicators to inform their decision-making process but also that any indicators needed to be clear and practical and had to be based on national-level policies and priorities. The inclusion of indicators in national-level legislation (such as the new Law on Urban Management and Development currently being prepared), along with requirements to collect and use the indicators, was seen as essential so that they are mandated to devote time and resources to the collection and analysis of data for the indicators.

For each of the six aggregate indicator areas, the framework contains main indicators for each of resilient cities, green growth cities and smart cities. Where appropriate, to add depth to the analysis and reflect the structure of existing indicator frameworks, secondary indicators have also been identified. The structure of the framework consequently contains six main indicator areas, 18 main indicators and a total of 14 secondary indicators. The rationale behind the selection of the main and secondary indicators is outlined below. The results of this process are shown schematically in Figure 4 and set out in more detail in Table 4 which can be taken as a draft Indicators Framework for Sustainable and Resilient Urban Development in Viet Nam for further discussion, refinement and finalization.

The individual indicators in the framework have been identified by, firstly, ensuring the indicators in the 2018 Circular on Urban Green Growth Indicators (with slight adjustments to wording where appropriate) were, where appropriate, integrated into this framework. Secondly, these were cross-referenced to the indicators listed in the appendix to the 2016 Resolution on Urban Classification and adjustments or additions to the indicators list were made to reflect the content of this Resolution where it is appropriate. Thirdly, the content of the international indicator frameworks such as those of the ISO and UNDP and, in particular, the Vietnamese studies discussed above were reviewed and, where it added value, additional indicators were included to reflect key issues that were not already identified.

³ Consultations were undertaken with key officials in seven provinces and cities as part of the preparation of this report. The locations where consultations took place are Ha Long, Quang Ninh, Yên Bai, Gia Nghia, Rach Gia, Kien Giang and Ho Chi Minh City.

Figure 4: Relationship Between Indicator Levels

Resilient City

- 1. Policies to support recovery of livelihoods and enterprises following a shock in place
- 2. Zoning regulations, infrastructure investments and institutional systems to reduce disaster risks in place
- 3. Percentage of households with secure access to piped water supply and improved sanitation
- 4. Percentage of households with reliable electricity connections
- 5. Percentage of population with access to reliable and affordable public transport
- 6. Institutional framework and awareness programs for disaster management in place

Sustainable Urbanization

- 1. Social and Economic Development
- 2. Urban and Land-Use Planning
- 3. Water
- 4. Energy
- 5. Transportation
- 6. Disaster Management

Green Growth City

- 1. Investment rate of new projects to build green growth urban centers
- 2. Urban planning and land-use zoning integrated with green growth and climate change objectives
- Percentage of wastewater treated and solid waste collected and treated up to standards and technical regulations
- 4. Number of days the Air Quality Index exceeds maximum threshold permitted by GoV regulations
- 5. Ratio of roads reserved for bicycle
- 6. Sustainable relief and recovery plans and facilities in place

Smart City

- 1. Access to high quality digital and communications technologies
- 2. Regulations and incentive systems on building standards and energy efficiency
- 3. Percentage of wastewater and solid waste recycled
- 4. Percentage of electricity supply from renewable energy generation sources
- 5. Percentage of city area covered by smart traffic management programs
- 6. Advanced early warning system operational and sustainable

Table 7: Indicators Framework for Sustainable and Resilient Urban Development in Viet Nam

Indicator Area	Resilient City	Green Growth City	Smart City
Social and	Main Indicator:	Main Indicator:	Main Indicator:
Economic Development	Policies to support recovery of livelihoods and enterprises following a shock in place	Investment rate of new projects to build green growth urban centers	Access to high quality digital and communications technologies
	Secondary Indicator:	Secondary Indicator:	Secondary Indicator:
	Strong integration with regional and global economies: Percentage of GDP exported	Effective management of ecosystems and natural resources: management strategies and regulations in place for protected ecosystems and key natural resources (e.g. riverside areas, mangroves, wetlands) Transformation of the	Proportion of completed construction works certified for green building
		economic structure: increase of Percentage GDP from industry and services	
Urban and	Main Indicator:	Main Indicator:	Main Indicator:
Land-Use Planning	Zoning regulations, infrastructure investments and institutional systems to reduce disaster risks in place	Urban planning and land- use zoning integrated with green growth and climate change objectives	Regulations and incentive systems on building standards and energy efficiency
	Secondary Indicators:	Secondary Indicator:	Secondary Indicator:
	Number of seriously polluted areas to be treated Percentage of households	Amount of public space, including area of protected ecosystems	Public awareness programs on green growth and climate change
	with permanent housing		
Water	Main Indicator:	Main Indicator:	Main Indicator:
Resources	Percentage of households with secure access to piped water supply and improved sanitation	Percentage of wastewater treated and solid waste collected and treated up to standards and technical regulations	Percentage of wastewater and solid waste recycled
			Secondary Indicator:
			Clean water loss rate

Indicator Area	Resilient City	Green Growth City	Smart City
Energy	Main Indicator:	Main Indicator:	Main Indicator:
	Percentage of households with reliable electricity connections	Number of days the Air Quality Index exceeds maximum threshold permitted by GoV regulations	Percentage of electricity supply from renewable energy generation sources
	Secondary Indicator:		Secondary Indicator:
	Rate of electricity use compared to total household expenditure		Proportion of urban roads using energy saving equipment or technologies or using renewable energy for lighting
Transportation	Main Indicator:	Main Indicator:	Main Indicator:
	Percentage of population with access to reliable and affordable public transport	Ratio of roads reserved for bicycle Secondary Indicator:	Percentage of city area covered by smart traffic management programs
		Proportion of private vehicles not using fossil fuels	
Disaster	Main Indicator:	Main Indicator:	Main Indicator:
Management	Institutional framework and awareness programs for disaster management in place	Sustainable relief and recovery plans and facilities in place	Advanced early warning system operational and sustainable
	Secondary Indicator:		Secondary Indicator:
	Rate of inundated areas in which flood prevention and control solutions are available		Back-up system for controlling communication and transportation in place in case of disaster

A description of the rationale behind each individual indicator area and indicator is set out in Table 8, below. Where appropriate, an indication of the source and type of data for the indicator and a brief summary of the indicator calculation method is also described in the table. This is a basic description only and it is essential that people and organizations using the indicators work out for themselves the details of what data to use and how to compute the indicators as this will be important in ensuring that they have a full understanding of the indicators.

The first main indicator area, **Social and Economic Development**, reflects the overall pattern of development and growth of the city and can be used to assess the extent to which the city is achieving national development approaches and targets. It is an essential reflection of not just how the economy is growing but also how the population are participating in the benefits of development.

The second main indicator area, **Urban and Land-Use Planning**, contains indicators that measure the effectiveness of the city government and other institutions in creating plans that are based on sustainable urbanization principles and approaches. City governments are the key to creating more sustainable urbanization and commitments in this area need to be reflected in concrete changes to planning systems and the content of planning and zoning activities.

The third main indicator area, **Water Resources**, relates to one of the most important natural resources and urban services that provide great benefits when managed well but that can be the source of severe social and environmental problems if poorly managed. It relates to water resources as an essential aspect of urban ecosystems, water supply as an essential service for urban families and businesses and water as a medium for waste disposal.

Energy, the fourth main indicator area, is similarly an essential service for people and businesses but urban energy demands are also potentially a source of severe and sustained environmental damage that can impact on the health of people and ecosystems. The sustainable provision of urban energy needs is one of the most important aspects of sustainable urbanization.

Transport, the fifth main indicator area, is again an essential service but also potentially the source of negative economic and environmental problems that impact upon the overall development of a city. Past patterns of the expansion of transport provision have often been poorly planned and extremely inefficient. Innovations in sustainable transport provision bring major social and economic benefits and reduce or remove one of the most important sources of negative environmental impacts from urban growth.

The sixth main indicator area, **disaster risk management**, is a key challenge for sustainable urbanization in Viet Nam. Many Vietnamese cities are extremely vulnerable to storms, floods and other forms of natural disaster and in some cases severe impacts is an annual occurrence. Effective disaster management systems greatly reduce these risks and are also essential for recovery when disasters do strike. The implementation of measures for disaster management is a key indicator of sustainable urbanization in Viet Nam.

Table 8: Indicators Framework: Rationale for the Selected Indicators

Indicator Area/Indicator	Rationale		
1. Social and Economic Development	Assesses the overall pattern of development and growth of the city and can be used to assess the extent to which the city is achieving national development approaches and targets.		
1.1. Resilient City			
Main Indicator:			
Policies to support recovery of livelihoods and enterprises following a shock in place	The ability of people's livelihoods and businesses to recover after a shock is a key indicator of resilience. This is hard to measure but will be greatly facilitated by policies from the city government and others to support the recovery process.		
Secondary Indicator:			
Strong integration with regional and global economies: percentage of GDP exported	Strong external economic integration gives greater resilience and more options to a city's economy. One measure of this that can be quantified is the percentage of the city's total economic output that is exported.		
1.2. Green Growth City			
Main Indicator:			
Investment rate of new projects to build green growth urban centers	The implementation of investments and other projects to implement government priorities is a key measure of how cities are responding to the policy agenda to promote green growth. The indicator should include both the total number of projects and the total quantity of investments involved in these projects.		

