



NORTH-EAST ASIA LOW CARBON CITY PLATFORM

**NORTH-EAST ASIAN SUBREGIONAL
PROGRAMME FOR ENVIRONMENTAL
COOPERATION (NEASPEC)**

NORTH-EAST ASIA LOW CARBON CITY PLATFORM (NEA-LCCP)

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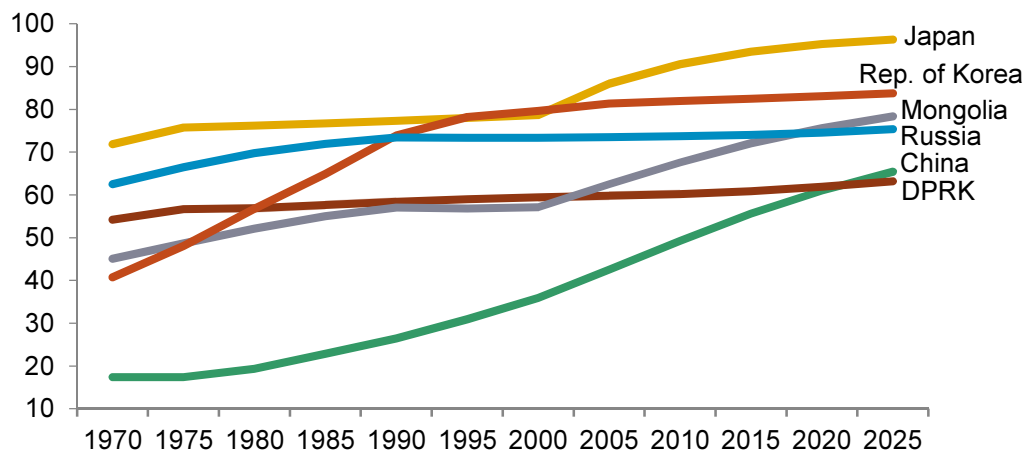
CALL FOR PARTICIPATING AGENCIES

UNESCAP East and North-East Asia (ENEA) Office, serving as the Secretariat of NEASPEC, prepared this paper to call for participating agencies for the NEA-LCCP.

1. WHY DO LOW CARBON CITIES MATTER IN NORTH-EAST ASIA?

North-East Asia (NEA) has a growing urban population which is expected to reach almost 1 billion in 2015 (Figure 1). The most notable urbanization in the recent decades has occurred in China where the urban share of total population exceeded 50 per cent in 2011 and the number of cities with more than 1 million inhabitants is expected to increase from 105 in 2015 to 148 in 2030.¹

[Figure 1] Share of urban population in North-East Asia, 1970-2025²



This urban growth trend has significant environmental implications as urban areas, compared with rural, have higher levels of energy consumption per capita due to energy intensive infrastructure and lifestyle, thereby emitting more greenhouse gases (GHGs). North-East Asian countries in 2012 collectively contributed 31.8 per cent of global CO₂ emissions from fuel consumptions.³ Considering the level of urbanization in North-East Asia and the relatively high level of energy consumption in cities, the global share of CO₂ emissions indicates the significant responsibilities and roles of North-East Asian cities in addressing climate change. At the same time, cities also have substantial potential in mitigating GHG emissions as the intensity of cities can make significant and quick changes when new approaches, policies and technologies are adopted. For GHG mitigation actions, cities can benefit from their proximity to the public, environmental issues and services, and economic activities as well as their relative flexibility in policy formulation. Urban population density can also be harnessed to attain quicker progress in lowering GHG emissions as behavioral and resource utilization changes can take place over a larger number of urban citizens.

¹ *World Urbanization Prospects (WUP) 2014*, UNDESA: The number of urban population does not include those in the European part of the Russian Federation and non-NEASPEC members, i.e., Hong Kong, Macao and Taipei China.

² *WUP database, Percentage of Population at Mid-Year Residing in Urban Areas by Major Area, Region and Country, 1950-2050*

³ *Key world energy statistics 2014*, IEA

2. LOW CARBON CITY DEVELOPMENT IN NORTH-EAST ASIA

North-East Asian countries, in particular, China, Japan and Republic of Korea, have recognized the significant potential in lowering carbon emissions through promoting green and low carbon city development and its related activities. Numerous initiatives, policies and programmes have been in place across different levels of governments, with each country taking a different approach. Meanwhile, a number of networks and programmes have been established across civil society and research institutions to support and accelerate this movement.

[Table 1] National Policies Related to Low-Carbon Cities

CHINA	JAPAN	REPUBLIC OF KOREA
POLICIES/ NATIONAL MEASURES RELATED TO LCC		
12th Five Year Plan targets: <ul style="list-style-type: none"> • Energy intensity reduction by 16% • Carbon intensity reduction by 17% 	Bill of the Basic Act on Global Warming Countermeasures (2010) Low-Carbon City Promotion Act (2012)	The Low Carbon, Green Growth Basic Act (2010) Urban Planning Guidelines for Low-carbon Green Growth (2009)
PROGRAMMES AND INITIATIVES		
Low Carbon Pilot Cities and Provinces (2010, 2012) Pilot Low Carbon Transportation System (2011)	Eco-model City Programme (2008) Future City Initiative (2010)	Climate-model city and Eco-rich City (2007)
GHG EMISSIONS REDUCTION GOALS IN SELECTED CITIES		
<i>Based on carbon intensity per GDP</i> <ul style="list-style-type: none"> • Baoding: 35% (2010-2020) • Hangzhou: 50% (2005-2020) • Jilin: 60% (2005-2030) • Shenzhen: 45% (2005-2020) • Guiyang: 45% (2005-2020) • Tianjin: 15.5% (2010-2015) 	<i>Based on absolute reduction target</i> <ul style="list-style-type: none"> • Tokyo: 25% (2000-2020) • Kyoto: 40% (1990-2030) • Toyama: 30% (2005-2030) • Kitakyushu: 30% (2005-2030) • Yokohama: 30% per capita (2004-2025) • Minamata: 32% (2005-2020) 	<i>Based on absolute reduction target or business as usual (BAU)</i> <ul style="list-style-type: none"> • Seoul: 25% (2005-2020), 30% (2005-2030) • Suwon: 20% (2005-2020) • Gangneung: 49% (BAU, 2020) • Jeju: 41% (BAU, 2020) • Gwangju: 40% (BAU, 2020)

