NORTH-EAST ASIAN SUBREGIONAL PROGRAMME FOR ENVIRONMENTAL COOPERATION

(Draft) NEASPEC Strategic Plan 2016-2020

NEASPEC Secretariat

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NEASPEC Strategic Plan 2016-2020

1. Introduction

North-East Asian Subregional Programme for Environmental Cooperation (NEASPEC) was established in 1993 as a subregional follow-up to the United Nations Conference on Environment and Development. As a comprehensive intergovernmental cooperation framework in North-East Asia with membership of six countries: China, Democratic People's Republic of Korea (DPRK), Japan, Mongolia, Republic of Korea (ROK) and the Russian Federation, NEASPEC has adopted a multi-disciplinary and multi-sectoral approach to address transboundary environmental issues as well as issues of common concerns in the subregion.

The Framework for NEASPEC adopted at the third Senior Officials Meeting (SOM-3) in 1996 sets out the principal objective of the Programme as "to promote subregional environmental cooperation and sustainable development efforts for enhancement of quality of life and well-being of present and future generations in line with the spirit of United Nations Conference on Sustainable Development (UNCED)". Furthermore, the Vision Statement for NEASPEC adopted at SOM-6 in 2000 calls on member States to "promote common policy dialogue on approaches and views and coordinated actions on subregional environmental issues".

In addition to the above, member States recognized the need of a long-term vision for NEASPEC and agreed on the development of a long-term strategic plan during SOM-18. Under the recommendation of SOM-19[1], the 2016-2020 Strategic Plan therefore aims to provide long-visioned directions and approaches of NEASPEC to effectively and efficiently address the following programme areas mutually identified by its member States as the priority areas of the subregion:

- Transboundary Air Pollution
- Nature Conservation
- Marine Protected Areas
- Climate Change and Low Carbon Cities
- Desertification and Land Degradation

The Plan keeps in mind the need to integrate economic, social and environmental aspects and to recognize their interlinkages, as emphasized in the outcome document of the UNCSD in 2012 (Rio+20) and supports the achievement of Sustainable Development Goals.

[1] SOM-19 emphasized on a number of points including the consideration of the subregion's uniqueness and NEASPEC's comparative advantages; the focus on practical and action-oriented activities, and the current programmatic areas with a view of properly addressing persistent challenges; and the need to avoid duplication and strengthening partnership with relevant mechanisms.

2. Subregional Context of the Programmatic Areas

2.1. Transboundary Air Pollution

Most member countries in North-East Asia have made significant progress in reducing sulfur oxide (SO_x) with improved policy and technical responses, however other pollutants including those from non-point sources, became an issue of concern. These include fine particulate matter (PM), nitrogen oxide (NO_x), ground-level ozone, volatile organic compounds (VOCs), etc. Furthermore, long-range movement of air pollution, crossing national borders and local borders, has also limited the effects of local and domestic policies on air pollution and become a major challenge of air quality management. In this connection, North-East Asian countries have been strengthening bilateral and multilateral cooperation through mechanisms including NEASPEC, Long-range Transboundary Air Pollutants (LTP) in North East Asia and Acid Deposition Monitoring Network in East Asia (EANET), each with different memberships and programmatic focuses.

In the course of launching NEASPEC, transboundary air pollution was identified as one of the top priorities of collaboration by member States. Responding to this challenge, NEASPEC with the support of the Asian Development Bank (ADB), carried out projects on mitigation of transboundary air pollution from coal-fired power plants in North-East Asia in three phases during 1996-2011. Meanwhile, LTP and EANET have provided platforms for national experts and government officials to facilitate collaboration to improve and bridge scientific knowledge among participating countries.

However, a joint review by national experts in NEASPEC member States noted the lack of subregional frameworks to provide a holistic approach covering all components of transboundary air pollution management, including science-to-policy linkages. Based on this assessment, the review highlighted the following recommendations for strengthening subregional cooperation:

- Develop a subregional strategy for addressing transboundary air pollution in North-East Asia and a cooperation framework that would take into account the identified gaps, building on experience and capacity of existing mechanisms;
- Implement a holistic program of transboundary air pollution regulation including control of all main pollutants, air quality monitoring and emissions data gathering, atmospheric modeling, impact assessment on health and ecosystems, and an effective emissions abatement strategy;
- Strengthen connections between research and policy, and provide a channel for open and effective exchange of knowledge and data among members; and
- Address the air pollution-climate interaction while tackling short-lived climate pollutants (SLCPs)

2.2. Nature Conservation

North-East Asian countries are home to many critically endangered species, a lot of which have extensive range habitats across countries. Furthermore, more than 100 protected areas have been established along international borders in the subregion and about two dozens of protected areas adjoin its neighboring protected areas across national borders. As transboundary areas are relatively undisturbed by human activities, ecosystems in these areas often become key habitats and extend over domestic protected zones and beyond the political borders. This distinctive nature of transboundary areas provides the only habitats to sustain the few remaining wild populations of large animals while the political border limits the scope and impact of management by each country. Thus, transborder habitats are in need of multilevel and multilateral cooperation among countries to effectively manage and conserve the habitats and their biodiversity.