Rationale		
Ecosystems play a key part in sustainable urbanization and offer resilience to a city's overall development and ability to cope with natural disasters. Their conservation is assisted by the city having management strategies and regulations in place with sufficient institutional and financial resources to make them effective.		
A diverse and growing economy is critical for sustainable economic development. In modern Viet Nam that equates to an increase in the percentage of the city's GDP that comes from modern industry and services, with this being data that should be readily available to the city government.		
Digital and communications technologies that are available to all parts of a city's population and business community are an essential feature of smart city growth, both with regard to access to information and also the implementation of many smart city approaches that rely on these technologies. The percentage of the population and of enterprises with high quality internet access is an important indicator of smart city social and economic development.		
The certification of new construction for green building standards such as insulation and energy efficiency measures is a clear indicator that the city's growth is moving in a sustainable direction. The introduction of a certification program is also important in spreading awareness of the existence and potential of these construction technologies.		
Assesses the extent to which the city is achieving national development approaches and targets. It is an essential reflection of not just how the economy is growing but also how the population are participating in the benefits of development.		
The effective management of land use, strategic infrastructure investments to reduce risk and effective institutional systems for disaster management that are an integral part of the overall city planning and management system are the basis for strengthening urban resilience.		

Indicator Area/Indicator	Rationale
Secondary Indicators:	
Number of seriously polluted areas to be treated	Pollution of air, water and land damages sustainability and reduces resilience, so that a city needs programs to identify and treat polluted areas. Measuring the reduction of the number of polluted areas is a strong indicator of resilience and sustainable urbanization.
Percentage of households with permanent housing	Permanent housing is a key factor in reducing people's vulnerability to disasters and their ability to recover from such shocks. Time series data on access to permanent housing is a good indicator of a population's resilience.
2.2. Green Growth City	
Main Indicator:	
Urban planning and land-use zoning integrated with green growth and climate change objectives	A key measure of the adoption of a green growth approach is the full integration of green growth and climate change objectives into the mainstream of the overall city planning and management system. This will happen when a city government gives an explicit decision on where and how this will happen.
Secondary Indicators:	
Amount of public space, including area of protected ecosystems	Open public space is an important feature of green growth and a good measure of the overall ecological health of a city, especially where these areas include protected natural ecosystems. An indicator can be either the total area or the per capita area of green space with a city and/or different neighbourhoods of a city.
2.3. Smart City	
Main Indicator:	
Regulations and incentive systems on building standards and energy efficiency	The regulatory framework to incentivize and require the development of smart building standards and technologies in areas such as energy efficiency is straightforward to assess and is a good measure of the adoption of a smart city approach within a city's planning and regulatory system.
Secondary Indicators:	
Public awareness programs on green growth and climate change	Wider community and public awareness of actions to enhance green growth and responses to climate change are an essential part of a green growth system, as it will both encourage individuals and communities to take actions and build community support for investments and planning requirements introduced by the city government.
3. Water Resources	Relates to water resources as an essential aspect of urban ecosystems, water supply as an essential service for urban families and businesses and water as a medium for waste disposal.
3.1. Resilient City	
Main Indicator:	
Percentage of households with secure access to piped water supply and improved sanitation	Reliable water supply and sanitation is a key factor in social and health development and fundamental to strengthening resilience. It is data that is usually readily available and can be traced over time.

Indicator Area/Indicator	Rationale		
3.2. Green Growth City			
Main Indicator:			
Percentage of wastewater treated and solid waste collected and treated up to standards and technical regulations	A key feature of a green growth approach is the safe disposal of waste products which, in growing cities, can be the source of severe health and environmental damage. It is a key service that can be measured as a good indicator of sustainable urban development.		
3.3. Smart City			
Main Indicator:			
Percentage of wastewater and solid waste recycled	Investments into modern technologies that increase recycling have great economic and environmental benefits and are an integral part of a smart city approach. An indicator on this will also act as an incentive to city governments to demonstrate their commitment to a smart city approach by investments to improve recycling.		
Secondary Indicators:			
Clean water loss rate	The operation and maintenance of water supply infrastructure is an important indication of sustainable management approaches and can be measured by the rate of water loss in the distribution system.		
4. Energy	Assesses an essential service for people and businesses but also potentially a source of severe and sustained environmental damage that can impact on the health of people and ecosystems.		
4.1. Resilient City			
Main Indicator:			
Percentage of households with reliable electricity connections	Reliable access to electricity is a key development indicator and fundamental to assessing resilience. This indicator can be measured in two ways (that can be combined): (1) the percentage of households with secure power supplies; and (2) the number of days per year that households have interrupted power supplies. The second measure is a strong indicator of resilience.		
Secondary Indicators:			
Rate of electricity use compared to total household expenditure	Electrical connections are only part of the picture: the affordability and use of electricity indicates the extent to which households' access is secure and sustainable. This can be done by calculating the percentage of living expenditure (rather than income) that is spent on electricity.		
4.2. Green Growth City			
Main Indicator:			
Number of days the Air Quality Index exceeds maximum threshold permitted by GoV regulations	Energy use, for transport, industrial activities and power generation, is the dominant source of air pollution that is, in turn, one of the key challenges to green growth and sustainability. A measure of air quality through assessing changes to the AQI over time is a strong indicator of how energy use affects green growth.		

Indicator Area/Indicator	Rationale		
4.3. Smart City			
Main Indicator: Percentage of electricity supply from renewable energy generation sources	Renewable energy, especially solar and wind power, will be a major part of the expansion of power generation capacity in Viet Nam and can be strengthened through policies to promote rooftop solar and cities reaching purchasing agreements with renewable energy suppliers.		
Secondary Indicators: Proportion of urban roads using energy saving equipment or technologies or using renewable energy for lighting	A clear measure of how cities are promoting a smart city approach is by their own actions in investing in renewable energy technologies, with street lighting one of the most common and economically attractive investments in this area.		
5. Transportation	Assesses whether innovations in sustainable transport provision will bring major social and economic benefits and reduce or remove one of the most important sources of negative environmental impacts from urban growth.		
5.1. Resilient City			
Main Indicator:			
Percentage population with access to reliable and affordable public transport	A key aspect of sustainable urbanization is secure access to transport for a city's population, with public transport having great advantages in social, economic and environmental terms. Access to public transport strengthens the resilience of individuals and the community as a whole.		
5.2. Green Growth City			
Main Indicator: Ratio of roads reserved for bicycle	The use of bicycles in conditions where the riders are safe from motorized traffic reduces congestion and pollution and has direct economic benefits. One widely used green growth strategy is dedicated cycleways and an indicator on this will both encourage and measure the development of this option in Vietnamese cities.		
Secondary Indicators:	· · · · · · · · · · · · · · · · · · ·		
Proportion of private vehicles not using fossil fuels	The growth of electric vehicles is rapid in many advanced cities and can be expected to grow in Viet Nam, with clear environmental advantages for sustainable urban development. Measuring their increase will be a clear indicator of green growth at the city level.		
5.3. Smart City			
Main Indicator:			
Percentage city area covered by smart traffic management infra and cities will be crucial for sustainable urbanization, v programs usually covering only parts of cities in their ear A measure of smart city development will be how such pare rolled out in individual cities.			
6. Disaster Management	Assesses whether disaster management systems are in place to reduce risks from natural disasters and to aid recovery when disasters do strike.		

Indicator Area/Indicator	Rationale		
6.1. Resilient City			
Main Indicator:			
Institutional framework and awareness programs for disaster management in place	Systematic disaster management systems, including both institutional structures and community awareness activities, are a key feature of building resilience. The indicator will reflect the actions of city governments and other organizations in this area.		
Secondary Indicator:			
Rate of inundated areas in which flood prevention and control solutions are available	Investments and management systems to reduce flood vulnerability in at-risk areas of a city are a key measure of the development of resilience as part of sustainable urbanization.		
6.2. Green Growth City			
Main Indicator:			
Sustainable relief and recovery plans and facilities in place	Disasters are inevitable in some places even where substantial investments have been made in activities to reduce risk. Where such disasters strike, they can seriously disrupt development, but the effects and duration of such impacts can be substantially reduced where effective and resourced relief and recovery programs are in place.		
6.3. Smart City			
Main Indicator:			
Advanced early warning system operational and sustainable	Technical advances in early warning systems offer the potential to significantly reduce risk and should be seen as an integral part of a smart city development process.		
Secondary Indicator:			
Back-up system for controlling communication and transportation in place in case of disaster	Maintaining essential transport and communications services during and after disasters is essential for sustainable urban development and require a planned back-up system that is developed by the city government working with other relevant agencies.		