2.1. CHINA

China has initiated national policies and targets that are closely related to LCC. These national policies and targets are often incorporated and implemented at the provincial level and below:

- The *12th Five Year Plan (12-5 Plan)* lays out China's national approach and key targets on development, including the reduction of greenhouse gas emissions per unit of GDP by 40-50 per cent by 2020 (compared to 2005), reduction in energy intensity by 16 per cent and carbon intensity by 17 per cent by 2015.
- The *National New Urbanization Plan (2014-2020)* is a strategic plan which includes principles and goals of urbanization on social, infrastructure, economic and environmental aspects, with emphasis on green city development through addressing the areas of energy, buildings, transportation, consumption and lifestyle, etc.
- The *2014-2015 Energy Conservation and Emissions Reduction Low Carbon Development Implementation Plan* detailed approaches and targets on reducing national emissions, such as targets on selected cities' vehicle emissions and green building construction.
- The *Low Carbon Province and City Pilot Project* involves developing low carbon development plans and their supporting policy measures, low carbon industrial and production strategy, greenhouse gas accounting mechanisms, green lifestyle models, etc. Its second phase launched in 2012 and expanded to a total of 42 cities and provinces across China.
- The *Low Carbon Community Pilot Project* launched in 2014 to promote low carbon development at the community-/district-level. Approximately a thousand pilot communities will participate by 2015.

2.2. JAPAN

Japan has also adopted a number of national initiatives:

- The *Bill of the Basic Act on Global Warming Countermeasures*, approved in 2010 by the Cabinet, specifies Japan's mid- and long-term targets to reduce 60-80 per cent of GHG emissions by 2050. It will be achieved through developing innovative technologies, mainstreaming existing advanced technologies, and promoting renewable energy and energy conservation so that the mechanisms can mature and drive toward a low carbon society throughout the nation.
- The *Low-Carbon City Promotion Act* aims to promote cross-sectoral emissions reductions through low carbon urban development and provides tax breaks for certified energy efficient buildings that reduce primary energy consumption. The Act

also requires municipalities (including towns and villages) to formulate Low-Carbon City Development Plans.

- The *Eco-model City Programme*, active since 2008, aims to create a low carbon society by shifting from single innovations to collaborative social innovations via structural innovations in the social system. The comprehensive approach utilizes concerted low carbon efforts by cities and communities.
- The *Future City Initiative*, created in 2011, aims to create and disseminate the best practices of low carbon, green cities in Japan and abroad.

2.3. REPUBLIC OF KOREA

The Republic of Korea's efforts include a range of policies under the framework of green growth, from a national stimulus plan to local city initiatives:

- Under the concept of "*low carbon, green growth*" announced in 2008, seven cities were selected as EcoRich Cities focusing on the improvement of the city environment as well as on creating new jobs in energy, commuting, recycling, etc. This concept combines policies from various ministries to provide a comprehensive approach for the green growth of cities.
- The *Urban Planning Guidelines for Low-Carbon Green Growth (2009)* involves establishing standards, evaluations and countermeasures concerning the application of the concept of low carbon, green growth in urban planning.
- The *Low Carbon, Green Growth Basic Act* passed in 2010 requires local governments to set targets for energy saving and GHG emissions reductions. For example, Gangneung City, the first Low-Carbon Green Demonstration City designated by the Central Government, aims to reduce greenhouse gas emissions by 49 per cent based on BAU by 2020.

3. LOW CARBON CITY NETWORKS AND PROGRAMMES

Numerous networks and programmes have been established to promote LCC development at global and regional levels.

3.1. GLOBAL AND REGIONAL CITY NETWORKS AND PROGRAMMES

At the global level, city networks are diverse in size and scope. In general they can be categorized by: (i) target audience, such as by size of cities; and (ii) thematic focus, which can be broad or specific. One of the largest and broadest networks of local governments in the world is the *United Cities and Local Governments (UCLG)*. It works as an umbrella organization for cities and local and municipal associations and attempts to promote values, objectives and interests common to its member cities. Most other networks are more confined in size and focus. For instance, *METROPOLIS*, a network of large metropolitan areas, carries out projects within four categories of initiatives, including sustainability. Others such as *Cities Alliance* or the *Rockefeller Foundation's 100 Resilient Cities Network*, focus specifically on one theme such as inclusive urban development or urban resilience. Among these global networks, those dedicated mainly to LCC development include:

- *ICLEI-Local Governments for Sustainability*, a network of over 1,000 cities and towns that promotes local action for global sustainability and supports its members to become sustainable, low-carbon, resilient and resource-efficient
- *C40 Cities Climate Leadership Group*, a network of the world's megacities that aims to reduce greenhouse gas emissions and address climate risks
- *World Mayors Council on Climate Change (WMCCC)*, an alliance of mayors and equivalent local leaders that advocates for enhanced engagement of local governments in multilateral efforts on climate change and other sustainability issues
- *Urban Environmental Accords Members Alliance (UEAMA)*, a recently established network of 159 cities in 53 countries that are signatories to the Gwangju Initiative, an LCC-focused agenda that seeks to address climate change and sustainable urban development through cooperation and practical measures such as the Urban Clean Development Mechanism

Most networks are targeted at **municipal government members**. The synergy effect of these international networks is significant. Altogether, these networks represent much of the urban population in every region of the world. These city networks play an integral role in the **exchange of information, knowledge and best practices; capacity-building**; and the **strengthening of local voices in the international arena**. They are responsible for localizing international or regional policies and goals, fostering peer-to-peer learning, and

connecting mayors and city officials, the most powerful example of which is the Compact of Mayors, which was signed in 2014 under the auspices of C40, ICLEI, UCLG and UN-Habitat.

