#### Nine Sustainable Development Goals for Implementation of PPP Projects of Urban Rail Transit

#### I. Formulation of UN Sustainable Development Goals and PPP Standards

#### 1. 8 Goals put forward as UN Millennium Development Goals and Relevant Achievement Conditions

191 member countries of UN unanimously approved UN Millennium Development Goals (MDGs) on United Nations Millennium Summit held in September 2000, which mainly involved in 8 goals: (1) Eradication of extreme poverty and hunger. The target is reducing extreme poverty rates by half; achieving full and productive employment and decent work for all, including women and young people; and halving the proportion of people who suffer from hunger; (2) Popularization of elementary education. It is required that children everywhere, boys and girls alike, shall be able to complete a full course of primary schooling. (3) To promotion of gender equality and empower women. It is advocated that gender disparity in primary and secondary education shall be eliminated preferably by 2005, and in all levels of education no later than 2015. (4) Reduction of child mortality. It is put forward that the under-five mortality rate shall be reduced by two thirds. (5) Improvement of maternal health. It is required that the maternal mortality ratio shall be reduced by three quarters, and universal access to reproductive health shall be achieved by 2015. (6) Combating with HIV/AIDS, malaria and other diseases. It is required to halt and begin to reverse spread of AIDS virus and AIDs. Besides, universal access to treatment for HIV/AIDS for all those who need it shall be achieved by 2010, and growth of the

incidence of malaria and other major diseases shall be halted and begin to reverse. (7) Maintenance of environmental sustainability. It is required that the principles of sustainable development shall be included in national policies and schemes; loss of environmental resources shall be reversed; a significant reduction in the rate of biodiversity shall be achieved by 2010. Besides, the proportion of people who cannot continuously access to safe drinking water and basic sanitation shall be halved by 2015, and that a significant improvement in the lives of at least 100 million slum dwellers shall be achieved by 2020. (8) A global partnership for development. It is required to further develop an open, rule-based, predictable, non-discriminatory trading and financial system, and dedications to governance optimization, development advance and poverty alleviation at national and international levels shall be included. Special needs of least developed countries including exemption of customs duties and no quota system shall be addressed. Debt-reduction plans for the heavily-indebted poor countries shall be enhanced, and more generous official development assistances shall be provided to the countries committed to poverty reduction. Besides, special needs of landlocked countries and small-island developing states shall be addressed; debt problems of developing countries shall comprehensively be handled with national and international measures, so that debts can be sustainably supported on long-term basis. Cooperation with developing countries shall be carried out to create productive employment and decent for young people. Moreover, cooperation with pharmaceutical companies shall also be carried out to provide access to affordable essential drugs in developing countries, and cooperation with the private sector to make available benefits from new technologies, especially information and communications.

UN Millennium Development Goals are the development plans that are promised to be realized by leaders from various countries in the world in General Headquarters of UN, which is intended to promote well-being of people in various countries around the world. 2015 is the last year to realize UN Millennium Development Goals. With the unprecedented scale, UN Millennium Development Goals have mobilized the political public intention, improved awareness, attached importance development issues, and have supported and implemented the agenda laying emphasis on human development. Huge progress has been made for UN Millennium Development Goals, of which, significant specific goals concerning population under poverty, slums, drinking water, equality in boys and girls in elementary education have already been realized. However, progress in the global partnership has witnessed poor development; official development assistances provided by developed countries to developing countries began to decline for the first time in 2011; and developed countries are constantly transferring the burden of financial retrenchment to the poor or nations in poverty.

### 2. 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals

In order to continue the valuable achievements of UN Millennium Development Goals, continuously develop inclusive economy and society and maintain sustainable development of the ecological environment, 193 members of UN unanimously approved 2030 Agenda for Sustainable Development on the summit conference held on September 25, 2015, and put forward 17 Sustainable Development Goals that UN e started to mobilize efforts to achieve them by 2030. On the basis of the achievements that have been obtained for UN Millennium Development Goals, new fields including climatic change, inequality in economy,

innovation, sustainable consumption, and peace and justice have been included, intended for thorough settlements of development issues in the three dimensions of society, economy and the environment and providing guidance for various member countries to move towards the path of sustainable development.