Appendix I: List of current legal documents related to Urban Development and Management

LAW – RESOLUTION

Constitution, organization of the state machine, the capital, specialized mechanism, promulgation of legal documents

- 1. The Constitution of the Socialist Republic of Viet Nam adopted by the XIIIth National Assembly of the Socialist Republic of Viet Nam at its 6th session on November 28, 2013
- 2. Law No. 57/2014/QH13 dated November 20, 2014 on Organization of the National Assembly
- 3. Law No. 76/2015/QH13 dated June 19, 2015 on Organization of the Government
- 4. Law No. 77/2015/QH13 dated June 19, 2015 on Organization of Local Administration
- 5. Law No. 25/2012/QH13 dated November 21, 2012 on the Capital
- 6. Law No. 80/2015/QH13 dated June 22, 2015 on Promulgation of legal documents
- 7. Resolution No. 54/2017/QH14 dated November 24, 2017 on the pilot specific mechanism, policies for the development of Ho Chi Minh City
- 8. Resolution No. 1211/2016/UBTVQH13 dated May 25, 2016 adopted by the National Assembly Standing Committee on criteria of administrative units and classification of administrative units
- Resolution No. 351/2017/UBTVQH14 dated 14 March 2017 adopted by the National Assembly Standing Committee regulating modalities and techniques for presenting legal documents of the National Assembly, the Standing Committee of the National Assembly, the State President

State budget, public investment, public debt, public assets

- 10. Law No. 83/2015/QH13 dated June 25, 2015 on the State Budget
- 11. Law No. 49/2014/QH13 dated June 18, 2014 on Public Investment
- 12. Law No. 20/2017/QH14 dated 23 November 2017 on Public Debt Management (effective date of July 01, 2018)
- 13. Law No. 29/2009/QH12 dated June 29, 2009 on Public Debt Management(expiry date of July 01, 2018)
- 14. Law No. 15/2017/QH14 dated June 21, 2017 on Management and Use of Public assets

Civil, investment, business, bidding, banking

- 15. Civil Code No. 91/2015/QH13 dated November 24, 2015
- 16. Law No. 67/2014/QH13 dated November 24, 2014 on Investment
- 17. Law No. 03/2016/QH14 dated November 22, 2016 on amendment and supplement to article 6 and Appendix 4 on the list of conditional business lines stipulated in the law on Investment
- 18. Law No. 68/2014/QH13 dated November 26, 2014 on Enterprises
- 19. Law No. 04/2017/QH14 dated June 12, 2017 on Support for Small- and Medium-sized Enterprises
- 20. Law No. 43/2013/QH13 dated November 26, 2013 on Bidding
- 21. Law No. 17/2017/QH14 dated November 20, 2017 on amendments to a number of articles of the Law on Credit Institutions
- 22. Law No. 47/2010/QH12 dated June 29, 2010 on Credit Institutions

Cities, planning

23. Law No. 30/2009/QH12 dated June 17, 2009 on Urban planning

- 24. Law No. 21/2017/QH14 dated November 24, 2017 on Planning, effective date of January 01, 2019
- 25. Resolution No. 1210/2016/UBTVQH13 dated May 05, 2016 adopted by the National Assembly Standing Committee on Urban classification

Construction, Residential housing, Real Estate Business

- 26. Law No. 50/2014/QH13 dated June 18, 2014 on Construction
- 27. Law No. 65/2014/QH13 dated November 25, 2014 on Residential housing
- 28. Law No. 66/2014/QH13 dated November 25, 2014 on Real estate business

Land

29. Law No. 45/2013/QH13 dated November 29, 2013 on Land

Environment, Water

- 30. Law No. 55/2014/QH13 dated June 23, 2014 on Environment protection
- 31. Law No. 50/2010/QH12 dated June 28, 2010 on Economical and Efficient Use of Energy
- 32. Law No. 33/2013/QH13 dated June 19, 2013 on Natural Disaster Prevention and Control
- 33. Law No. 17/2012/QH13 on Water Resources
- 34. Law No. 08/2017/QH14 dated June 19, 2017 on Irrigation
- 35. Law No. 79/2006/QH11 dated December 12, 2006 on Dikes

Transportation

- 36. Law No. 23/2008/QH12 dated November 28, 2008 on Road Traffic
- 37. Law No. 35/2005/QH11 dated June 27, 2005 on Railway (Effective date until June 30, 2018)
- 38. Law No. 06/2017/QH14 dated June of 16, 2017 on Railway (Effective date of July 01, 2018)
- 39. Law No. 66/2006/QH11 dated July 12, 2006 on Viet Nam Civil Aviation
- 40. Law No. 61/2014/QH13 dated November 21, 2014 on amendments and addition to a number of articles of the Viet Nam Civil Aviation Law
- 41. Law No. 23/2004/QH11 dated June 15, 2004 on Inland waterway navigation
- 42. Law No. 48/2014/QH13 dated June 17, 2014 of the National Assembly on amendments and addition to a number of articles of the Law on Inland Waterway Navigation

Culture, Tourism

- 43. Law No. 28/2001/QH10 dated June 29, 2001 on Cultural Heritage
- 44. Law No. 32/2009/QH12 dated June 18, 2009 on amendments and addition to a Number of Articles of Law No. 28/2001/QH10 on Cultural Heritages.
- 45. Law No. 09/2017/QH14 dated June 19, 2017 on Tourism

Charges and fees

46. Law No. 97/2015/QH13 dated November 25, 2015 on Charges and Fees

Price, auction

- 47. Law No. 11/2012/QH13 dated June 20, 2012 on Prices
- 48. Law No. 01/2016/QH14 dated November 17, 2016 on Property Auction

Electricity, telecommunications

- 49. Law No. 28/2004/QH11 dated December 14, 2004 on Electricity
- 50. Law. No. 24/2012/QH13 dated November 20, 2012 on amendments and addition to a number of articles of the Electricity Law
- 51. Law No. 41/2009/QH12 dated November 23, 2009 on Telecommunications

Science, Technology

- 52. Law No. 29/2013/QH13 dated June 18, 2013 on Science and Technology
- 53. Law No. 21/2008/QH12 dated November 28, 2008 on High Technologies

Tax

- 54. Law No. 78/2006/QH11 dated December 12, 2006 on Tax Administration
- 55. Law No. 21/2012/QH13 dated November 20, 2012 on amendments and addition to a number of articles of the Law on Tax Administration
- 56. Law No. 14/2008/QH12 dated June 12, 2008 on Enterprise Income Tax
- 57. Law No. 32/2013/QH13 dated June 19, 2013 on amendments and addition to a number of articles of the Law on Enterprise Income Tax
- 58. Law No. 71/2014/QH13 dated November 26, 2014 on amendments and addition to a number of articles of the Laws on Taxes
- 59. Law No.13/2008/QH12 dated June 12, 2008 on Value Added Tax
- 60. Law No. 31/2013/QH13 dated June 19, 2013 on amendments and addition to a number of Articles of the Law on Value-Added Tax
- 61. Law No. 106/2016/QH13 dated April 06, 2016 on amendments to a number of Articles of the Law on Value-added Tax, the Law on Special Excise Duty, and the Law on Tax Administration
- 62. Law No. 04/2007/QH12 dated November 21, 2007 on Personal Income Tax
- 63. Law No. 26/2012/QH13 dated November 22, 2007 on amendments and addition to a number of articles of the Law on personal income tax
- 64. Law No. 48/2010/QH12 dated June 17, 2010 on Non-agricultural Land Use Tax
- 65. Law No. 23-L/CTN dated July 10, 1993 on Agricultural Land Use Tax
- 66. Resolution No. 55/2010/QH12 dated November 24, 2010 of the National Assembly on Agricultural Land Use Tax Exemption and Reduction
- 67. Resolution No. 28/2016/QH14 dated November 11, 2016 of the National Assembly on amendments and addition to a number of articles of Resolution No. 55/2010/QH12 on agricultural land use tax exemption and reduction

DECREE

Constitution, organization of the state machine, the capital, specialized mechanism for promulgation of legal documents

- 1. Decree No. 89/2017/NĐ-CP dated July 29, 2017 on defining particularly financial and budgetary mechanisms and policies for Hai Phong city
- 2. Decree No. 63/2017/NĐ-CP dated May 19, 2017 on defining particularly financial and budgetary mechanisms and policies for Hanoi capital
- 3. Decree No. 48/2017/NĐ-CP dated April 24, 2017 on defining particularly financial and budgetary mechanisms and policies for Ho Chi Minh capital
- 4. Decree No. 123/2016/ND-CP dated September 01, 2016 on defining the functions, tasks, powers and organizational structures of ministries and ministerial-level agencies
- 5. Decree No. 92/2017/ND-CP dated August 07, 2017 on amendments and addition to a number of articles of the decrees concerning control of administrative procedures, with effect from September 25, 2017.

- 6. Decree No. 138/2016/ND-CP dated October 10, 2016 on defining the Working Regulation of the Government
- 7. Decree No. 34/2016/ND-CP dated May 14, 2016 on detailing a number of articles of, and providing measures for implementing, the Law on Promulgation of Legal Documents

State budget, public investment, public debt, public assets

- 8. Decree No. 45/2017/ND-CP dated April 21, 2017 on detailing the formulation of five-year finance plans and three-year finance-state budget plans
- 9. Decree No. 163/2016/ND-CP dated December 21, 2016 on detailing a number of articles of the Law on the State Budget
- 10. Decree No. 136/2015/ND-CP dated December 31, 2015 on guiding the implementation of a number of articles of the Law on Public Investment
- 11. Decree No. 77/2015/ND-CP dated 10 September, 2015 on annual and medium-term public investment plan
- 12. Decree No. 131/2015/ND-CP dated December 25 on guiding the projects on national significance
- 13. Decree No. 84/2015/ND-CP dated September 30, 2015 on supervision and assessment of investment
- 14. Decree No. 32/2017/ND-CP dated March 30, 2017 on state investment credit
- 15. Decree No. 50/2016/ND-CP dated June 01, 2016 on penalties for administrative violations against regulations on planning and investment
- 16. Decree No. 52/2017/ND-CP dated April 28, 2017 on on-lending of the Government's foreign borrowed capital to People's Committees of centrally-affiliated cities and provinces
- 17. Decree No. 78/2010/ND-CP dated July 14, 2010 of the Government on on-lending of the Government's foreign loans
- 18. Decree No. 79/2010/ND-CP dated July 14, 2010 on Public Debt management operations
- 19. Decree No. 04/2017/ND-CP dated January 16, 2017 on grant and management of Government guarantee
- 20. Decree No. 16/2016/ND-CP dated March 16, 2016 on management and use of official development assistance (ODA) and concessional loans of foreign donors
- 21. Decree No. 151/2017/NĐ-CP dated December 26, 2017 on guiding the Law on management and use of public properties
- 22. Decree No. 130/2013/ND-CP of October 16, 2013, on the production and provision of public-utility products and services