At the regional level in Asia and the Pacific, these networks are **few in number** compared to those in Europe, and they are **mostly focused on urban sustainability issues including LCC**. These networks indicate overall interests in urban sustainability and provides good basis to build on for further cooperation:

- *CITYNET*, the largest and oldest network of cities in the region, with 135 municipalities, NGOs, private sector and research centers. It aims to connect actors, exchange knowledge and builds commitment to sustainable and resilient cities through capacity building, city-to-city cooperation and tangible projects. CITYNET offers four clusters—climate change, infrastructure, disaster and Millennium Development Goals.
- *Asian Network of Major Cities 21 (ANMC21)*⁴, a network of Asia's 13 largest capital cities that hosts joint projects and exchanges best practices around themes such as urban planning, sustainability and crisis management.
- *Asian Cities Climate Change Resilience Network (ACCCRN)*, is an expert-oriented network that connects urban practitioners and institutions that work in urban resilience projects in climate vulnerable cities in South Asia and Southeast Asia.

City networks have engaged in a variety of programmes and initiatives. Many of these programmes involve information sharing and communications as shown in Annex I. Many are **joint projects with other stakeholders** such as academia, multilateral agencies, NGOs, national government agencies and the private sector, and provide a variety of services including technical assistance, analytical studies and capacity building.

3.2. ROLES AND TRENDS OF NORTH-EAST ASIAN CITIES IN LCC DEVELOPMENT

The following characteristics highlight current trends in regional networks involving cities in North-East Asia:

- **Japanese cities have traditionally played a leadership role in urban environmental networks and programmes in Asia and continue to do so.** For instance, CITYNET was founded after the Yokohama Congress (the 1st Regional Congress of Local Authorities for the Development of Human Settlements in the Asia Pacific), hosted by Yokohama City and organized jointly with ESCAP and UN-Habitat. Likewise, the Asian Network of Major Cities 21 was advocated by and is currently based in Tokyo. Kitakyushu city has been also a key Japanese city for networking and technical assistance on environmental management, for example, through the Kitakyushu Initiative for a Clean Environment jointly operated with UNESCAP during 2000-2010 as well as its bilateral programmes.

⁴ According to its official website, the Asian Network of Major Cities 21 is “not conducting any activities at this time” and therefore will be excluded from the following discussion.

- **Cities in Republic of Korea are currently the biggest participants in networks related to LCC and are increasingly playing a leadership role.** As shown in Table 2, ROK cities have the largest presence in networks related to LCC, both global and regional, in terms of participant numbers. Global green leadership has increased in recent years as well. Currently, Seoul hosts both the ICLEI East Asia Secretariat and the CITYNET Secretariat, and Seoul Mayor serves as the Chair of the Council to the WMCCC. Gwangju Metropolitan City hosted the UNEP-led Urban Environmental Accords Summit Meeting in October 2011 and has been home to the UEA Secretariat (UEAMA) since 2012. Gwangju has been essential in spearheading the UEA and is playing an integral role in co-developing the Urban Clean Development Mechanism and the Urban Environment Evaluation Index with UNEP.
- **Other North-East Asian cities are underrepresented in city networks and Chinese cities have much potential in further participation in city networks.** As of 2015, China has 105 cities with populations of over 1 million, as well as numerous medium and small-sized cities with populations below 1 million. Over 40 cities and 1,000 communities have piloted low carbon development under the national projects. However, considering China's rate of urbanization and scale of LCC pilot projects, the representation of Chinese cities in global or regional city networks has much room for development.

[Table 2] Participation of North-East Asian Cities in Major LCC Networks

C40	ICLEI	UEAMA	WMCCC ⁵	CITYNET
CHINA				
5 cities: Beijing, Hong Kong, Shanghai, Shenzhen, Wuhan	1 city: Shenyang	5 cities: Changchun, Luoyang, Shenyang, Suifenhe, Wuhan	-	4 cities: Nanchang, Nanjing, Shanghai, Wuhan
JAPAN				
2 cities: Tokyo, Yokohama	15 cities and 3 prefectures e.g. Hiroshima, Kitakyushu, Kyoto, Nagoya, Sendai, Tokyo, Yokohama	2 cities: Hiroshima, Sakai	1 city: Kyoto	1 city: Yokohama
REPUBLIC OF KOREA				
2 cities: Changwon, Seoul	28 cities, 10 counties, 5 provinces and 5 districts: e.g. Seoul, Suwon, Busan, Daegu, Incheon, Sejong, Suncheon	16 cities, 5 districts and 1 province	4 cities: Seoul, Suncheon, Suwon, Mungyeong	6 cities: Busan, Changwon, Incheon, Seoul, Suwon, Yongin
MONGOLIA				
-	2 cities: Ulaanbaatar, Zuunmod	1 city: Ulaanbaatar	-	1 city: Ulaanbaatar
RUSSIA				
1 city: Moscow	-	4 cities: Dimitrovgrad, Medvezhegorsk, Moscow, Polyarnye Zori	-	-

⁵ Mayors and equivalent local officials of the cities listed under this column are signatories to the WMCCC.