17 sustainable development goals and 169 sub-goals are included in 2030 Agenda for Sustainable Development which is a route map intended to end global poverty, build decent life for all in the world and not let any person to be left behind. Contents such as poverty and starvation elimination, favourable health and well-being, high-high-quality education, gender equality, clean drinking water & health facilities, cheap and clean energy resources, decent work and economic growth, industry, creation and infrastructure, distance shortening, sustainable cities and communities, responsible consumption and production, climate action, underwater creatures, terrestrial biota, peace, justice and powerful institutions, and partnership to promote achievement of goals are involved in 17 sustainable development goals, which mainly include: (1) Ending poverty in all its forms everywhere in the world; (2)Ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture; (3) Ensuring healthy lives and promoting well-being for all at all ages; (4) Ensuring inclusive and high-quality education for all and promoting lifelong learning; (5) Achieving gender equality and empowering all women and girls; (6)Ensuring access to water and sanitation for all and providing relevant sustainable management; (7)Ensuring access to affordable, reliable sustainable and modern energy for all; (8) Promoting inclusive and sustainable economic growth, employment and decent work for all; (9) Building resilient infrastructure, promoting sustainable industrialization and fostering innovation; (10) Reducing inequality within and among countries; (11) making cities inclusive, safe, resilient and sustainable; (12) ensuring sustainable consumption and production patterns; (13) Taking urgent actions to combat climate change and its impacts; (14) Conserving and sustainably using the oceans, seas, and marine resources; (15) Protecting, recovering and promoting sustainable utilization of terrestrial ecosystem, sustainably managing forests, combating desertification, and halting and reserving land degradation and halting disappearance of biological diversity; (16) Creating just, peaceful and inclusive societies to promote sustainable development, let everyone to resort to the administration of justice and establish effective, responsible and inclusive institutions at all levels; and (17) Strengthening implementing measures and revitalizing the global partnership for sustainable development.

#### 3. Achieving 17 UN Sustainable Development Goals with PPP Pattern

17 sustainable development goals have been put forward for UN 2030 Agenda for Sustainable Development, which have reflected the shared vision of the human society. Sustainable development has been embodied as the three dimensions of economy, society and environment. In terms of economic development, prosperity has been taken as principle, which is reflected as bankability, investment ability and other connotations. In the respect of social development, people-oriented idea is emphasised, which is embodied as social harmony, social fingerprint, sustainable employment, human capital development and other connotations. In terms of environmental development, planet is taken as principle, which is reflected as sustainability, ecological footprint and other connotations. The path to realize sustainable development is to create peaceful environment, establish cooperative partnership and integrate various resources. Among them, establishment of cooperative partnership is regarded as a significant method to realize economic, social and

environmental development goals determined for UN 2030 Agenda for Sustainable Development, on the basis of summary of the experience over the past 15 years for promotion of Millennium Development Goals. Essential feature of Public and Private Partnership (PPP) is to increase quality and efficiency of public products and service supply through establishment of long-term cooperative partnership for benefit sharing and risk sharing.

The reason why PPP pattern can become a tool to achieve human sustainable development lies in the following aspects: On one hand, a series of goals of human sustainable development involving supply of infrastructure investment and efficient and high-quality public products or services including education, medical, elderly-care and many other industries, government financial pressure and limitation on management level of professional skills have determined that realization of these goals cannot only rely on government agencies. Whereas, investment and construction items in these fields are always characterized by public or quasi public products, and it's not appropriate to simply take private or sufficiently market-oriented mode for operation. However, PPP pattern can be taken to well balance contradictions between the two aspects. Human sustainable development goals can be achieved through introduction of private capital, sufficient absorption of the investment, construction, operation and other capacities of specialization of private capital. On the other hand, it is difficult to form effective motivation producing innovation to public sector with traditional model in the infrastructure and public service programs. The reason is that regardless of innovations technically or on management level, huge economic incentives shall be provided to the implementer. Therefore, while introducing social capital, PPP pattern may be used to motivate innovation on social capital, give the initiative innovation capacity of investment, construction and operation of specialization of social capital to full play, so as to realize the sustainable development goals through the design that satisfies incentive compatibility condition system. Based on this consideration, United Nations Economic Commission for Europe (UNECE) put forward the people-oriented PPP idea, taking PPP as a significant and effective tool to realize sustainable development goals of various countries. The specific method is to establish PPP standard system that reflects the requirements of sustainable development goals, so as to push forward sustainable development of economy, society and environment.