Civil, investment, business, bidding, banking

- 23. Decree No. 118/2015/ND-CP dated November 12, 2015 on guiding the Investment Law
- 24. Decree No. 15/2015/ND-CP dated February 14, 2015 on investment in the form of public-private partnership
- 25. Decree No. 29/2008/ND-CP dated March 14, 2008 on providing for industrial parks, export processing zones and economic zones
- 26. Decree No. 164/2013/ND-CP of November 12, 2013 on amendments and addition to a number of articles of Decree No. 29/2008/ND-CP of March 14, 2008, on industrial parks, export-processing zones and economic zones
- 27. Decree No. 114/2015/ND-CP dated November 09, 2015 on amending and supplementing Article 21 of Decree No. 29/2008/ND-CP of March 14, 2008, on industrial parks, export processing zones and economic zones
- 28. Decree No. 96/2015/ND-CP dated October 19, 2015 on detailing a number of articles of the Law on Enterprises
- 29. Decree No. 78/2015/ND-CP dated September 14, 2015 on Enterprise registration
- 30. Decree No. 63/2014/ND-CP dated June 26, 2014 on detailing a number of articles of the Bidding Law regarding contractor selection
- 31. Decree No. 30/2015/ND-CP dated March 17, 2015 on guiding the implementation of a number of Articles on investor selection of the Law on Bidding
- 32. Decree No. 93/2017/ND-CP dated August 07, 2017 on the financial regime applicable to credit institutions and foreign bank branches and financial supervision and assessment of efficiency of state capital investment at credit institutions with 100% state-owned charter capital and credit institutions with state capital
- 33. Decree No. 39/2014/ND-CP dated May 07, 2014 on operation of financial company and financial leasing company

Cities

- 34. Decree No. 11/2013/ND-CP dated January 14, 2013 on management of urban development investment
- 35. Decree No. 79/2009/ND-CP dated September 28, 2009 on management of urban lighting
- 36. Decree No. 64/2010/ND-CP dated June 11, 2010 on management of urban green trees
- 37. Decree No. 72/2012/ND-CP dated September 24, 2012 on management and common-use of technical infrastructure works
- 38. Decree No. 117/2007/ND-CP dated July 11, 2007 on clean water production, supply and consumption
- 39. Decree No. 124/2011/ND-CP dated December 28, 2011 on amendments and addition to a number of articles of Decree No.117/2007/ND-CP dated July 11, 2007 of the government of the production, supply and consumption of clean water

- 40. Decree No. 39/2010/ND-CP dated April 07, 2010 on management of urban underground construction space
- 41. Decree No. 91/2005/NĐ-CP dated July 11, 2005 on regulations on naming, changing names on roads, streets and public works
- 42. Decree No. 23/2016/NĐ-CP on construction, management and use of cemeteries and cremation facilities

Planning

- 43. Decree No. 37/2010/ND-CP dated April 7, 2010 on the formulation, appraisal, approval and management of urban planning
- 44. Decree No. 38/2010/ND-CP dated April 07, 2010 on management of urban space, architecture and landscapes

Construction, residential housing, real estate business

- 45. Decree No. 32/2015/ND-CP dated March 25, 2015 on the construction cost management
- 46. Decree No. 37/2015/ND-CP dated April 22, 2015 on prescribing in detail construction contracts
- 47. Decree No. 44/2015/ND-CP dated May 06, 2015 on detailing a number of contents on construction planning
- 48. Decree No. 46/2015/ND-CP dated May 12, 2015 on quality management and maintenance of construction works
- 49. Decree No. 59/2015/ND-CP dated June 18, 2015 on management of construction investment projects
- 50. Decree No. 42/2017/ND-CP dated April 05, 2017 on amendments to Decree No. 59/2015/ ND-CP dated June 18, 2015 on management of construction investment projects
- 51. Decree No. 39/2016/ND-CP dated May 15, 2016 on detailing the implementation of a number of Articles of the Law on occupational safety and sanitation
- 52. Decree No. 119/2015/ND-CP dated November 13, 2015 on prescribing compulsory insurance in construction investment activities
- 53. Decree No. 53/2017/ND-CP dated May 05, 2017 on specifying lawful papers on land for grant of construction permits
- 54. Decree No. 101/2015/ND-CP dated October 20, 2015 on renovation and reconstruction of condominiums
- 55. Decree No. 100/2015/ND-CP dated October 20, 2015 on social housing development and management
- 56. Decree No. 99/2015/ND-CP dated October 20, 2015 on detailing and guiding the implementation of a number of articles of the Law on residential housing

- 57. Decree No. 117/2015/ND-CP dated November 12, 2015 on establishment, management and use of residential housing and real estate market information system
- 58. Decree No. 79/2016/ND-CP dated July 01, 2016 on conditions for training business in specialist knowledge, professional competence in management and operation of apartment buildings, knowledge of real estate brokerage practicing, real estate transaction management
- 59. Decree No. 76/2015/ND-CP dated September 10, 2015 on guiding a number of articles of the Law on Real Estate Trading
- 60. Decree No. 139/2017/NĐ-CP dated November 27, 2017 *on* providing for penalties for administrative violations against regulations on investment and construction; extraction, processing and trading of minerals used in construction, production and trading of building materials; management of infrastructural constructions; real estate business, housing development, management and operation of apartment buildings and office buildings.

Land

- 61. Decree No. 46/2014/ND-CP dated May 15, 2014 on collection of land rent and water surface rent
- 62. Decree No. 135/2016/ND-CP dated September 09, 2015 on amendments and addition to a number of articles on collection of land rent and water surface rent
- 63. Decree No. 35/2017/ND-CP dated April 03, 2017 on collection of land use fee, land rent and water surface rent in economic zones and hi-tech zones
- 64. Decree No. 123/2017/ND-CP dated November 14, 2017 on amendments and addition to a number of articles of the Decrees on collection of land use fee, land rent and water surface rent
- 65. Decree No. 45/2014/ND-CP dated May 15, 2014 on collection of land use fee
- 66. Decree No. 43/2014/ND-CP dated May 15, 2014 on detailing a number of articles of the Land Law
- 67. Decree No. 01/2017/ND-CP dated January 06, 2017 on amendments to the decrees on the implementation of the Land Law
- 68. Decree No. 44/2014/ND-CP dated May 15, 2014 on land prices
- 69. Decree No. 47/2014/ND-CP dated May 15, 2014 on compensation, support, and resettlement upon land expropriation by the State
- 70. Decree No. 102/2014/ND-CP dated November 10, 2014 on imposing penalties for land-related administrative violations
- 71. Decree No. 104/2014/ND-CP dated November 14, 2014 on the land price bracket
- 72. Decree No. 35/2015/ND-CP dated April 13, 2015 on management and use of land for rice cultivation
- 73. Decree No. 35/2017/ND-CP dated April 3, 2017 on prescribing the collection of land use fee, land rent and water surface rent in economic zones and hi-tech zones

74. Decree No. 80/2014/ND-CP dated August 06th, 2014 on the drainage and treatment of wastewater

Environment, water

- 75. Decree No. 38/2015/ND-CP dated April 24, 2015 on management of waste and discarded materials
- 76. Decree No. 154/2016/ND-CP November 16, 2016 on environmental protection fee on wastewater
- 77. Decree No. 18/2015/ND-CP dated February 14, 2015 on environmental protection planning, strategic environmental assessment, environmental impact assessment and environmental protection plans
- 78. Decree No. 19/2015/ND-CP dated 14 February 2015 on guiding the Law on Environmental Protection
- 79. Decree No. 21/2011/ND-CP of March 29, 2011 on providing guidelines and implementation of the law on economical and efficient use of energy and measures for its implementation
- 80. Decree No. 66/2014/ND-CP dated July 4, 2014 on guiding the law on natural disaster prevention and control
- 81. Decree No. 30/2017/ND-CP dated March 21, 2017 on regulating the organization of response to emergency, acts of god and search and rescue
- 82. Decree No. 201/2013/ND-CP dated November 27, 2013 on guiding the Law on Water Resources
- 83. Decree No. 82/2017/ND-CP dated July 17, 2017 by the Prime Minister on providing for calculation method and charge for granting water right
- 84. Decree No. 43/2015/ND-CP dated May 6, 2015 on providing the establishment and management of water source protection corridors
- 85. Decree No. 54/2015/ND-CP dated June 08, 2015 on providing for incentives for economical and efficient water use activities
- 86. Decree No. 113/2007/NĐ-CP dated June 28, 2007 on guiding the Law on Dikes

Transportation

- 87. Decree No. 11/2010/ND-CP dated February 24, 2010 on the management and protection of the structure of overland transport infrastructure
- 88. Decree No. 100/2013/ND-CP dated September 03, 2013 amending Decree No. 11/2010/ND-CP dated 24 February 2010 regulating on the management and protection of the structure of overland transport infrastructure
- 89. Decree No. 64/2016/ND-CP dated July 01, 2016 amending Decree No. 11/2010/ND-CP dated 24 February 2010 regulating on the management and protection of the structure of overland transport infrastructure

Culture, tourism

- 90. Decree No. 98/2010/ND-CP dated September 21, 2010 providing guidelines on the Law on cultural heritage and the amended Law on cultural heritage
- 91. Decree No. 70/2012/ND-CP dated September 18, 2012 regulating the power, order, procedures for establishment, approval of planning, project of preservation, renovation, restoration of historical-cultural relics, beautiful landscapes