3.3. CITY NETWORKS AND PROGRAMMES: AN EXAMPLE OF EUROPE

Europe is characterized by a variety of networks, programmes and initiatives for local sustainability. European initiatives offer a point of reference for future regional endeavors in North-East Asia. In general, **city networks in Europe are active, well-established and diverse.**

Networks in Europe target a variety of themes that are both specific and broad. For instance, *Energy Cities* is a network of 1,000 cities and towns in 30 European countries that specializes in sustainable, low-carbon energy. Other networks such as Climate Alliance focus on multiple fronts within climate action while broader networks such as EUROCITIES and the Council of European Municipalities and Regions (CEMR), the oldest and broadest European association of local governments, engage in themes like democracy and citizenship, culture, economic and social cohesion and resource efficiency among others.

European city networks have **expansive and inclusive nature**, enabling cities and towns of all sizes to actively participate in networks, and many countries are represented. This has allowed Europe to make great strides in local and regional cooperation on LCC. The most effective example of this is the Covenant of Mayors, the mainstream European movement currently involving 6,455 local and regional authorities who have voluntarily committed to meeting and exceeding the European Union's 20 per cent CO₂ reduction objective by 2020. From the Covenant of Mayors also came the Mayors Adapt, in which 121 cities have committed to developing a comprehensive local adaptation strategy. Both movements were driven not only as low-carbon initiatives, but also as **networks that can facilitate cooperation and cohesion among each other's member cities.** This collaboration among networks was also strengthened by the low-carbon visions, policies and goals set forth by the European Commission, especially by the Directorate-General for Energy, the Directorate-General for Climate Action and the Intelligent Energy Europe Programme.

Additionally, **several subregional city networks are present in Europe.** For example, the Alliance in the Alps gathers 265 municipalities in the seven Alpine countries of Austria, France, Germany, Italy, Liechtenstein, Slovenia and Switzerland under the principles of the Alpine Convention, a 1995 treaty for the sustainable development of the Alps. Similarly, the Alps-Adriatic-Alliance includes cities from the Eastern Alps and the Northern Adriatic region, the Network of Associations of Local Authorities of South-East Europe brings together 16 national associations in 12 South-East European countries and the Union of the Baltic Cities connects 90 cities across 10 Baltic Sea countries. While LCC-related initiatives are a part of the joint projects engaged by these subregional networks, a greater focus is on fostering cooperation and cohesion within each of their respective subregion.

[Table 3] Comparison of city networks in Europe and North-East Asia

EUROPE	NORTH-EAST ASIA
Many active regional networks	Few active regional networks
Cities and towns of all sizes are represented	Mostly large or major cities are represented
Expansive; cities in many countries around Europe are represented	Cities in China, DPR Korea, Mongolia and Russia are underrepresented
Many programmes and initiatives spearheaded by a collaboration of networks and aided by the European Commission	Many programmes and initiatives spearheaded by cities and institutions in Japan and ROK or multilateral agencies
Subregional networks are well-established	Lack of subregional networks

3.4. NEASPEC AND LOW CARBON CITIES

In view of the broad range of stakeholders already working on LCC development and the variety of needs from cities with different characteristics, the subregion is in need of a **platform** to communicate and exchange on the demand and supply of services and information. Such platform can provide enhanced access to information and current activities; channels to express needs, and to discuss and implement actions required for the subregion; linkages to wider LCC development beyond the subregion; and gateways for cooperation and partnerships.

The North-East Asian Subregional Programme for Environmental Cooperation (NEASPEC) launched the Eco-efficiency Partnership Programme in 2007, followed by the Suwon Conference on Low Carbon, Green Cities in North-East Asia in 2011 to consult and discuss ways on addressing resource efficiency and urban challenges. Great interest and support had also been shown on furthering cooperation to accelerate LCC development in the subregion and to attend to specific subregional trends such as emerging cities and small and medium cities. The Conference proposed NEASPEC to act as a locus of information platform for collecting, analyzing and distributing strategies and plans for low carbon, green cities in North-East Asia, and as a catalyst for capacity development programmes among cities.

As a practical means to address needs expressed by countries and to support national initiatives for reducing urban energy intensity and carbon intensity, the proposal to launch the Subregional Partnership on Low Carbon City was presented and received support by member States during the 18th Senior Officials Meeting (SOM-18) held on 5-6 November 2013 in Ulaanbaatar, Mongolia.

As a follow-up to the proposal, an international symposium on "Realizing Low Carbon Cities in North-East Asia" was jointly held with the Chinese Academy of Social Sciences in Beijing on 5-6 December 2013. It brought together experts, academia, and subregional and international

agencies as well as city representatives to exchange and discuss various issues related to LCC. The symposium reviewed and shared works by key actors across sectors in LCC development.

Key points and observations from Beijing Symposium (2013):

- Empowerment of **local governments, peer-to-peer support and experience sharing** was highlighted as being useful and attractive for city governments
- Some collaborative work has been carried out, yet there is **much room for further collaboration and communications between agencies**, allowing resources to be pooled and more efficiently utilized while minimizing duplication and potential competition
- The symposium **supported the proposal to launch a subregional platform** for information sharing and communications, joint studies and assessments, and capacity building among all stakeholders

Member States of NEASPEC during the SOM-19 held on 22-23 September 2014 in Moscow also supported the outcomes of the symposium and endorsed the establishment of the North-East Asia Low Carbon City Platform with recommendations to consider the different stages of development and unique characteristics of cities and focus on experience sharing and capacity building.

4. NORTH-EAST ASIA LOW CARBON CITY PLATFORM (NEA-LCCP)

4.1. RATIONALE AND OBJECTIVES

North-East Asian countries are at a mixed pace in LCC development as Japan and Republic of Korea are advanced in LCC experience and technology, while China as well as other countries are more recent starters and are quickly catching up. There is great demand and potential in furthering LCC development with the subregion's rapid urbanization and substantial urban population which continues to grow. North-East Asia is therefore where **supply and demand of LCC meets**.

