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REVIEW OF PROGRAMME PLANNING AND IMPLEMENTATION

(Item 5 (d) of the provisional agenda)

Low Carbon Cities

Note by the Secretariat

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I. BACKGROUND OVERVIEW

1. North-East Asia (NEA) is expected to have over 70% of its population living in urban centers by the next decade and eight out of 30 world's largest urban agglomerations ranked by population size in 2010 came from this subregion[1]. North-East Asian countries also contribute almost one-third of the global greenhouse gas (GHG) emissions in 2013, including four of the world's top ten emitters: China (1st), Russia (4th), Japan (5th) and ROK (7th for CO_2 and 12th for all GHGs).

2. In view of the significance of urban GHG emissions in the subregion, its linkages and contribution to overall sustainability, NEASPEC held consultation of low carbon city activities in 2013, at which the need for further collaboration and the **empowerment of local governments**, **peer-to-peer support** as well as **experience-sharing** was emphasized. Subsequently, the SOM-19 in 2014 endorsed launching of the North-East Asia Low Carbon City Platform (NEA-LCCP) as a platform for organizations working on low carbon cities.

3. The twentieth Senior Officials Meeting (SOM-20) acknowledged the NEA-LCCP as an open platform for organizations to jointly mobilize their efforts in adopting and advancing LCC development through four areas of activities: (i) information sharing and communications, (ii) technical assistance, (iii) analytical studies, and (iv) capacity building. The Secretariat then had a series of consultations with experts in order to further elaborate the approaches and activities of the Platform, and reviewed the latest LCC development in the subregion and activities undertaken by other organizations.

II. OVERVIEW OF SUBREGIONAL PROGRESS

4. Since 2009 there has been more people living in urban than in rural areas around the globe. Cities occupy just 3% of the world's land yet over 70% of global economic activity is urban[2]. Cities as hubs of economic activities, services and living spaces, are energy intensive and account for about 70% of global energy use as well as its associated greenhouse gas emissions[3]. One of the Sustainable Development Goals (SDGs) is thus on

[1] World Urbanization Prospects (2011).

[2] UNEP Global Initiative for Resource Efficient Cities http://www.unep.org/pdf/GI-REC_4pager.pdf

[3] Gouldson, et al., 2015. Accelerating Low-Carbon Development in the World's Cities. New Climate Economy, London and Washington, DC.

sustainable cities and communities (Goal 11), which is also key to promote other SDGs including climate (Goal 13), energy efficiency (Goal 7) and consumption (Goal 12).

5. The recent Habitat III, the United Nations Conference on Housing and Sustainable Urban Development, took place in October 2016 highlighted the role of cities in attaining global sustainability. It was the first major UN conference after the adoption of the Paris Climate Agreement and the adoption of the 2030 Agenda for Sustainable Development, thus a timely opportunity to explore synergies and implementation of pledges on three closely related agendas – climate, development and cities. The New Urban Agenda, as the outcome document of Habitat III, provides a 20-year roadmap to guide sustainable urban development, renews commitments that are in line with the Urban SDG and the Paris Climate Agreement, and features partnerships with business and civil society for sustainable solutions.

6. North-East Asian countries have continued to promote low carbon urban development through expanding current programmes or by developing new initiatives and goals. For instance, a number of major cities in China including Beijing, Shenzhen, Guangzhou and Wuhan, are expected to reach its peak emissions around 2020-2022[4], well ahead of the national peak emissions target in 2030. Further to designating 42 pilot low carbon cities and provinces since 2010 under its first and second phase, the third phase has been announced in January 2017 for an additional 45 pilot low carbon cities. All pilot cities under the third phase are targeted to reach its peak emissions prior to 2030, 35 of which will reach its peak emissions by end of 2025.

7. Other than national schemes, cities in China have also taken initiatives in further reducing its GHG emissions. Beijing, for example, has been actively promoting the use of electric vehicles (EVs) through allocating 40% of its new car license plate quota for EVs; providing subsidies and plans to install 435,000 charging stations between 2016-2020[5]. The Government supports in promoting low carbon lifestyle and production has also created momentum for the private sector. Hangzhou has begun operating its public bike sharing system since 2008 and became the world's largest public bike sharing scheme with a plan to expand to 175,000 bikes by 2020. Meanwhile, bike-sharing startups have also

[4] U.S.-China Climate Leaders' Declaration On the Occasion of the First Session of the U.S.-China Climate-Smart/Low-Carbon Cities Summit http://www.sdpc.gov.cn/gzdt/201509/W020150922344556917878.pdf

[5] Electric vehicles gain mainstream momentum, China Dialogue https://www.chinadialogue.net/article/show/single/en/9418-Electric-vehicles-gain-mainstream-momentum

grown significantly. For instance, Ofo, one of the major startups, has been operating a fleet of 250,000 bikes across China since late 2015[6].