All six North-East Asian countries are part of the East Asian-Australasian Flyway which connects breeding grounds, stop-over sites and wintering grounds from North-East Asia to South-East Asia and Australia. It has numerous endangered and threatened species and is the world's most threatened flyway amongst eight international flyways for migratory birds , pressured by rapid development of land and coastal areas causing serious habitat loss and degradation.

In this connection, NEASPEC identified six flagship species, namely, Amur tiger (*Panther tigris altaica*), Amur leopard (*Panthera pardus orientalis*), Snow leopard (*Panthera uncia*), Black-faced Spoonbill (*Platalea minor*), White-naped Crane (*Grus vipio*), and Hooded Crane (*Grus monachus*) to mobilize joint efforts for the conservation of the species as well as their habitats. These species do not necessarily inhabit the territories of all NEASPEC member countries. However, each species is one of the key species that constitutes the subregion as one ecologically borderless community, and together can be regarded as flagship species of North-East Asia. Their ecological characteristics have significant potential in bringing multilateral actions to conserve wider habitats and biodiversity. With the identification of the flagship species, NEASPEC member States adopted the Nature Conservation Strategy in 2007, calling upon member States to initiate subregional actions and to take into account the agreed strategy to facilitate the formulation of national policies. With the comprehensive review and discussion among national experts, as of 2015, NEASPEC has been implementing two projects, namely (1) conservation and rehabilitation of habitats for key migratory birds in NEA with special emphasis on cranes and black-faced spoonbills and (2) study on transborder movement of Amur tigers and leopards using camera trapping and molecular genetic analysis.

2.3. Marine Protected Areas

Whilst undergoing rapid development, North-East Asian countries are facing the challenge of managing the ecological integrity of marine and coastal environment as well as the sustainable management of marine resources. Coastal areas of North-East Asian seas, in particular, along the

Yellow Sea, are the most highly populated in the world and heavily impacted by increasing economic activities. Four North-East Asian countries, i.e. China, Japan, ROK and the Russian Federation are the key players in capture fisheries, with combined share of about 30 percent of the world's capture fisheries. The three counties excluding the Russian Federation are also major players in aquaculture production, among the top 15 producers of the world. Furthermore, many intertidal flats in the Yellow Sea and the East China Sea, providing essential nursery and fishing grounds, are internationally important wetlands as key habitats of migratory birds and provide important ecosystem services as well as livelihoods. Management practices of marine and coastal environment have not been adequate to address those often conflicting ecological and economic requirements and adverse impacts of economic activities.

In this connection, Marine Protected Areas (MPAs) play a catalytic role in conserving representative samples of biological diversity and associated ecosystems for long-term viability of marine environment. MPAs protect ecologically critical sites from human activities for reproduction and growth of species, provide focal points/reference sites for education and research on marine environment, and provide grounds for nature-based tourism and other economic activities. For these reasons, North-East Asian countries have established a large number of MPAs at various administration and legislations with significant variations in terms of characteristics, purposes, institutional settings and regulations in each country's MPAs.

Given the complexity and interlinkages of anthropocentric impacts of marine and coastal environment, expected role and challenges of MPAs go beyond the conservation of marine species within designated areas. For instance, while establishment of ecological network of MPAs could enhance the resilience of marine ecosystem, establishment and sustainable management of MPAs often require reconciling of the economic and conservation interests, involving various stakeholders. MPAs in the North-East Asian countries may share similar experiences and challenges despite their variation in size and other attributes described above.

In this context, to strengthen roles of MPAs in the management of marine biodiversity through knowledge sharing, awareness raising and capacity building at the subregional level, NEASPEC launched the North-East Asia Marine Protected Areas Network (NEAMPAN) in 2013 with 11 target MPA sites in China (6), Japan (1), Republic of Korea (2) and the Russian Federation (2).

2.4. Climate Change and Low Carbon City

The global carbon concentration in the atmosphere crossed the 400 ppm milestone in March 2015 while there was a positive signal of breaking-up the link between energy-related CO_2 emissions and economic growth with no increase in the level of 2014 emissions from the preceding year. North-East Asia has a significant role in determining the current level of global greenhouse gases (GHG) emissions as the subregion encompasses four of the top 10 global GHG emitters and shares almost one-third of the world's emissions. The halt in the annual emission growth was also made possible with changing

patterns of energy consumption in China, in particular, greater generation of electricity from renewable sources. In this regards, cities are critical in mitigating GHG emissions as they are a major source of emissions as well as the testing ground of new and innovative policies such as green transport and building. Furthermore, the current rate of urbanization and the high demand of urban renewal and regeneration in North-East Asia provide both central and municipal governments with the opportunity to avoid lock-in effects of energy and carbon intensive urban system, in particular, infrastructure, by incorporating low-carbon concept from planning of the system. Considering both roles of cities as key emission sources and policy testing ground, many North-East Asian countries have developed and implemented policies to promote low-carbon cities. Such policies include low carbon pilot city programme of China, Low carbon city promotion act and Eco-model city programme of Japan, Low Carbon, Green Growth Act and Climate model city programme of the Republic of Korea. Under such initiatives, various plans, policies and programmes have been in place across cities with each country and city taking a different approach.