Cities and communities as implementing units are facing challenges in formulating individual approaches tailored to each city's unique setting and characteristics, as well as in simultaneously addressing changes across multiple sectors. It is therefore key to **support cities directly and respond to their specific needs**.

OBJECTIVES

This paper has identified numerous global and regional networks in Asia, which consist of mainly municipal governments or academia. In order to add value to the existing networks, launching **a platform of organizations working on LCC approaches, policies and programmes** will:

- (i) **Bring together existing and new information and knowledge on LCC approaches and policies,**
- (ii) **Synergize the works of research institutions, civil society organizations and international organizations working on LCC ; and**
- (iii) **Collectively support municipal authorities in moving towards and continuing to advance in LCC**

4.2. KEY AREAS OF ACTIVITIES

FOUR PROPOSED AREAS OF ACTIVITIES CALLING FOR PARTICIPATING AGENCIES

1. INFORMATION SHARING AND COMMUNICATIONS

This will be the core service of the platform through the following activities:

- (i) Events such as symposiums, workshops, field visits, topic-specific/ expert group meetings. Events can be jointly organized with national, regional or global agencies to connect subregional LCC development to wider geographical and/or context scope.
- (ii) Web-based platform containing subregional LCC information, case studies sharing, relevant activities, platform events, updates, publications, etc.

2. TECHNICAL ASSISTANCE

Participating institutions and experts can provide practical and direct assistance to cities through the platform. Cities are invited to submit their LCC development plan/ approach for peers or experts to seek review and recommendations. It can be a benchmarking exercise to compare overall LCC or specific sectoral performance, and an opportunity to discuss and learn from other's experiences.

3. ANALYTICAL STUDIES

Identify gaps and generate practical knowledge required by cities to formulate, implement or improve low carbon development. Conduct analytical studies with institutions, researchers and other practitioners to address specific low carbon city issues in the North-East Asian context.

4. CAPACITY BUILDING

With both the demand and the supply of knowledge and experiences available within the subregion, capacity building activities can directly enhance local capacity and enable first-hand experiences to be shared. Capacity building can target specific audience or technical aspects, and be tailored to specific requests. Capacity building elements can also be incorporated into other activities such as at workshops or to support implementation of recommendation from peer review, etc.

4.3. POTENTIAL ROLES OF PARTICIPATING AGENCIES

- Attend and actively participate in Platform meetings and related events, providing input to the Platform and its ongoing projects.
- Collaborate with other agencies in promoting and expanding relevant programmes in low carbon city development.
- Collaborate as “technical experts” or advisors to others’ work development and assist in developing or advancing their low carbon city development-related works.
- May serve as a resource centre of the Platform to lead partnership in specific programme areas and to provide technical support.

NEASPEC was launched in 1993 as a comprehensive intergovernmental cooperation mechanism comprising all six North-East Asian countries, namely, China, Democratic People’s Republic of Korea, Japan, Mongolia, Republic of Korea, and Russian Federation.

UNESCAP-ENEA Office functions as the Secretariat.

Senior Officials Meeting (SOM) is held annually as the governing body and principal vehicle for the evolution of NEASPEC.

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<http://enea.unescap.org>

ANNEX I

[Table A1] Selected City Networks at the Global Level

Name	Type of Network	Network Size	Thematic Focus	Relevant Programmes
Carbon Neutral Cities Alliance (CNCA) ⁶	Municipal governments	17 cities	Climate action, best practices	-
C40 Cities Climate Leadership Group ⁷	Municipal governments	75 megacities	Climate action	Climate Positive, Compact of Mayors, Global Protocol for Community-Scale GHG Emissions (GPC)
ICLEI-Local Governments for Sustainability ⁸	Municipal governments	1,000 cities, towns and metropolises	Sustainable development, environmental protection	carbon _n Climate Registry (cCR), Compact of Mayors, Harmonized Emissions Analysis Tool Plus (HEAT+), GPC, Urban-LEDS; EcoCities Network, GreenClimateCities Network, Local Renewables Network
Urban Environmental Accords Members Alliance (UEAMA) ⁹	Municipal governments	159 cities	Energy efficiency and climate change, waste reduction, green transport, water management, natural ecology	Urban Clean Development Mechanism, Urban Environment Evaluation Index
World Mayors Council on Climate Change (WMCCC) ¹⁰	Municipal government leaders (mayors and equivalent leaders)	88 members	Climate action	cCR
Cities Alliance ¹¹	Municipal governments and other stakeholders ¹²	24 entities including 11 national governments	Inclusive urban development	-

⁶ <http://www.usdn.org/public/Carbon-Neutral-Cities.html>

⁷ <http://www.c40.org/>

⁸ <http://www.iclei.org/>

⁹ http://www.gjsummit.com/upload/pds/brochure_en.pdf

¹⁰ <http://www.worldmayorscouncil.org/>

¹¹ <http://www.citiesalliance.org/>

¹² Other stakeholders may include academia, multilateral agencies, NGOs, national government agencies and the private sector.