8. The Republic of Korea (ROK) piloted an Eco-friendly Energy Town programme starting with the Hongcheon pilot project, with nation-wide expansion to 5 towns in 2016 and a total of 10 towns by 2018. The programme plans to develop a new rural development model, incorporating waste-to-energy for greater energy self-sufficiency that can be shared and adopted in other countries. The Government also supports GHG mitigation actions of municipal governments by providing over 20 financing schemes covering energy, building, transport, etc., and about 10 educational and citizens' participatory programmes.

9. To purse the long-term goal of 80% reduction in GHG emissions by 2050, Japan has taken various initiatives including the enactment of the Eco-City Act to set requirements on certification of low carbon buildings, public transportation, urban function etc. Recently in May 2016, the Plan for Global Warming Countermeasures has been approved by the cabinet which includes policies and measures in transport sector, such as promoting sales of EV and FCV to account for 50 to 70% of new automobile sales, promoting low-carbon logistics and cross-sectional strategies that include the building of low-carbon city, area structure and socio-economic system[7].

10. Russian cities have also made progress in low carbon development. Skolkobo is becoming an energy efficient city with high household and municipal waste recycling rate. In corporation with EDF, the largest state owned energy company in France, Skolkobo will develop smart grids, electricity storage facilities and energy efficient electric transport systems[8].

11. The Russian city Krasnoyarsk has also been declared winner in the low-carbon city competition (LCMT) by the Asia-Pacific Centre in the field of energy research (APERC) and received a grant for the implementation of environmental projects. The City of Kazan started the project "Reduction of vehicle greenhouse gas emissions in

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[6] Bike-sharing revolution aims to put China back on two wheels, the Guardian. https://www.theguardian.com/world/2016/dec/28/bike-sharing-revolution-aims-to-put-china-back-on-two-wheels

[7] Overview of the Plan for Global Warming Countermeasures, Cabinet decision on May 13, 2016, Ministry of the Environment, Japan https://www.env.go.jp/press/files/en/676.pdf

[8] Russia's Skolkovo and France's EDF team up to develop new energy efficient solutions http://www.ewdn.com/2016/01/25/russias-skolkovo-and-frances-edf-team-up-to-develop-new-energy-efficient-solutions/

Russian cities by 2017" in 2013[9]. This project monitors the impact of transport and promotes the utilization of hybrid and electric vehicles, complemented with a state programme for developing the market of natural gas-based motor fuel and a project of biogas production from fecal waste to further reduce GHG emissions.

III. PEER REVIEW AND COMPARATIVE ANALYSIS

12. North-East Asia has initiated policies and plans for low carbon city (LCC) development at both national- and city-levels, the subregion has a wealth of experiences to offer and has great demand to learn from each other. The Secretariat therefore proposes two activities – peer reviews and comparative studies – that aim to strengthen knowledge, capacity and networking of experts, agencies and cities in North-East Asia:

13. **(1) Peer Review** is a widely utilized instrument that enables the sharing of insights and experiences among peers. It has been utilized as a mutual learning tool by international and regional mechanisms such as the OECD Environmental Performance Review (EPR) since 1991, which has then been extended to the European region by the UNECE in 1993. So far over 50 countries have undertaken the EPR. A significant merit of peer review is that as reviewers and reviewees are 'equals' and are often facing similar challenges, the peer reviews create a neutral and practical atmosphere to facilitate learning from each other, and help nurture a co-supporting community

14. The proposed NEA-LCCP peer review, peers refer to cities, experts and specialized agencies. It is a review exercise of a city's low carbon development to support the host (reviewee), facilitate peer-to-peer networking and experience-sharing, as presented in Figure 1. As North-East Asian cities are at different stages of development, peer review of each city's strategy can review as well as provide advice and discussions according to the specific context of each city. Even forerunners can benefit from the continuous improvement of current strategy, and can share invaluable lessons learnt with others, in particular, the newer cities.