Fees and charges

92. Decree No. 120/2016/ND-CP dated August 23, 2016 providing guidelines on the Law on fees and charges

Prices, auction

- 93. Decree No. 177/2013/ND-CP dated November 14, 2013 providing guidelines on the Law on Prices
- 94. Decree No. 62/2017/ND-CP dated May 16, 2017 providing guidelines on the Law on property auction

Electricity, Telecommunication

- 95. Decree No. 137/2013/ND-CP providing guidelines on the Law on electricity and the amended Law on electricity
- 96. Decree No. 08/2018/ND-CP dated January 15, 2018 on amendment to the Decree relating to the investment business conditions under management authority of the Ministry of Industry and Trade
- 97. Decree No. 25/2011/ND-CP dated April 06, 2011 providing guidelines on the Law on telecom
- 98. Decree No. 81/2016/ND-CP dated July 01, 2016 amending Decree No. 25/2011/ND-CP providing guidelines on the Law on telecom relating to the investment business conditions of telecom services
- 99. Decree No. 49/2017/ND-CP dated April 24, 2017 amending Article 15 of Decree No. 25/2011/ND-CP providing guidelines on the Law on telecom and Article 30 of Decree No. 174/2013/ND-CP regulating on administrative sanction in posts, telecom, information technology and radio frequency sector

Taxation

- 100. Decree No. 83/2013/ND-CP dated July 22, 2013 providing guidelines on the Law on tax management and the amended Law on tax management
- 101. Decree No. 91/2014/ND-CP dated October 01, 2014 amending the Decrees regulating on taxation

- 102. Decree No. 12/2015/ND-CP dated February 12, 2015 providing guidelines on the Law on amendment, supplement to a number of articles of the amended and amendments to some articles of Decrees on taxation
- 103. Decree No. 92/2013/ND-CP dated August 13, 2013 providing guidelines on a number of articles that take effect on 01 July, 2013 of the law on amendments and supplements to a number of articles of the law on corporate income tax and the law on amendments and supplements to a number of articles of the law on value- added tax
- 104. Decree No. 218/2013/ND-CP dated December 26, 2013 guiding the implementation of law on corporate income tax
- 105. Decree No. 146/2017/ND-CP dated December 15, 2017 on amendments to Decrees No. 100/2016/ND-CP and No.12/2015/ND-CP
- 106. Decree No. 209/2013/ND-CP dated December 18, 2013 guiding the Law on value-added tax
- 107. Decree No. 100/2016/ND-CP dated July 01, 2016 guiding the amended Law on value-added tax, the law on special sales tax and the law on tax management
- 108. Decree No. 65/2013/ND-CP dated June 27, 2013 guiding the Law on personal income tax and the Law amending a number of articles of the Law on personal income tax
- 109. Decree No. 53/2011/ND-CP dated July 01, 2011 guiding the Law on non-agricultural land use tax
 - Decree No. 20/2011/ND-CP dated March 23, 2011 guiding the Resolution No. 55/2010/QH12 on exemption and reduction of non-agricultural land use tax
- 110. Decree No. 21/2017/ND-CP dated February 24, 2017 amending Decree No. 20/2011/ND-CP dated 23 March 2011 guiding Resolution No. 55/2010/QH12 on exemption and reduction of non-agricultural land use tax

DECISION OF THE PRIME MINISTER

- 1. Decision No. 445/QD-TTg dated April 07, 2009 on approval of modification of the master plan for development of Viet Nam's urban system by 2025 with a vision to 2050.
- 2. Decision No. 758/QD-TTg dated August 06, 2009 on approval of the national urban upgrading planning for 2009-2020 period.
- 3. Decision No. 1659/QD-TTg dated November 7, 2012 on approval of the national urban development program for the period from 2012 to 2020.
- 4. Decision No. 2127/QD-TTg dated November 30, 2011 on approval of the national strategy on residential housing development by 2020, with vision toward 2030.
- 5. Decision No. 1474/QD-TTg dated October 05, 2012 on approval of national action plan on climate change for 2012 2020 period
- 6. Decision No. 2623/QD-TTg dated December 31, 2013 on approval of the project of "Development of Vietnamese cities for responding to climate change for the 2013-2020 period".

- 7. Decision No. 1393/QD-TTg dated September 25, 2012 on approval of National strategy for green development.
- 8. Decision No. 403/QD-TTg dated March 20, 2014 on approval of the National Action Plan on green development for the 2014 2020 period issued by the Prime Minister
- 9. Decision No. 2139/QD-TTg dated 05 December 2011 on approval of National strategy on climate change
- 10. Decision No. 2502/QD-TTg dated December 22, 2016 on approval of adjustments to the development orientations for water supply for cities and industrial parks of Viet Nam by 2025, with a vision toward 2050.
- 11. Decision No. 1670/QD-TTg dated October 31, 2017 on approval of the National target for responding to the climate change and for green development for the 2016-2020 period issued by the Prime Minister

CIRCULAR

Constitution, organization of the state agencies, the capital, special mechanism, promulgation of legal documents

- Circular No. 01/2017/TT-VPCP dated March 31, 2017 of the Minister/Head of the Government
 Office guiding the implementation of the provisions on National Newspapers provided in
 Decree No. 34/2016/ND-CP guiding the Law on issuance of legal documents issued by the
 Minister/Head of Government Office
- Circular No. 338/2016/TT-BTC dated December 28, 2016 of the Minister of the Ministry of Finance regulating the formulation of cost estimation, management, use and settlement of state budget for ensuring of the formulation of legal documents and perfecting the legal system

State budget, public investment, public debt, public assets

- 3. Circular No. 342/2016/TT-BTC dated December 30, 2016 of the Minister of the Ministry of Finance guiding Decree No. 163/2016/ND-CP guiding the Law on state budget
- 4. Circular No. 03/2017/TT-BKHDT dated April 25, 2017 of the Minister of the Ministry of Planning and Investment regulating the regime of the report of formulation, supervision and assessment of the implementation of the public investment plan
- 5. Circular No. 22/2015/TT-BKHDT dated December 18, 2015 of the Minister of the Ministry of Planning and Investment regulating on the form of the report of supervision and assessment of investment.
- 6. Circular No. 139/2015/TT-BTC dated September 3, 2015 of the Minister of the Ministry of Finance providing guidance on guarantee for foreign loans on-lent by the Government
- 7. Circular No. 126/2017/TT-BTC dated November 27, 2017 of the Minister of the Ministry of Finance regulating on the regime for report and public announcement of the information on public debts and foreign debts of the nation
- 8. Circular No. 111/2016/TT-BTC dated June 30, 2016 of the Minister of the Ministry of Finance regulating on financial management of programs and projects funded by official development assistance (ODA) and concessional loans granted by foreign donors
- 9. Circular No. 12/2016/TT-BKHDT dated August 8, 2016 of the Minister of the Ministry of Planning and Investment providing guidelines for Decree No. 16/2016/ND-CP on management and use of official development assistance and incentive loans granted by foreign sponsors

Civil, investment, enterprise, bidding, banking

- 10. Circular No. 02/2017/TT-BKHDT dated April 18, 2017 of the Minister of the Ministry of Planning and Investment guiding the mechanism for cooperation in processing of applications for investment registration and enterprise registration submitted by foreign investors
- 11. Circular No. 16/2015/TT-BKHDT dated November 18, 2015 of the Minister of the Ministry of Planning and Investment regulating the application forms for investment procedures and reporting forms on investment in Viet Nam
- 12. Circular No. 83/2016/TT-BTC dated June 17, 2016 of the Minister of the Ministry of Finance guiding the implementation of investment incentive programs under the provisions of the Law on Investment and the Government's Decree No. 118/2015/ND-CP dated November 12, 2015 specifying and guiding the implementation of several articles of the Law on Investment
- 13. Circular No. 75/2017/TT-BTC dated July 21, 2017 of the Minister of the Ministry of Finance amending Circular No. 55/2016/TT-BTC providing certain contents of financial management of investment projects in the form of public-private partnership and costs of investor selection
- 14. Circular No. 55/2016/TT-BTC dated March 23, 2016 of the Minister of the Ministry of Finance providing certain contents of financial management of investment projects in the form of public-private partnership and costs of investor selection
- 15. Circular No. 06/2016/TT-BKHDT dated June 28, 2016 of the Minister of the Ministry of Planning and Investment guiding the implementation of Decree No. 15/2015/ND-CP on investment in the form of public-private partnerships
- 16. Circular No. 02/2016/TT-BKHDT dated March 1, 2016 of the Minister of the Ministry of Planning and Investment guiding preliminary project selection, formulation, appraisal and approval for project proposal, and feasibility study report on investment project under form of public-private partnership
- 17. Joint Circular No. 06/2015/TTLT-BKHDT-BNV dated September 3, 2015 of the Ministers of the Ministry of Planning and Investment and the Ministry of Internal Affair guiding the functions, duties, powers and organizational structure of the Boards of Management of the industrial parks, processing zones, economic zone
- 18. Circular No. 20/2015/TT-BKHDT dated December 1, 2015 of the Minister of the Ministry of Planning and Investment guiding on the enterprise registration
- 19. Circular No. 127/2015/TT-BTC dated August 21, 2015 of the Minister of the Ministry of Finance guiding on issuance of enterprise registration numbers to new enterprises and appointment of their supervisory tax authorities
- 20. Circular No. 16/2016/TT-BKHDT dated December 16, 2016 of the Minister of the Ministry of Planning and Investment guiding on formulation of the dossier for invitation for preliminary selection, bidding with a view to select the investor implementing the investment project using land.
- 21. Circular No. 03/2015/TT-BKHDT dated May 6, 2015 of the Minister of the Ministry of Planning and Investment specifying preparation of invitation to bid on construction works issued by the Ministry of Planning and Investment
- 22. Circular No. 07/2015/TT-NHNN dated June 25, 2015 of the State Bank Governor guiding on the bank guarantee
- 23. Circular No. 13/2017/TT-NHNN dated September 29, 2017 of the State Bank Governor amending Circular No. 07/2015/TT-NHNN dated June 25, 2015 of the State Bank Governor regulating on bank guarantee