Name	Type of Network	Network Size	Thematic Focus	Relevant Programmes
International Urban Development Association (INTA) ¹³	Urban policy-makers, practitioners and firms	-	Integrated urban development	-
METROPOLIS ¹⁴	Municipal governments	141 metropolitan areas and cities with more than one million people	Innovation, governance, social inclusion and sustainability	Climate-METROPOLE+
United Cities and Local Governments (UCLG) ¹⁵	Municipal governments and other stakeholders	1,000 cities and 112 national associations	Promotion of values, objectives and interests	Compact of Mayors
United Nations Global Compact-Cities Programme ¹⁶	Municipal governments and businesses	106 cities	Urban governance and management	-
100 Resilient Cities Network (100RC) ¹⁷	Municipal governments	68 cities (eventually 100 cities)	Urban resilience, best practices	-

¹³ <http://www.inta-aivn.org/en/>

¹⁴ <http://www.metropolis.org/>

¹⁵ <http://www.uclg.org/>

¹⁶ <http://citiesprogramme.com/>

¹⁷ <http://www.100resilientcities.org/>

[Table A2] Selected City Programmes and Initiatives at the Global Level

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
C40, ICLEI, UCLG, UN- HABITAT	Compact of Mayors ¹⁸	Signed agreement by city networks and their members to undertake a transparent and supportive approach to reduce city-level emissions, reduce vulnerability and enhance resilience, and use the carbonn Climate Registry as its central repository for local emissions data	X			X
C40, Clinton Climate Initiative, U.S. Green Building Council	Climate Positive Development Program (Climate Positive) ¹⁹	Programme that brings district-scale new build and regeneration projects to become “climate positive” and serve as pilot cities to seek growth that is environmentally sustainable, climate resilient and economically viable	X	X	X	X
ICLEI	carbonn Climate Registry (cCR) ²⁰	World’s largest global database of local climate actions, providing an online platform for cities to self-report GHG emission reductions and adaptation targets, achievements and actions	X	X		
ICLEI	Harmonized Emissions Analysis Tool Plus (Heat+) ²¹	Multilingual online emissions inventory tool to help local governments account for greenhouse gas emissions and air pollutants in local communities	X	X		

¹⁸ <http://www.compactofmayors.org/>

¹⁹ http://www.c40.org/networks/climate_positive_development

²⁰ <http://carbonn.org/>

²¹ <http://heat.iclei.org/heatplusgpc/indexnew.aspx>

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
ICLEI, Ecocity Builders	EcoCities Network ²²	Initiative for city stakeholders of ICLEI Member cities to share information, resources, best practices and to accelerate actions through a holistic and integrated approach to sustainable development via policy, design, development and educational tools, projects, campaigns and strategies	X			X
ICLEI	GreenClimateCities Programme ²³	Programme for transforming local building stock and urban infrastructure for higher energy-efficiency and lowering carbon emissions through capacity training and exchange opportunities		X		X
ICLEI	Local Renewables Network ²⁴	Platform for exchanging expertise and experience on renewable energy and energy efficiency for all cities and towns around the world committed to renewable and sustainable energy at the local level	X			
ICLEI, UN- HABITAT, European Commission	Urban Low Emission Development Strategies (Urban- LEDS) ²⁵	Project for enhancing the transition to low emission urban development in emerging economy countries by offering select local governments in Brazil, India, Indonesia and South Africa a comprehensive methodological framework (i.e. GreenClimateCities) to integrate low-carbon strategies into all sectors of urban planning and development	X	X		X
Global Carbon Project (GCP)	Initiative on Urban and Regional Carbon Management (URCM) ²⁶	Scientific initiative aimed at supporting policies for urban carbon management and sustainable urban development	X		X	

²² <http://www.iclei.org/details/article/ecocities-network.html>

²³ <http://www.iclei.org/our-activities/our-agendas/low-carbon-city/gcc.html>

²⁴ <http://www.local-renewables.iclei.org/>

²⁵ <http://www.urbanleds.iclei.org/index.php?id=61>

²⁶ <http://www.gcp-urcm.org/>

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
Sustainable Energy for All (SE4All)	Global Energy Efficiency Accelerator Platform ²⁷	Initiative to help achieve SE4All, co-led by the UN Secretary-General and the President of the World Bank, by defining common target elements for energy efficiency sectors among cities, regions, governments and business in areas such as governance, performance metrics, reporting requirements, commitment management, policies, resources and tools as well as public-private financial support	X	X	X	X
UEAMA (UEA Secretariat), UNEP, Korea Environment Institute (KEI)	Urban Clean Development Mechanism (Urban CDM) ²⁸	Carbon finance system for emissions reduction that adapts the UNFCCC Clean Development Mechanism to the urban context with consideration of suitable methodologies that combine the key emission sources of cities and metropolitan areas and targets whole cities rather than business units		X		X
UEAMA (UEA Secretariat), UNEP, Korea Environment Institute (KEI)	Urban Environment Evaluation Index ²⁹	Initiative to develop broad, reasonable criteria of an “eco-city” with appropriate technical and environmental standards as recommended by the World Health Organization in order to provide cities with guideline and direction for their urban planning and environmental policies	X		X	X
UNEP	Global Initiative for Resource Efficient Cities (GI-REC) ³⁰	Initiative that seeks to connect different entities and stakeholders working on resource efficiency so that participant cities (cities with populations of over 500,000 or greater) can receive support on developing a resource footprint, setting clear goals and targets and accessing other technical expertise	X	X	X	X

²⁷ <http://www.se4all.org/energyefficiencyplatform/>

²⁸ http://www.gjsummit.com/upload/pds/brochure_en.pdf

²⁹ http://www.gjsummit.com/upload/pds/brochure_en.pdf

³⁰ http://www.unep.org/pdf/GI-REC_4pager.pdf

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
UNFCCC	NAZCA (Non-State Actor Zone for Climate Action) ³¹	Initiative launched by the Peruvian Presidency of COP20 alongside the Lima Paris Action Agenda to showcase commitments to climate action by cities, companies, subnational regions and investors in order to provide strong momentum to the climate talks at Paris in 2015	X			
UN-HABITAT	Cities and Climate Change Initiative ³²	Initiative that seeks to enhance the preparedness and mitigation activities of cities in developing and least developed countries. Emphasizes good governance, responsibility, leadership and practical initiatives for local governments, communities and citizens	X			X
World Bank	Low-Carbon, Livable Cities (LC2) Initiative ³³	Initiative that works with partners with focuses on planning and financing of low carbon development		X	X	X
World Resources Institute, C40, ICLEI	Global Protocol for Community-Scale GHG Emissions (GPC) ³⁴	Methodology that harmonizes greenhouse gas emissions measurement and reporting processes for cities and community-scale GHG emissions	X	X		