[9] Overview of climate actions in the regions of Russia within the implementation of the Russian Federation Climate Doctrine http://rusecounion.ru/eng_obzor_otvetov_regionov

15. The NEA-LCCP peer review will gather reviewers to review information, conduct site visits and workshops, to facilitate exchange and networking. Compared to other international LCC evaluation frameworks, the NEA-LCCP peer review has an additional evaluation component, the "**policy indicators**", which will examine policy, governance and supportive mechanisms of low carbon urban development. This will provide useful insights on actions to promote LCC and enable practical and specific recommendations be made.

Figure 1 Proposed NEA-LCCP Peer Review

16. During the Seoul Mayors Forum on Climate Change 2016, the Secretariat held a back-to-back expert group workshop on 2 September in Seoul to seek views of experts and key agencies on the overall approach of the NEA-LCCP, as well as on the proposal of the NEA-LCCP peer review. The proposed peer review received support in the workshop and a number of points and recommendations were shared by participants including:

- **Geographic scope** – as data usually follows the jurisdiction boundaries, adopting each city's own definition of city and data would be most practical
- **Co-benefits** could be explored in the peer review which would be appealing to governments for knowing and showcasing the benefits and potentials of LCC development

- **Universality of indicators** needs to be considered as whether to apply a standard set of indicators to all reviewed cities or specific sets of indicators depending on the characteristics and context of the city. A summary of proposed indicators is shown in Table 1.
- **Implementation mechanisms** should be reviewed to help cities as it is considered a major challenge to cities
- Offering **optional in-depth topics** in the peer review is recommended, similar to the OECD EPR approach
- **Linkages to SDG** and the **New Urban Agenda** could be made in the peer review for city actions to make relevance to national and international goals

The summary document of the EGW including the list of participants is presented in the Annex.

Table 1 Summary of indicators, measures and mechanisms included in the peer review

	Indicators
Background indicators	General background (e.g. Population, GDP, Carbon intensity etc.)
Sectoral indicators	Energy consumption and CO_2 emissions
	Building Energy Use
	Land Use
	Industry (e.g. industrial structure, energy use etc.)
	Water (e.g. consumption, efficiency etc.)
	Waste (e.g. generation and treatment etc.)
	Public utilities (e.g. street lighting etc.)
	Mobility (e.g. public transportation etc.)
Policy Indicators	Governance (e.g. city strategy and targets, coordinating body, evaluation etc.)
	Supporting mechanisms (e.g. legislation, financing, incentives, education and capacity building etc.)

17. **(2) Comparative Study** is a country-level study, in contrast to peer review at a city-level. The proposed study aims to generate a comprehensive and systematic overview of national approaches and current status. It also intends to identify good practices from

cities and on specific sector for sharing information and promoting cooperation. As low carbon city development requires both top-down (from national-level) and bottom up (from city-level) initiatives, it is essential to develop understanding at both levels and explore how they can drive and support each other.

18. The proposed comparative study will include:

- **Background and recent trends** on low carbon city development at a global, national and local levels (in North-East Asia)
- **Analysis and comparison** on LCC development modes including planning, approach and evaluation systems etc.
- **Case studies** of selected LCCs in the subregion to showcase a diversity of cities, their challenges and approaches
- **Identification of good practices** through the review and collection of good practices across sectors (e.g. financing, mitigation planning and evaluation etc.) as well as cities with different characteristics
- **Conclusions and recommendations** on the way forward for cities and cooperation of key stakeholders

19. The proposed comparative study will review literature, carry out site-visits, conduct workshops for subregional discussions and a launch event to promote outputs of the Study. Tentative outputs of the Study include a joint publication by all partners on the overall Study and a specific compilation of good practices of low carbon city development.

20. The peer review and comparative study will require participation of cities, national partners and international agencies. Since the workshop in September 2016, the Secretariat has been seeking for suitable partners to explore the roles and plans for piloting the peer review in 2017 and to carry out the comparative study. The tentative plan is to carry out two pilot peer reviews by end of 2017, subject to availability of voluntary reviewee (host city), and to produce a draft report of the comparative study by first half of 2018.

IV. ISSUES FOR CONSIDERATION

21. The Meeting may wish to agree on the proposal by the secretariat and invite member States to recommend cities, national institutions and municipal research institutions to participate at the peer review (as host city or reviewer) and at the comparative study.

22. The Meeting may further wish to request member States to guide and express their interests in the areas of the North-East Asia Low Carbon City Platform and potential projects under the Platform.

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