Cities

- 24. Joint Circular No. 20/2013/TTLT-BXD-BNV dated November 21, 2013 of the Ministers of the Ministry of Construction and Ministry of Internal Affair guiding Decree No. 11/2013/ND-CP on management of urban development investment
- 25. Circular No. 13/2010/TT-BXD dated August 20, 2010 of the Minister of the Ministry of Construction issuing the form of the contract for management and operation of urban public lighting systems
- 26. Circular No. 01/2018/TT-BXD dated January 5, 2018 of the Minister of the Ministry of Construction regulating on the construction of urban green development criteria (effective date of February 20, 2018)
- 27. Circular No. 03/2013/TT-BXD dated April 2, 2013 of the Minister of the Ministry of Construction issuing contract form of share of technical infrastructure works and contract of management and operation of shared technical infrastructure works
- 28. Joint Circular No. 210/2013/TTLT-BTC-BXD-BTTTT dated December 30, 2013 of the Ministers of the Ministries of Finance Construction Information and Telecommunication guiding on the mechanism, principles of price control and the method for determining the price for hiring the shared technical infrastructure works
- 29. Joint Circular No. 21/2013/TTLT-BXD-BCT-BTTTT dated December 27, 2013 of the Ministers of the Ministries of Construction Industry and Trade Information and Telecommunication regulating the signs of identification of lines, cables and pipelines are installed in shared technical infrastructure works
- 30. Circular No. 01/2008/TT-BXD dated January 2, 2008 of the Minister of the Ministry of Construction guiding the implementation of Decree No. 117/2007/ND-CP on the manufacture, provision and consumption of pure water
- 31. Joint Circular No. 75/2012/TTLT-BTC-BXD-BNNPTNT dated May 15, 2012 of the Ministries of Finance Construction Agriculture and Rural development guiding the principles, method for determining of and power of issuing the consumption price of pure water in cities, industrial parks and rural areas
- 32. Circular No. 88/2012/TT-BTC dated May 28, 2012 of the Minister of the Ministry of Finance on promulgating the consumption price bracket of domestic water
- 33. Circular No. 50/2015/TT-BYT dated December 11, 2015 of the Minister of the Ministry of Health regulating on examination of the hygiene and quality of drinking water and domestic water
- 34. Circular No. 11/2010/TT-BXD dated August 17, 2010 of the Minister of the Ministry of Construction guiding the management of data base on the urban underground construction works
- 35. Circular No. 36/2006/TT-BVHTT of the Ministry of Culture and Information guiding the implementation of the regulation on naming, changing names of roads, streets and public works attached with Decree No. 91/2005/ND-CP
- 36. Circular No. 02/2015/TT-BXD dated April 2, 2015 of the Minister of the Ministry of Construction guiding the method of determining the price for drainage services
- 37. Circular No. 04/2015/TT-BXD dated April 3, 2015 of the Minister of the Ministry of Construction guiding the implementation of Decree No. 80/2014/ND-CP on drainage and waste water treatment

Planning

- 38. Circular No. 05/2017/TT-BXD dated April 5, 2017 of the Minister of the Ministry of Construction guiding the determination, management of the costs for construction planning and urban planning
- 39. Circular No. 12/2016/TT-BXD dated June 29, 2016 of the Minister of the Ministry of Construction regulating the dossier of tasks and scheme of regional construction planning, urban planning and construction planning of characteristic functional zone.
- 40. Circular No. 16/2013/TT-BXH dated October 16, 2013 of the Minister of the Ministry of the Construction amending Circular No. 06/2013/TT-BXD dated May 13, 2013 of the Minister of the Ministry of Construction guiding the contents of urban design
- 41. Circular No. 06/2013/TT-BXD dated May 13, 2013 of the Minister of the Ministry of Construction guiding the contents of urban design
- 42. Circular No. 22/2016/TT-BXD dated July 1, 2016 of the Minister of the Ministry of Construction on appeal of the entire or a part of legal instruments regulating the investment business conditions issued or jointly issued by the Ministry of Construction
- 43. Circular No. 171/2016/TT-BTC dated October 27, 2016 of the Minister of the Ministry of Finance providing for charges for issuance of planning permits and the collection and transfer thereof
- 44. Circular No. 07/2011/TT-BXD dated June 28, 2011 of the Minister of the Ministry of Construction guiding the determination of charges for establishment, public announcement of management mechanism of planning, urban design
- 45. Circular No. 19/2010/TT-BXD dated October 22, 2010 of the Minister of the Ministry of Construction guiding on establishment of the management mechanism of planning, urban design issued by the Ministry of Construction
- 46. Circular No. 14/2017/TT-BXD dated December 28, 2017 of the Minister of the Ministry of Construction on guiding the determination and management of the costs for urban public services issued by the Minister of the Ministry of Construction (with effective date being as from February 15, 2018)
- 47. Circular No. 10/2016/TT-BXD dated March 15, 2016 of the Minister of the Ministry of Construction regulating the planting and management of boundary markers under construction planning

Construction, residential housing, real estate business

- 48. Circular No. 09/2016/TT-BTC dated January 18, 2016 of the Minister of the Ministry of Finance regulating on final settlement of completed projects funded with State capital
- 49. Circular No. 06/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction guiding the determination and management of construction investment cost
- 50. Circular No. 05/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction guiding the determination of the labor cost unit in management of the construction investment cost
- 51. Circular No.09/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction guiding the contract for construction of buildings
- 52. Circular No. 07/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction guiding the adjustment of the price of the contract for construction

- 53. Circular No. 08/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction guiding on construction consultancy contract
- 54. Circular No. 30/2016/TT-BXD dated December 30, 2016 of the Minister of the Ministry of Construction guiding the contract for technology equipment design provision and construction of buildings
- 55. Circular No. 05/2015/TT-BXD dated October 30, 2015 of the Minister of the Ministry of Construction regulating on the management of construction quality and maintenance of single residential housing
- 56. Circular No. 04/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction regulating the construction works quality awards
- 57. Circular No. 03/2016/TT-BXD dated March 10, 2016 of the Minister of the Ministry of Construction regulating on the classification of construction works and instructing the application to construction investment management
- 58. Circular No. 26/2016/TT-BXD dated October 26, 2016 of the Minister of the Ministry of Construction regulating on the quality management and maintenance of the construction works
- 59. Circular No. 01/2017/TT-BXD dated February 6, 2017 of the Minister of the Ministry of Construction guiding the determination and management of construction survey cost
- 60. Circular No. 03/2017/TT-BXD dated March 16, 2017 of the Minister of the Ministry of Construction guiding the determination of the maintenance cost of the construction works
- 61. Circular No. 13/2016/TT-BXD dated June 29, 2016 of the Minister of the Ministry of Construction guiding on contesting, selecting the architectural design plan for construction work
- 62. Circular No. 15/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding the issuance of the construction permit
- 63. Circular No. 18/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding on appraisal, approval of the plan and design, cost estimation of the building construction
- 64. Circular No. 24/2016/TT-BXD dated September 01, 2016 of the Minister of the Ministry of Construction amending the circular relating to the management of construction investment project
- 65. Circular No. 17/2016/TT-BXD dated September 01, 2016 of the Minister of the Ministry of Construction guiding on the capacity of organizations, individuals involved in construction activities
- 66. Circular No. 16/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding the implementation of Decree No. 59/2015/ND-CP on the organization structure of the management of construction investment project
- 67. Circular No.14/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding on the issuance of construction activities license and management of foreign contractor implementing construction activities in Viet Nam
- 68. Circular No. 172/2016/TT-BTC dated October 27, 2016 of the Minister of the Ministry of Finance regulating the rates, collection and remittance of state fee for grant of construction activity license
- 69. Circular No. 209/2016/TT-BTC dated November 10, 2016 of the Minister of the Ministry of Construction regulating the rate, collection, remittance and management and use of the fee for appraisal of the construction investment project, the fee for appraisal of basic design