³¹ <http://www.climateaction.unfccc.int/about.aspx>

³² <http://www.unhabitat.org/urban-initiatives/initiatives-programmes/cities-and-climate-change-initiative/>

³³ <http://www.worldbank.org/en/topic/urbandevelopment/brief/low-carbon-livable-cities>

³⁴ <http://www.ghgprotocol.org/city-accounting>

[Table A3] Selected City Networks at the Regional Level, Asia-Pacific

Name	Type of Network	Network Size	Thematic Focus	Relevant Programmes
Asian Cities Climate Change Resilience Network (ACCCRN) ³⁵	Urban practitioners and institutions	449 individuals, 5 institutions (Bangladesh, India, Indonesia, Thailand, Vietnam)	Climate action, urban resilience, best practices	-
Asian Network of Major Cities 21 ³⁶	Municipal governments	13 capital cities/ metropolitan areas (13 countries)	Urban planning, sustainability, crisis management	-
CITYNET ³⁷	Municipal governments and other stakeholders	131 cities and institutions (19 countries)	Climate resilience, disaster risk reduction, infrastructure development, joint projects and best practices	Network of City Networks

³⁵ <http://accrn.net/>

³⁶ <http://www.anmc21.org/english/>

³⁷ <http://citynet-ap.org/>

[Table A4] Selected City Programmes and Initiatives at the Regional Level, Asia-Pacific

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
Asian Development Bank, GIZ ³⁸	Cities Development Initiative for Asia (CDIA) ³⁹	Regional initiative that cooperates with other existing city networks and provides direct technical assistance to cities and advisory support to link medium-sized cities to finance for infrastructure investments	X	X	X	X
Asia-Pacific Network for Global Change Research	Low Carbon Initiatives (LCI) Framework ⁴⁰	Supports regional research, capacity development and networking activities related to low carbon development through three approaches: regional-based research activities, capacity building activities, and communication and networking activities	X		X	X
CITYNET, Clean Air Asia, CDIA	Network of City Networks ⁴¹	Initiative to compile and coordinate city networks for the enhancement of collaboration among networks in Asia to scale up their efforts and efficiency	X			
ICLEI Japan, Ministry of the Environment (Japan)	Asia Low-Carbon Development Collaboration Platform ⁴²	Provides information to Asian government officials and enterprises on Japanese low carbon, environmental technologies; best practices via Japanese consulting firms; and support programs in line with the Joint Crediting Mechanism (JCM)	X	X		

³⁸ German Federal Ministry for Economic Cooperation and Development

³⁹ <http://cdia.asia/>

⁴⁰ <http://www.apn-gcr.org/programmes-and-activities/focused-activities/low-carbon-initiatives-framework/>

⁴¹ <http://cleanairasia.org/portal/node/2263>

⁴² <http://lowcarbon-asia.org/english/portal.html>

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
Institute for Global Environmental Strategies (IGES), National Institute for Environmental Studies Japan (NIES)	International Research Network for Low Carbon Societies (LCS-RNET) and Low Carbon Asia Research Network (LoCARNet) ⁴³	Aims to establish research capacity in the region based on South-South-North cooperation and to reflect research findings into actual policies through enabling a sufficient amount of dialogue between scientists and policy makers	X		X	
UN-HABITAT, UNEP	Sustainable Cities Programme-Asia (SCP-Asia) ⁴⁴	Provides capacity-building and institutional strengthening support based on the environmental planning and management (EPM) process to some 66 demonstration cities and their national partners in 10 cities in Asia	X	X	X	X

⁴³ <http://lcs-rnet.org/>

⁴⁴ http://www.fukuoka.unhabitat.org/programmes/detail04_03_en.html

[Table A5] Selected City Networks at the Regional Level, Europe

Name	Type of Network	Network Size	Thematic Focus	Relevant Programmes
Alliance in the Alps ⁴⁵	Municipal governments	265 municipalities members (7 Alpine countries)	Sustainable development, environmental protection, best practices	-
Alps-Adriatic-Alliance ⁴⁶	Municipal governments and other stakeholders	12 members (cities, counties and regions) (4 Alps-Adriatic countries)	Subregional cooperation, joint projects	-
Climate Alliance ⁴⁷	Municipal governments and other stakeholders	1711 members (25 countries)	Climate action, GHG emissions reduction, energy and transport, best practices	Covenant of Mayors, Mayors Adapt, CITIZENERGY, CITYinvest, SEAP_Alps, TURAS
Council of European Municipalities and Regions (CEMR) ⁴⁸	National associations of local and regional governments and other stakeholders	60 member associations (150,000 cities and regions) (41 countries)	Democracy and citizenship, resource efficiency and environment, regional cooperation and partnership, service provision, economic and social cohesion	Covenant of Mayors, Mayors Adapt, CITYinvest
Energy Cities ⁴⁹	Municipal governments and other stakeholders	1,000 cities and towns, municipal companies and agencies (30 countries)	Sustainable energy, joint projects and best practices	Covenant of Mayors, INFINITE Solutions