United Nations Economic Commission for Europe (UNECE) hopes that PPP pattern shall be adopted to achieve the people-oriented sustainable development goals put forward for UN 2030 Agenda for Sustainable Development; and the specific operations shall be realized through establishment of PPP standards. The PPP standards are established in combination with the 17 sustainable development goals in a purposeful way, contents of which have referred to the best practice and rules of various nations of the world. Under the idea and object location of taking PPP as a tool to realize the people-oriented and sustainable development, popularization and application of PPP pattern has laid more emphasis on the idea that ultimate purpose of development must take human needs as principle, and lay people on the first place. This has promoted the operational concept and target location of PPT pattern to a new height, representing development direction of PPP in future.

#### II. Match Analysis on Urban Rail Transit Projects and Sustainable Development Goals

#### 1. Ending poverty in all its forms everywhere in the world

It is advocated that extreme poverty in all forms in the world shall be eliminated by 2030, and social security system for the entire people shall

be perfected, so as to ensure all man and women (especially the poor and vulnerable groups) shall have equal rights to obtain economic resources, enjoy basic services, acquire the ownership and right of control of land and properties of other forms, gain inheritance, natural resources, appropriate new technologies and financial services including micro finance. Besides, the poor and vulnerable groups shall be enhanced with resilience, and their risks to face and be susceptible to extreme events related to climates and to be under other economic, social, environmental and disaster impacts shall be reduced.

As significant urban fundamental infrastructure, urban rail transit shall still take poverty reduction as the subsidiary objective for project implementation, despite of its main objective of providing public services for city dwellers. For instance, affordability of the low income groups in terms of price making of tickets has been taken into consideration. Besides, it shall be ensured that the public at all levels of society will access to basic public services of urban rail transit of high quality, and no technological barriers shall be established to hold back the vulnerable groups to access to modern traffic service. Therefore, it is considered that the vulnerable groups shall be included in the goals for establishment of PPP standards of urban rail transit.

### 2. Ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture

It is put forward that the goal intended for elimination of poverty and malnutrition of all forms shall be achieved by 2030. The income of agricultural productivity and small-scale food producers (especially women, indigenous people, farmers, herdsmen and fishermen shall be doubled. It is ensured that the sustainable agricultural production system shall be established, and agricultural practices to be provided with the capacity for resisting natural disasters shall be implemented, so as to raise

productivity and yield, assist to preserve ecological system, enhance the capacity to adapt to climate change, extreme weather, drought, floods and other disasters, and gradually improve the land quality. Genetic diversity of seeds, plant cultivation, aquaculture, domestic animals and relevant wild species shall be preserved through the ways of acquisition of well-managed seeds and plant pools under diversified business at national, regional and international levels. It shall be ensured that benefits generated from just and equal sharing and utilization of genetic resources and relevant traditional knowledge shall be obtained in accordance with agreed international principles. Investments on agricultural infrastructure, farming research and popularization, technological development, plant and livestock gene pool shall be strengthened with many methods including enhancement of international cooperation, so as to increase the agricultural production capacity of developing countries, especially least developed countries. Trade restrictions and distortions on global agricultural market shall be corrected and prevented in line with the task specified in Doha Development Round. Besides, agricultural export subsidies of all forms and all the exports with the equal effects shall be cancelled at the same time. Measures shall be taken to ensure food commodity market and its derivative instruments to function properly, for the convenience of timely acquisition of market information including grain reserves, so as to assist to restrict food price and extreme fluctuation.

Since these goals are not directly related to implementation of urban rail transit projects, it is suggested not to take them into consideration.

#### 3. Ensuring healthy lives and promoting well-being for all at all ages

This goal mainly includes reduction of maternal mortality rate, elimination of preventable mortality of newborn and children under five years old, elimination of epidemic diseases including AIDS virus,

tuberculosis, malaria, and neglected tropical diseases, prevention of hepatitis, water-borne disease and other infectious diseases, promotion of mental health and well-being through prevention and treatment, enhanced control on drug abuse, reduction of casualties of road accidents, maintenance of healthcare service of popularized and reproductive health, realization of health insurance for the entire people, remarkable reduction of death toll and number of sufferers due to dangerous chemical and air, water and soil contamination, enhanced implementation of Framework Convention on Tobacco Control, support for research and development of vaccine and drugs to prevent and cure infectious and non-infectious diseases mainly having effects on developing countries, substantial increase of health financing, increase of recruitment, cultivation, training and employment of medical workers working in developing countries, especially those in least developed countries and developing countries of small islands, and enhancement of the capacity of various countries, especially that of developing countries to take forewarning measures, reduce risks and manage national and global health risks.