- 70. Circular No. 210/2016/TT-BTC dated November 10, 2016 of the Minister of the Ministry of Finance regulating the rate, collection, remittance, management and use of the fee for appraisal of technical design, the fee for appraisal of construction cost estimation
- 71. Circular No. 04/2017/TT-BXD dated March 30, 2017 of the Minister of the Ministry of Construction regulating on the management of labor safety in construction of buildings
- 72. Circular No. 329/2016/TT-BTC dated December 26, 2016 of the Minister of the Ministry of Finance guiding the implementation of Decree No. 119/2015/ND-CP regulating the compulsory insurance in the construction investment activities
- 73. Circular No. 21/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding the implementation of Decree No. 101/2015/ND-CP on renovation, reconstruction of the apartments
- 74. Circular No. 25/2015/TT-NHNN dated December 9, 2015 of the State Bank Governor guiding on concessional loans for implementation of social residential housing policies
- 75. Circular No. 20/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding the implementation of Decree No. 100/2015/ND-CP on development and management of social residential housing
- 76. Circular No. 139/2016/TT-BTC dated September 16, 2016 of the Minister of the Ministry of Finance guiding on procedures for exemption from land levies, land rents; refunds or deductions from financial obligations of social residential housing investors and method for determination of land levies paid by purchasers, hire-purchasers permitted to re-sell social residential housing
- 77. Circular No. 26/2015/TT-NHNN dated December 9, 2015 of the State Bank Governor providing guidelines for procedures and formalities for mortgaging and releasing mortgage of residential housing construction projects and residential housing to be formed in the future
- 78. Circular No. 09/2015/TT-BXD dated December 29, 2015 of the Minister of the Ministry of Construction guiding the management of official residential housing
- 79. Joint Circular No. 09/2016/TTLT-BTP-BTNMT dated June 23, 2016 of the Ministers of the Ministries of Justice Natural resources and Environment guiding the registration of the mortgage of the land use right, land-related properties
- 80. Circular No. 19/2016/TT-BXD dated June 30, 2016 of the Minister of the Ministry of Construction guiding the implementation of the Law on residential housing and Decree No. 99/2015/ND-CP guying the Law on residential housing
- 81. Circular No. 124/2016/TT-BTC dated August 3, 2016 of the Minister of the Ministry of Construction guiding the management of collections from lease, hire-purchase and sale of state-owned residential housing; payment of monetary differences in renting official residential housing and management of collections from lease of official residential housing under the Government's Decree No. 99/2015/ND-CP guiding the Law on residential housing
- 82. Circular No. 27/2016/TT-BXD dated December 15, 2016 of the Minister of the Ministry of Construction guiding Decree No. 117/2015/ND-CP on formulation, management and use of the information system on residential housing and real estate market
- 83. Circular No. 02/2016/TT-BXD dated February 15, 2016 of the Minister of the Ministry of Construction on the regulation of management and use of apartments

- 84. Circular No. 28/2016/TT-BXD dated December 15, 2016 of the Minister of the Ministry of Construction amending Circular No. 10/2015/TT-BXD providing on professional training courses on management and operation of the apartment, Circular No. 11/2015/TT-BXD providing on issuance of real estate broker license; guidelines for training and improving knowledge of real estate brokerage practice and management of the real estate trading floor; establishment and organization of activities of the real estate trading floor, and the Regulation on management and use of apartment buildings enclosed with Circular No. 02/2016/TT-BXD
- 85. Circular No. 10/2015/TT-BXD dated December 30, 2015 of the Minister of the Ministry of Construction providing on professional training courses on management and operation of apartment buildings
- 86. Circular No. 23/2016/TT-BXD dated July 1, 2016 of the Minister of the Ministry of Construction repealing entire of or a part of legal instruments regulating on the investment business conditions
- 87. Circular No. 11/2015/TT-BXD dated December 30, 2015 of the Minister of the Ministry of Construction providing on issuance of real estate broker license; guidelines for training and improving knowledge of real estate brokerage practice and management of the real estate trading floor; establishment and organization of activities of the real estate trading floor
- 88. Circular No. 31/2016/TT-BXD dated December 30, 2016 of the Minister of the Ministry of Construction on classification and recognition of grades of apartment buildings

Land

- 89. Circular No. 77/2014/TT-BTC dated June 16, 2014 of the Minister of the Ministry of Finance providing guidelines of Decree No. 46/2014/ND-CP on collection of land rental and water surface rental
- 90. Circular No. 333/2016/TT-BTC dated December 26, 2016 of the Minister of the Ministry of Finance amending Circular No. 77/2014/TT-BTC dated June 16, 2014 of the Minister of the Ministry of Finance guiding Decree No. 46/2014/ND-CP on collection of land rental and water surface rental
- 91. Circular No. 89/2017/TT-BTC dated August 23, 2017 of the Minister of the Ministry of Finance guiding a number of articles of Decree No. 35/2017/ND-CP regulating on collection of land use levy, land rental and water surface rental in economic zones and hi-tech zones
- 92. Circular No. 76/2014/TT-BTC dated June 16, 2014 of the Minister of the Ministry of Finance guiding Decree No. 45/2014/ND-CP on collection of land use levy
- 93. Circular No. 332/2016/TT-BTC dated December 26, 2016 of the Minister of the Ministry of Finance amending Circular No. 76/2014/TT-BTC dated June 16, 2014 of the Minister of the Ministry of Finance guiding Decree No. 45/2014/ND-CP on collection of land use fee
- 94. Circular No. 80/2017/TT-BTC dated August 2, 2017 of the Minister of the Ministry of Finance providing guidelines for determination of land use right value, land rent and assets attached to land to be refunded upon land resumption by the State, and management and use of compensation amounts for assets assigned by the State for management and use, and assistance amounts when land is resumed by the State without land compensation
- 95. Circular No. 33/2017/TT-BTNMT dated September 29, 2017 of the Minister of the Ministry of Natural resources and Environment guiding Decree No. 01/2017/ND-CP amending the Decree guiding the Law on land and amending the Circular guiding the implementation of the Law on land

- 96. Circular No. 53/2017/TT-BTNMT dated December 4, 2017 of the Minister of the Ministry of Natural resources and Environment on suspension of enforcement of Clause 5 Article 6 of Circular No. 33/2017/TT-BTNMT guiding Decree No. 01/2017/ND-CP amending the Decree guiding the Law on land amending the Circular guiding the implementation of the Law on land
- 97. Circular No. 24/2014/TT-BTNMT dated May 19, 2014 of the Ministry of Natural resources and Environment on cadastral dossiers
- 98. Circular No. 02/2015/TT-BTNMT dated January 27, 2015 of the Minister of the Ministry of Natural resources and Environment guiding Decree No. 43/2014/ND-CP and Decree No. 44/2014/ND-CP
- 99. Circular No. 28/2014/TT-BTNMT dated June 2, 2014 of the Minister of the Ministry of Natural resources and Environment on land statistics, land inventory and formulation of the map of land use status
- 100. Circular No. 29/2014/TT-BTNMT dated June 2, 2014 of the Minister of the Ministry of Natural resources and Environment providing in detail on the establishment, amendment of land planning, land use plan
- 101. Circular No. 09/2015/TT-BTNMT dated March 23, 2015 of the Minister of the Ministry of Natural resources and Environment on the economic technical norms on establishment, amendment of land planning and land use plan
- 102. Circular No. 30/2014/TT-BTNMT dated June 2, 2014 of the Minister of the Ministry of Natural resources and Environment regulating on dossier for land allocation, land lease, change of land use purpose, land withdrawal
- 103. Join Circular No. 15/2015/TTLT-BTNMT-BNV-BTC dated April 4, 2015 of the Ministries of Natural resources and Environment Internal Affair Finance guiding the functions, duties, powers, organizational structure and operation mechanism of the Land registration office affiliated with the Authority for Natural resources and Environment
- 104. Joint Circular No. 14/2015/TTLT-BTNMT-BTP of the Ministries of Natural resources and Environment Justice issuing the regulations on the organization of the implementation of the auction of land use right for land allocation with collection of land use fee or land lease
- 105. Joint Circular No. 22/2016/TTLT-BNNPTNT-BTNMT dated June 30, 2016 of the Ministers of the Ministries of Agriculture and Rural development Natural resources and Environment regulating the perennial crops allowed to be certified of the ownership
- 106. Circular No. 36/2014/TT-BTNMT dated June 30, 2014 of the Minister of the Ministry of Natural resources and Environment providing in detail on the method of determination of land price; formulation, amendment of land price; determination of particular land price and consultancy on determination of land price
- 107. Joint Circular No. 87/2016/TTLT-BTC-BTNMT dated June 22, 2016 of the Ministers of the Ministries of Finance Natural resources and Environment guiding the appraisal of the drafting land price list of the Committee for Appraisal of land price list, appraisal of the land price plan of the Committee for land price appraisal
- 108. Circular No. 37/2014/TT-BTNMT dated June 30, 2014 of the Minister of the Ministry of Natural resources and Environment providing in detail on compensation, support, resettlement when the State withdraw the lands
- 109. Circular No. 25/2014/TT-BTNMT dated May 19, 2014 of the Minister of the Ministry of Natural resources and Environment on cadastral maps

- 110. Circular No. 23/2014/TT-BTNMT dated May 19, 2014 of the Minister of the Ministry of Natural resources and Environment on the Land use right, ownership of residential housing and other land-related properties certificate,
- 111. Circular No. 34/2014/TT-BTNMT dated June 30, 2014 of the Minister of the Ministry of Natural resources and Environment regulating on formulation, management and use of the information system on lands
- 112. Circular No. 35/2014/TT-BTNMT dated June 30, 2014 of the Minister of the Ministry of Natural resources and Environment on investigation, appraisal of lands
- 113. Circular No. 42/2014/TT-BTNMT dated July 29, 2014 of the Minister of the Ministry of Natural resources and Environment on land statistics, land inventory and formulation of the map of land use status
- 114. Circular No. 47/2014/TT-BTNMT dated August 22, 2014 of the Minister of the Ministry of Natural resources and Environment regulating the technique for establishment of all-level administrative boundaries map
- 115. Joint Circular No.12/2016/TTLT-BTNMT-BTC dated June 24, 2016 of the Ministers of the Ministries of Natural resources and Environment Finance regulating the management, issuance, advance payment and reimbursement of the charge for measuring the use of land in breach of law
- 116. Circular No. 18/2016/TT-BTC dated January 21, 2016 of the Minister of the Ministry of Finance guiding the implementation of Decree No. 35/2015/ND-CP on management, use of land for rice cultivation
- 117. Circular No. 19/2016/TT-BNNPTNT dated June 27, 2016 of the Minister of the Ministry of Agriculture and Rural development providing guidelines of Article 4 of Decree No. 35/2015/ND-CP on management and use of land for rice cultivation
- 118. Circular No. 19/2017/TT-BNNPTNT dated November 9, 2017 of the Minister of the Ministry of Agriculture and Rural development amending Circular No. 19/2016/TT-BNNPTNT providing guidelines of Article 4 of Decree No. 35/2015/ND-CP on management and use of land for rice cultivation and guiding the conversion of the crop structure of land for rice cultivation into land for planting perennial crops in accordance with Decree No. 01/2017/ND-CP amending a number of Decrees guiding the Law on land
- 119. Circular No. 60/2015/TT-BTNMT dated December 15, 2015 of the Minister of the Ministry of Natural resources and Environment regulating on the technique for land inspection and appraisal
- 120. Circular No. 33/2016/TT-BTNMT dated November 7, 2016 of the Minister of the Ministry of Natural resources and Environment on the economic-technical norms for land inspection and appraisal