⁴⁵ <http://alpenallianz.org/en/about-us>

⁴⁶ <http://www.alps-adriatic-alliance.org/>

⁴⁷ <http://www.climatealliance.org/>

⁴⁸ <http://www.ccre.org/>

Name	Type of Network	Network Size	Thematic Focus	Relevant Programmes
EUROCITIES ⁵⁰	Municipal governments and other stakeholders	135 member cities (35 countries)	Culture, economy, environment, knowledge society, mobility, social affairs, cooperation	Covenant of Mayors, Mayors Adapt
European Federation of Agencies and Regions for Energy and the Environment (FEDARENE) ⁵¹	Local and regional energy agencies	59 member agencies and regions (17 countries)	Energy efficiency, best practices	ManagEnergy
METREX-the network of European Metropolitan Regions and Areas ⁵²	Municipal governments and other stakeholders	50 metropolitan regions and partners (21 countries)	Joint projects and best practices	-
Network of Associations of Local Authorities of South-East Europe ⁵³	National associations and other stakeholders	16 member associations (9000 local authorities) (12 South-East European countries)	Urban planning, solid waste and water management, sustainable tourism, energy efficiency, fiscal decentralization	-
Union of the Baltic Cities ⁵⁴	Municipal governments	90 cities (10 Baltic Sea countries)	Subregional cooperation, joint projects	-

⁴⁹ <http://www.energy-cities.eu/>

⁵⁰ <http://www.eurocities.eu/>

⁵¹ <http://www.fedarene.org/>

⁵² <http://www.eurometrex.org/ENT1/EN/>

⁵³ <http://www.nalas.eu/>

⁵⁴ <http://www.ubc.net/>

[Table A6] Selected City Programmes and Initiatives at the Regional Level, Europe

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
Climate Alliance, CEMR	CITYinvest ⁵⁵	Programme for supporting local and regional stakeholders in identifying innovative financing solutions for energy efficiency renovation in public buildings through local capacity building, training sessions and workshops and 3 pilot projects	X	X	X	X
Climate Alliance, Metropolitan City of Torino, multiple parties	Sustainable Energy Action Plans (SEAP) Alps ⁵⁶	Programme for promoting energy planning at the local level by sharing a common methodology among participants with a special emphasis on mitigation and adaptation measures and capacity building in the Alps	X			X
Climate Alliance, multiple parties, research institutions	Transitioning towards Urban Resilience and Sustainability (TURAS) ⁵⁷	Initiative for enhancing climate change-related urban resilience and sustainability in 12 participating urban regions by bringing together local authorities, small and medium-sized enterprises and academic institutions that will collectively develop new visions, strategies, spatial scenarios and guidance tools	X		X	X
European Commission, DG Energy, multiple parties	Covenant of Mayors ⁵⁸	Mainstream European movement involving local and regional authorities (currently with 6,455 signatories), voluntarily committing to energy efficiency and use of renewable energy sources on their territories, and committing to meet and exceed the EU 20% CO ₂ reduction objective by 2020 through individual Sustainable Energy Action Plans	X			X

⁵⁵ <http://www.ccre.org/en/activites/view/39>

⁵⁶ <http://seap-alps.eu/hp2/Home.htm>

⁵⁷ <http://www.turas-cities.org/>

⁵⁸ http://www.covenantofmayors.eu/index_en.html

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
European Commission, Covenant of Mayors, multiple parties	Mayors Adapt ⁵⁹	Initiative for engaging cities in taking action to adapt to climate change, in which cities signed up (currently 121) commit to contributing to the EU Adaptation Strategy by developing a comprehensive local adaptation strategy or integrating climate change adaptation into relevant existing plans	X			X
European Commission DG CLIMA	Climate Adapt ⁶⁰	Platform for users (countries, regions and towns) to access and share data and information on climate action, transnational adaptation strategies and options and tools that support adaptation planning	X			
European Commission Intelligent Energy Europe (IEE), Climate Alliance, multiple parties	CITIZENERGY ⁶¹	Regional crowdfunding platform for renewable energy that promotes the European-wide transfer of business models and helps finance renewable energy projects while identifying barriers to citizen investment; plans to pilot 6 new renewable projects in 6 European countries by 2017		X	X	X
European Commission Intelligent Energy Europe (IEE), Energy Cities	Innovative Financing for Local Sustainable Energy (INFINITE) Solutions ⁶²	Programme that carries out peer coaching activities aimed at developing the financial expertise of local staff and at replicating two proved financial schemes from Stuttgart, Germany, and Delft, Netherlands, in 9 different cities (4 cities focused on creating a revolving fund linked to internal contracting and 5 focused on soft loans)	X	X	X	X

⁵⁹ <http://mayors-adapt.eu/>

⁶⁰ <http://climate-adapt.eea.europa.eu/cities>

⁶¹ <http://citizenergy.eu/citizenergy/site/project?e=e7s1>

⁶² http://www.energy-cities.eu/spip.php?page=infinitesolutions_en

By	Name	Description	Info Sharing/ Communications	Technical Assistance	Analytical Studies	Capacity Building
European Commission Intelligent Energy Europe (IEE), FEDARENE	ManagEnergy ⁶³	Initiative for providing technical support to local and regional actors in the public sector in the field of energy efficiency and renewable energy through training workshops, case studies and online events	X	X		X
ICLEI Europe	Cities for Climate Protection ⁶⁴	Campaign for cities and towns in Europe that provides tools and methodology to assist in the reporting of emissions to the Covenant of Mayors	X	X		
ICLEI Europe, City of Aalborg	European Sustainable Cities Platform ⁶⁵	Platform for cities and towns in Europe to share sustainability information and initiatives, events and best practices	X			
METROPOLIS, EuroCities, UCLG	Climate-METROPOLE+ ⁶⁶	Initiative intended to exchange and generate knowledge on different measures and political and technical elements to governance strategies and actions for climate change adaptation in water cycle management, transportation, municipal waste and environmental stewardship in Barcelona, Marseille and Berlin	X	X	X	X

⁶³ <http://www.managenergy.net/>

⁶⁴ <http://www.iclei-europe.org/ccp>

⁶⁵ <http://www.sustainablecities.eu/>

⁶⁶ <http://www.metropolis.org/initiatives/climate-metropole>