Urban rail transit projects shall pay attention to disease transmission due to implementation of the projects, elevate the convenience to access to health care and other public services, reduce air pollution and improve soil environment, so as to provide convenient public transport services for the city dwellers to obtain the healthy lifestyle and promote improvement of well-being for all at all age groups. Therefore, this goal shall be taken into consideration for establishment of PPP standards for urban rail transit.

### 4. Ensuring inclusive and high-quality education for all and promoting lifelong learning

It is advocated that all boys and girls shall be entitled to access to equitable and high-quality primary and secondary compulsory education

by 2030, so as to produce relevant and effective study achievements. It shall be ensured that all boys and girls shall be entitled to access to high-quality development, care and preschool education for infants, making good preparation for them to receive primary education. It shall also be guaranteed that all boys and girls shall equally have right to access to quality technical, vocational and higher education, including college education, to improve their relevant skills required for employment, decent work or starting a business. Gender gap in education shall be eliminated; it shall be ensured that the disabled, indigenous people, children under poor situation and other vulnerable groups shall equally have right to access to education and vocational training of various levels, so as to improve the literacy rate of teenagers and adults. It shall be guaranteed that all the learners shall master knowledge and skills required for promotion of sustainable development. These knowledge and skills include acquaintance with sustainable development, sustainable lifestyle, human rights and gender equality, promotion of peace and non-violence culture, global citizenship through education, understanding of the contributions that cultural diversity and culture have made on sustainable development. Besides, educational facilities sensitive to children, the disabled and gender issues shall be established and improved, and the safe, non-violence, inclusive and effective learning environment shall be provided for all. Scholarship support amount for students in least developed countries, small-island developing countries and African countries to receive higher education in developed countries and other developing countries shall be increased. Teacher training in developing countries, especially in least developed and small-island developing countries shall be carried out through international cooperation.

Since these goals are not directly related to implementation of urban rail transit projects, it is suggested not to take them into consideration.

#### 5. Achieving gender equality and empowering all women and girls

It is advocated that discrimination of all forms on women and girls around the world shall be eliminated, and all the violent actions aimed at all women and girls in public and private sectors including transporting, sexual and other exploitations shall be eradicated. Child and forced marriages and female genital mutilation and all the other harmful acts on women and girls shall be eliminated. Free care and housework shall be understood and supported through providing of public service, infrastructure and social protection policies. Besides, household duties and familial responsibilities shall be shared according to specific circumstances of various countries; it shall be ensured that women can fully and effectively be engaged in decision-making in political, economic and public activities of various levels. Moreover, women shall have equal opportunities to move into leadership, who shall be ensured to universally have sexual, reproductive health and reproduction rights in accordance with The Programme of Action of the International Conference on Population and Development, Bejing Declaration and Platform for Action, and results agreed on the outcome documents from all previous review conferences. Reform shall be carried out in accordance with national law, so as to guarantee women to have equal access to economic resources, have ownership and right of control on land and properties of other forms, and obtain financial, heritage and natural resources. Besides, it shall be ensured that women shall have rights to utilize enabling technology (especially information and communication technology) to improve women's power. Sound policies and executable legislative acts shall be adopted and strengthened to promote gender equality and increase power of women and girls at various levels.

Gender issues are core contents that close attentions must be paid to during social evaluation of urban rail transit projects. For instance, there shall be female personnel participating in project construction planning, scheme reasoning and project implementation, and women shall equally have rights to access to travel services with urban rail transit during operation stage of the project. Therefore, this goal shall be taken into consideration for establishment of PPP standards for urban rail transit.