Environment

- 121. Circular No. 36/2015/TT-BTNMT dated June 30, 2015 of the Minister of the Ministry of Natural resources and Environment on management of hazardous waste
- 122. Circular No. 35/2015/TT-BTNMT of the Minister of the Ministry of Natural resources and Environment on protection of the environment of the economic zones, industrial parks, processing zones and hi-tech zones
- 123. Circular No. 19/2016/TT-BTNMT dated August 24, 2016 of the Minister of the Ministry of Natural resources and Environment on report of environmental protection

- 124. Circular No. 31/2016/TT-BTNMT dated October 14, 2016 of the Minister of the Ministry of Natural resources and Environment on protection of the environment of the clusters of industrial park, concentrated business and service areas, craft villages and premises for production, business, services issued by the Minister of the Ministry of Natural resources and Environment
- 125. Circular No. 07/2017/TT-BXD dated May 15, 2017 of the Minister of the Ministry of Construction on issuance of the guidelines for determination of service fee for treatment of domestic solid waste
- 126. Circular No. 08/2017/TT-BXD dated May 16, 2017 regulating on management of construction solid waste
- 127. Circular No. 43/2015/TT-BTNMT dated September 29, 2015 of the Minister of the Ministry of Natural resources and Environment on report of the environment status, list of environmental directions and management of the data of environmental monitoring
- 128. Circular No. 26/2015/TT-BTNMT dated May 28, 2015 of the Minister of the Ministry of Natural resources and Environment regulating the detailed plan for environmental protection and simple plan for environmental protection
- 129. Circular No. 27/2015/TT-BTNMT dated May 29, 2015 of the Minister of the Ministry of Natural resources and Environment on strategic environmental protection, environmental impact assessment and plans for environmental protection
- 130. Circular No. 32/2015/TT-BGTVT dated July 24, 2015 of the Minister of the Ministry of Transport regulating the environmental protection in development of the structure of transport infrastructure
- 131. Circular No. 20/2017/TT-BGTVT dated June 21, 2017 of the Minister of the Ministry of Transport amending Circular No. 32/2015/TT-BGTVT dated July 24, 2015 of the Minister of the Ministry of Transport regulating the environmental protection in development of the structure of transport infrastructure
- 132. Circular No. 195/2016/TT-BTC dated November 8, 2016 of the Minister of the Ministry of Finance regulating the rates, mechanism for collection, remittance, management and use of the fees for appraisal of environmental impact assessment report, detailed plan for environmental protection appraised by the central state authorities
- 133. Circular No. 212/2015/TT-BTC dated December 31, 2015 of the Minister of the Ministry of Finance guiding the corporate income tax policy with regard to the environmental protection activities provided in Decree No. 19/2015/ND-CP providing in detail on the implementation of the Law on Environmental protection
- 134. Circular No. 12/2017/TT-BTC dated February 10, 2017 of the Minister of the Ministry of Finance guiding the order, procedures for capital support for investment in the equipment of the project of implementation of the environmental protection invention
- 135. Circular No. 05/2016/TT-BKHDT dated June 6, 2016 of the Minister of the Ministry of Planning and Investment guiding the incorporation of the contents of natural disaster fighting and prevention into the planning and plan for socio-economic development and industry development.
- 136. Circular No. 27/2014/TT-BTNMT dated May 30, 2014 of the Minister of the Ministry of Natural resources and Environment on registration of for groundwater exploitation, form of dossier for issuance, extension, modification, re-issuance of the water resource license

Transport

- 137. Circular No. 50/2015/TT-BGTVT dated September 23, 2015 of the Minister of the Ministry of Transport guiding Decree No. 11/2010/ND-CP on management and maintenance of the overland transport infrastructure structure
- 138. Circular No. 35/2017/TT-BGTVT dated October 9, 2017 of the Minister of the Ministry of Transport amending Circular No. 50/2015/TT-BGTVT dated September 23, 2015 of the Minister of the Ministry of Transport guiding Decree No. 11/2010/ND-CP on management and maintenance of the overland transport infrastructure structure

Culture, Tourism

139. Circular No. 18/2012/TT-BVHTTDL dated December 28, 2012 of the Minister of the Ministry of Culture, Sports and Tourism regulating on the preservation, renovation, restoration of monuments

Price, Auction

- 140. Circular No. 25/2014/TT-BTC dated February 17, 2014 of the Minister of the Ministry of Finance regulating the method for general price determination regarding the goods and services
- 141. Circular No. 56/2014/TT-BTC dated April 28, 2014 of the Minister of the Ministry of Finance guiding the implementation of Decree No. 177/2013/ND-CP guiding on the Law on price
- 142. Circular No. 233/2016/TT-BTC dated November 11, 2016 of the Minister of the Ministry of Finance amending Circular No. 56/2014/TT-BTC dated April 28, 2014 of the Minister of the Ministry of Finance guiding the implementation of Decree No. 177/2013/ND-CP guiding on the Law on price

Electricity, Telecommunication

143. Circular No. 43/2013/TT-BCT dated December 31, 2013 of the Minister of the Ministry of Industry and Trade regulating the contents, orders, procedures of establishment, appraisal, approval and amendment of the Planning for electricity development

Taxation

- 144. Circular No. 156/2013/TT-BTC dated November 6, 2013 of the Minister of the Ministry of Finance guiding the Law on tax management; the Law amending, supplementing a number of articles of the Law on tax management and Decree No. 83/2013/ND-CP
- 145. Circular No. 95/2016/TT-BTC dated June 28, 2016 guiding on the tax registration issued by the Minister of the Ministry of Finance
- 146. Circular No. 78/2014/TT-BTC dated June 18, 2014 guiding the implementation of Decree No. 218/2013/ND-CP guiding the Law on corporate income tax issued by the Minister of the Ministry of Finance
- 147. Circular No. 119/2014/TT-BTC dated August 25, 2014 of the Ministry of Finance amending, supplementing a number of articles of Circular No. 156/2013/TT-BTC dated November 6, 2013, Circular No.111/2013/TT-BTC dated August 15, 2013, Circular No. 219/2013/TT-BTC dated December 31, 2013, Circular No. 08/2013/TT-BTC dated January 10, 2013, Circular No.85/2011/TT-BTC dated June 17, 2011, Circular No. 39/2014/TT-BTC dated March 31, 2014 and Circular No. 78/2014/TT-BTC dated June 18, 2014 of the Ministry of Finance for reforming, simplifying the tax administrative procedures

- 148. Circular No. 151/2014/TT-BTC dated October 10, 2014 of the Ministry of Finance guiding the implementation of Decree No. 91/2014/ND-CP dated October 1, 2014 of the Government on the amendments, supplements to a number of articles of the Decrees regulating on tax
- 149. Circular No. 96/2015/TT-BTC dated June 22, 2015 of the Ministry of Finance guiding on corporate income tax provided in Decree No. 12/2015/ND-CP dated February 12, 2015 of the Government providing in detail on the implementation of the Law amending, supplementing a number of articles of the Law on tax and amending, supplementing a number of articles of the Decrees on tax and amending, supplementing a number of articles of Circular No. 78/2014/TT-BTC dated June 18, 2014, Circular No. 119/2014/TT-BTC dated August 25, 2014, Circular No. 151/2014/TT-BTC dated October 10, 2014 of the Ministry of Finance
- 150. Joint Circular No. 12/2016/TTLT-BKHCN-BTC dated June 28, 2016 of the Ministry of Science and Technology, Ministry of Finance guiding the spending and management of the science and technology development of the enterprises
- 151. Circular No. 130/2016/TT-BTC dated August 12, 2016 of the Ministry of Finance guiding Decree No. 100/2016/ND-CP dated July 1, 2016 of the Government providing in detail on the implementation of the Law amending, supplementing a number of articles of the Law on Value-added tax, the Law on Special sales tax and the Law on tax management and amending, supplementing a number of articles provided in the Circulars on tax
- 152. Circular No. 111/2013/TT-BTC dated August 15, 2013 of the Ministry of Finance guiding the Law on personal income tax and Decree No. 65/2013/ND-CP
- 153. Circular No. 153/2011/TT-BTC dated November 11, 2011 of the Ministry of Finance guiding on the non-agricultural land use tax
- 154. Circular No. 120/2011/TT-BTC dated August 16, 2011 guiding Decree No. 20/2011/ND-CP providing in detail and guiding the implementation of Resolution No. 55/2010/QH12 on exemption, reduction of the agricultural land use tax issued by the Ministry of Finance