### 6. Ensuring access to water and sanitation for all and providing relevant sustainable management

It is advocated that everybody shall have equally right to access to safe and affordable drinking water by 2030. Everybody shall be entitled to enjoyable and just environmental health and personal hygiene. Besides, open-air bowel evacuation habit shall be got rid of; special attentions shall be paid to needs of women, girls and vulnerable groups. Besides, water quality shall be improved. For this end, pollution shall be reduced; waste tipping phenomena shall be eliminated; discharge of hazardous chemical and materials shall be minimized; proportion of untreated waste water shall be reduced by half; and proportion of recovery and safe recycling shall be increased. Water-use efficiency in various sectors shall substantially be improved to ensure sustainable utilization and supply of fresh water, so as to solve water-shortage problem and significantly reduce the number of people in shortage of water supply. Besides, comprehensive water resource management shall be carried out in various levels, including carrying out cross-border cooperation according to the actual condition. The ecological system relevant to water including mountainous areas, forests, wet land, rivers, aquifer and lakes shall be protected and restored. International cooperation and capacity building

assistance to developing countries shall be expanded, so as to help them to carry out activities and programs (including rainwater harvesting, water desalination, water-use efficiency, wastewater treatment, and recovery and recycling technology) relevant to water and environmental health. Local communities shall be supported and enhanced to participate in improvement of water and environmental health management.

Since these goals are not directly related to implementation of urban rail transit projects, it is suggested not to take them into consideration.

### 7. Ensuring access to affordable, reliable sustainable and modern energy for all

It is put forward that affordable and reliable modern energy service shall be universally access to all, proportion of renewable energy sources in global energy portfolio shall substantially be increased, and that improvement rate of global energy efficiency shall be doubled. Besides, international cooperation shall be strengthened; research and technology for acquisition of clean energy resources including renewable energy sources, energy efficiency and advanced and cleaner fossil fuel technology shall be accelerated. Infrastructure shall be expanded and technological level shall be improved. Modern and sustainable energy service in developing countries, especially in least developed countries and small island developing countries shall be popularized.

Since these goals are not directly related to implementation of urban rail transit projects, it is suggested not to take them into consideration.

#### 8. Promoting inclusive and sustainable economic growth, employment and decent work for all

It is required to maintain per capita economic growth according to specific circumstances, and especially, annual growth rate of GDP of least developed countries shall at least be maintained at 7%. Besides, relatively high economic productivity level shall be reached through

diversification, technical promotion and innovation and taking labour-intensive sectors with high added value as emphasis. Besides, development-oriented policies shall be promoted; productive activities, decent employment opportunities, enterprising spirit, creative power and innovations shall be supported; micro, small and medium-sized enterprises shall be encouraged to take advantage of financial service and other methods to realize normalization, growth and expansion; and global energy efficiency in consumption and production shall gradually be improved. Efforts shall be made to separate economic growth from environmental degradation under the guidance of developed countries in accordance with 10-year scheme framework for sustainable consumption and production. All men and women including young people and the disabled shall be provided with sufficient and productive employments, decent work and get the same pay for the same job. Moreover, the proportion of young people not engaged in work, education or training shall be reduced remarkably. Effective measures shall immediately be taken to forbid and eliminate child labour of the harshest forms, and labour right shall be protected. Furthermore, safe and secured working environment for all workers including migrant workers (especially migrant women and workers with no secure jobs) shall be created; various policies for sustainable tourist industry shall be determined, executed and popularized, so as to create job opportunities and carry forward local culture and products. The capacity of national financial institutions shall be strengthened; the entire people shall be encouraged to obtain the opportunity to obtain bank, insurance and financial services. Trade-related supports shall be provided to developing countries, especially least developed countries, including providing such supports through Strengthened Comprehensive Framework for Trade-related Technical Assistance to Least Developed Countries. Moreover, global

strategy for youth employment shall be prepared and carried out, and *Global Employment Contract* determined by International Labour Organization shall be carried out.

Employment promotion and protection of labour rights are core issues that attentions shall be paid to during construction and operation of urban rail transit. Therefore, this goal shall be taken into consideration for establishment of PPP standards for urban rail transit.

### 9. Building resilient infrastructure, promoting sustainable industrialization and fostering innovation

It is put forward that high-quality, reliable, sustainable and resilient infrastructure (including regional and cross-border infrastructure) shall be developed, so as to support economic development and human well-being and what's more important is to provide equal and affordable opportunity to all. Besides, inclusive and sustainable industrialization shall be promoted. The proportion of relevant industry in employment and GDP shall be increased significantly, and such portion in employment and GDP in least developed countries shall be doubled. Small-sized and other enterprises of developing countries shall be enhanced to obtain financial services including the affordable loan opportunity, and shall have them included in value chain and market. All the countries shall improve the efficiency of resource utilization, adopt more clean and environmental protection technologies and industry process, so as to promote infrastructure and transform industry. Scientific research shall be enhanced and technical capacity of industrial sectors shall be elevated in all countries, especially in developing countries. Besides, more financial, technological and technical supports shall be provided to African nations, least developed countries, inland and small-island developing countries; development of resilient and sustainable infrastructure in developing countries shall be promoted; domestic technological development, research and innovation of developing countries shall be supported. Besides, it shall be ensured to provide favourable policy environment for industrial diversification and traditional value of commodities. The opportunity to access to information and communication technology shall be greatly improved, and Internet with cheap price in least developed countries shall be popularized by 2020.

Urban rail transit is significant urban infrastructure. Construction of resilient, inclusive and sustainable industrial development of urban rail transit and promotion of innovation in investment and construction fields for urban infrastructure are core fields that attentions shall be paid to for PPP projects of urban rail transit. Therefore, this goal shall be taken into consideration for establishment of PPP standards for urban rail transit.

#### 10. Reducing inequality within and among countries

This goal is intended to promote, realize and maintain income increase of the population at the lowest level, strengthen power of all, and assist them to be integrated into social, economic and political activities. Equal opportunity shall be maintained and inequality in results shall be reduced. Besides, discriminatory laws, policies and practice shall be cancelled, and appropriate legislation, policies and actions in this respect shall be promoted to be determined. Besides, fiscal, salary, social protection and other policies shall be adopted to realize greater equality; supervision and monitoring on global financial market and institutions shall be improved, and supervision measures in this connection shall be reinforced for implementation. Moreover, developing countries shall be ensured to have rights to enjoy greater right of representation and right to speak in decision-making in global economy and financial institutions, so as to build more effective, dependable, responsible and legal institutions. Migration and moving of people shall be promoted to carry out in an ordered, safe, regular and responsible way. Besides, planned and

well-managed migration policy shall be carried out. Special and differential treatment principles shall be carried out for developing countries, especially least developed countries in accordance with various agreements of WTO; official development assistance, capital flow including foreign direct investment shall be encouraged to be provided to the countries who need assistance most (especially least developed countries, African nations, small-island and inland developing countries in accordance with plans and schemes of these nations. Charges for remittances of the migrants shall be reduced below 3% and remittance corridor with charges over 5% shall be cancelled.

Since these goals are not directly related to implementation of urban rail transit projects, it is suggested not to take them into consideration.

#### 11. Making cities inclusive, safe, resilient and sustainable

It shall be ensured that all people shall access to comfortable, safe and affordable housing and basic services, and slums shall be renovated by 2030; safe, accessible, affordable and sustainable transportation system will be provided for all; road safety shall be improved. Especially, public transportation shall be expanded, and special attentions shall be paid to needs of vulnerable groups, women, children, the disabled and the aged. Besides, inclusive and sustainable urbanization in all countries shall be promoted, and planning and management of participatory, comprehensive and sustainable human communities shall be strengthened. Greater efforts shall be made to protect and defend world cultural and natural heritage; the number of deaths and sufferers due to various disasters including flood shall remarkably be reduced. Emphasis shall be laid to protect the poor and vulnerable groups. Moreover, negative effects of each person on the urban environment shall be reduced, and special attentions shall be paid to air quality and management on urban and other waste. Safe, inclusive, accessible and green public space shall sufficiently be provided, especially to women, children, the aged and the disabled. National and regional development planning shall be strengthened; positive economic, social and environmental connections among cities, suburbs and rural areas shall be supported. Comprehensive policies and plans shall be adopted and implemented, so as to realize integration, increase in rate of resource utilization, slowing down and acclimatization of climate change and increase of the number of resilient city and human communities. Least developed countries shall be supported to build sustainable anti-disaster buildings by drawing on local resources.

Urban rail transit construction can have multifaceted and sustainable impacts on urban development. Promotion of construction for inclusive, safe, resilient and sustainable cities and facilitation of harmonious and sustainable development of communities are core issues that attentions must be paid to for PPP project construction of urban rail transit. Therefore, this goal shall be taken into consideration for establishment of PPP standards for urban rail transit.

#### 12. Ensure sustainable consumption and production patterns

Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries; achieve the sustainable management and efficient use of natural resources; halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses; achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment; substantially reduce waste generation through prevention,

reduction, recycling and reuse; encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle; promote public procurement practices that are sustainable, in accordance with national policies and priorities; ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature; support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production; develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products; rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

Urban rail transit PPP project should provide low-carbon, green, safe and comfortable public travel services, to ensure sustainability of urban public transport service supply. Therefore, it should be included into the goals that should be considered for urban rail transit PPP standard setting.

#### 13. Take urgent action to combat climate change and its impacts

Emphasize the importance of the *United Nations Framework Convention* on *Climate Change*; strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; integrate climate change measures into national policies, strategies and planning; improve education, awareness-raising and human and institutional

capacity on climate change mitigation, adaptation, impact reduction and warning; implement the early commitment undertaken developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible; promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries, including focusing on women, youth and local and marginalized communities.

Combating climate change is global focus. The implementation of Urban Rail Transit PPR Project is beneficial to reduce carbon dioxide emissions and promote green travel. Therefore, it should be included into the goals that should be considered for urban rail transit PPP standard setting.

### 14. Conserve and sustainably use the oceans and marine resources to promote sustainable development

By 2015, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution; by 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans; minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels; by 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their

biological characteristics; by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information; by 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation; by 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism; increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing states and least developed countries; provide access for small-scale artisanal fishers to marine resources and markets; ensure that the contracting party fully implements international law reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, where applicable.

These goals have no direct relationship with implementation of urban rail transit project, so it is suggested that consideration should not be given.

15. Protect, restore and promote sustainable use of terrestrial ecosystem, sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements; promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally; combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world; ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development; take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity, protect and prevent the extinction of threatened species; ensure fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources; take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products; take measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species; integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts; mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems; mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives for developing countries to advance such management, including for conservation and reforestation; enhance global support for efforts to combat poaching and trafficking of protected species, including by

increasing the capacity of local communities to pursue sustainable livelihood opportunities.

These goals have no direct relationship with implementation of urban rail transit project, so it is suggested that consideration should not be given.

# 16. Promote peaceful and inclusive societies conducive to sustainable development, provide the access to justice for all, and establish effective, accountable and inclusive institutions at levels

Significantly reduce all forms of violence and related death rates everywhere; end abuse, exploitation, trafficking and all forms of violence against and torture of children; promote the rule of law at the national and international levels and ensure equal access to justice for all; significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime; substantially reduce corruption and bribery in all their forms; develop effective, accountable and transparent institutions at all levels; ensure responsive, inclusive, participatory and representative decision-making at all levels; broaden and strengthen the participation of developing countries in the institutions of global governance; provide legal identity for all, including birth registration; ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements; strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime; promote and enforce non-discriminatory laws and policies for sustainable development.

These goals have no direct relationship with implementation of urban rail transit project, so it is suggested that consideration should not be given.

## 17. Reinforce the means of implementation and revitalize the global partnership for sustainable development

In terms of financing, strengthen domestic resource mobilization, including through providing international support for developing countries, to improve domestic capacity for tax and other revenue collection; developed countries fully implement official their development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; mobilize additional financial resources for developing countries from multiple sources; assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress; adopt and implement investment promotion regimes for least developed countries.

In terms of technology, enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism; promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed; fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.

In terms of capacity building, enhance international support for implementing effective and targeted capacity-building in developing

countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation.

In terms of trading circulation, promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda; significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020; realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access.

In terms of institution and policy, lay emphasis on policy and institutional coherence; enhance global macroeconomic stability, including through policy coordination and policy coherence; enhance policy coherence for sustainable development; respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development; establish multi-stakeholder partnerships; enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries; encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

In the process of implementation of urban rail transit project, the purpose of introducing PPP model is to build the partnership and strengthen mutual benefit and cooperation in financing, technology application, capacity building and other fields. Therefore, it should be included into the goals that should be considered for urban rail transit PPP standard setting.

#### III. Urban rail transit project should serve for realization of nine sustainable development goals

### 1. The sustainable development goals that urban rail transit PPP project should pay attention to

According to the above mentioned analysis, urban rail transit PPP project should pay attention on 9 of 17 sustainable development goals advocated by 2030 Agenda for Sustainable Development: (1) Goal 1: end poverty in all its forms everywhere; (2) Goal 3: ensure healthy lives and promote well-being for all at all ages; (3) Goal 5: achieve gender equality and empower all women and girls; (4) Goal 8: promote inclusive and sustainable economic growth, employment and decent work for all; (5) Goal 9: build resilient infrastructure, promote sustainable industrialization and foster innovation; (6) Goal 11: make cities inclusive, safe, resilient and sustainable; (7) Goal 12: ensure sustainable consumption and production patterns; (8) Goal 13: take urgent action to combat climate change and its impacts; (9) Goal 17: reinforce the means of implementation and revitalize the global partnership for sustainable development.

### 2. Urban rail transit PPP project should focus on the core issues of sustainable development

Urban rail transit PPP project can effectively integrate various resources and improve the quality and efficiency of project implementation by adopting PPP model, and should focus on the following core issues during the realization of above 9 sustainable development goals advocated by 2030 Agenda for Sustainable Development: (1) Poverty

alleviation is one of the goals of the project; (2) Ensure the poor can enjoy basic travel services provided by urban rail transit; (3) Ensure vulnerable groups can obtain safe travel services provided by urban rail transit when faced with the extreme events related to climate and other economic, social and environmental impacts and disasters; (4) Focus on influence of urban rail transit project implementation on pathophoresis; (5) The project operation should beneficial to improve convenience of obtaining medical services and other basic public services for related communities; (6) Provide convenient public traffic services for urban residents to obtain healthy lifestyle by reducing air pollution and protecting soil environment; (7) The urban rail transit network planning, construction scheme demonstration and project implementation should pay attention to participation of women; (8) The project operation scheme should ensure women obtain fair urban rail transit services; (9) Eliminate the potential safety hazards for women to use urban rail transit facilities; (10) The implementation of urban rail transit project should consider full employment; (11) Provide the decent working environment and labour safety protection measures for workers; (12) Emphasize the training of labour skills and legally employ the workers, with equal remuneration for work of equal value; (13) Optimize the urban rail transit construction scheme, and adopt the clean and environmental technologies to improve resource utilization efficiency and ensure the project construction scheme is of resilience; (14) Promote the development of inclusive and sustainable urban rail transit industry; (15) Promote the technological development, research and innovation in investment and construction of urban infrastructures; (16) Promote inclusive, safe, resilient and sustainable urban rail transit construction; (17) Provide safe, barrier-free, affordable and sustainable urban rail transit service; (18) Pay special attention on the needs of vulnerable groups, women, children, the

disabled and the aged to use urban rail transit facilities; (19) Focus on protection of urban cultural heritages in the implementation of urban rail transit project; (20) Minimize the adverse impact of the project implementation on the urban environment; (21) Promote the economic, social and environmental relations between the cities, suburbs and rural areas through urban rail transit network; (22) Play a role of urban rail transit in sustainable management and utilization of urban land resources (23) Significantly reduce the waste produced by urban rail transit project by prevention, emission reduction, recycling and reuse; (24) Ensure urban rail transit PPP project can provide low-carbon, green, safe and comfortable public travel services, to ensure sustainability of urban public transport service supply. (25) The project implementation program should meet the national policy, strategy and planning requirements for combating climate change; (26) The implementation of urban rail transit PPP project should be beneficial to reduce carbon dioxide emissions and promote green travel; (27) Optimize the subsidy mode and scheme of governmental fiscal funds for the urban rail transit project through PPP model; (28) Optimize the financing scheme of the urban rail transit project through PPP model; (29) Relieve the governmental debts of the urban rail transit project and promote debt financing, debt relief and debt restructuring to realize sustainability of long-term debts through PPP model; (30) Promote technical cooperation in rail transit field and promote knowledge sharing through PPP model; (31) Promote international cooperation in urban rail transit project construction and management capacity building fields through PPP model; (32) Promote international cooperation in urban rail transit equipment trade and service trade fields through PPP model; (33) Promote innovation of urban rail transit project management system and local government public governance mechanism, strengthen policy coordination and build perfect

sustainable development policy system through PPP model; (34) Establish multi-stakeholder partnerships, and encourage effective public, public-private and civil society partnerships through PPP model.

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