LCC Initiatives and programmes in North-East Asia

China	Japan	Republic of Korea
Based on carbon intensity per GDP 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)	*Based on the absolute reduction target* Kyoto: 40% (1990-2030) Toyama: 30% (2005-2030) Kitakyushu: 30% (2005-2030) Yokohama: 30% per capita (2004-2025) Minamata: 33% (2005-2020)	Seoul: 25% (absolute reduction, 2005-2020) Suwon: 20% (absolute reduction, 2005-2020) Kangreung: 49% (BAU, 2020) Jeju: 41% (BAU, 2020) Kwangju: 40% (BAU, 2020)

Meanwhile, at regional and international levels, a number of networks and programmes have been established across the civil and academic communities to support and accelerate this movement. These include local governments and cities networks such as the ICLEI-Local Governments for Sustainability, C40 Cities Climate Leadership Group (C40), and Asian Cities Climate Change Resilience Network (ACCCRN). In this connection, NEASPEC member States at SOM-19 in 2014 reviewed the benefits of subregional cooperation on low carbon cities and endorsed the establishment of the North-East Asia Low Carbon City Platform, which would support communication, information sharing, joint studies and capacity building among major stakeholders working on low carbon cities.

2.5. Desertification and Land Degradation

Desertification and land degradation has been a significant problem in North-East Asia, not only affecting the environment but also threatening both irrigated and rain-fed agricultural land and

rangelands, where the livelihoods of more than half of the population in the subregion depend. In particular, desertification threatens over 25 percent of landmass (approximately 2.6 million km^2) in 18 provinces, affecting more than 400 million people in China, and 77 percent of territory and almost 90 percent of its pastureland in Mongolia. Democratic People's Republic of Korea (DPRK) also faces serious deforestation and land degradation, which diminishes agricultural productivity through water infiltration and soil erosion. Dust and sandstorms (DSS) originated in China and Mongolia as a result of degraded land and encroaching deserts is causing damages not only close to the dust-source areas, but also hundreds and even thousands of kilometres downwind of the dust-source areas, thereby becoming a major issue of subregional environmental externalities.

In recognition of the serious threat of desertification and land degradation, countries have undertaken various bold policies and programmes including the Law on Prevention and Control of Desertification and National Plan on Desertification Prevention and Control (2011-2020) of China, the Green Wall Programme 2005-2030, the National Action Plan to Combat Desertification (2010) and Law on Soil Protection and Combating Desertification of Mongolia, and the Long-term National Plan for Forest Development (1990-2020) and National Action Plan to Combat Desertification and Land Degradation in DPRK (2006-2010) of DPRK. At the subregional level, countries have cooperated on desertification control through intergovernmental mechanisms as well as a large number of joint activities by civil society.

In this connection, NEASPEC has supported collaboration of member countries to share information and build policy and technical capacity of Mongolia under the Regional Master Plan for the Prevention and Control of Dust and Sandstorms in North-East Asia developed in 2005 by ADB, UNESCAP, UNEP and UNCCD in collaboration with four NEASPEC member countries, i.e., China, Mongolia, Japan and the ROK. Furthermore, NEASPEC has facilitated various stakeholder groups to develop North-East Asia Multi-stakeholder Plan (NEAMSP) on Combating Desertification and Land Degradation in July 2015 in order to share information of DLD–related activities among the stakeholders, build partnership and enhance efficiency of the activities.

3. Strategic Goals and Approaches

3.1. Goals

(a) Enhance coordinated actions to address borderless environmental challenges
(b) Mobilize mutual support to manage domestic environmental issues in member States
(c) Contribute to the implementation of national, regional and global goals for sustainable development, in particular, Sustainable Development Goals

3.2. Approaches

(a) Strengthen the development and implementation of multi-disciplinary and multi-sectoral programmes

(b) Operate effective platforms and networks for member governments and other major stakeholders to enhance subregional environmental cooperation and coordinated actions
(c) Focus on joint actions to maximize the efficiency and impact of subregional cooperation
(d) Support knowledge sharing and capacity development among member governments and other stakeholders
(e) Identify and enhance potential linkages between subregional programmes and regional and global goals

4. Strategy for Priority Programme Areas

4.1. Transboundary Air Pollution

- **Objectives:** By 2020, fully operationalize a subregional framework on transboundary air pollution to facilitate information sharing, joint study and cooperation among Member States.
- **Activities:**
    - Support collaboration among national institutions on modelling on source-receptor relationship of transboundary air pollution, policy scenarios, impact assessment, etc., to strengthen the science-policy linkage;
    - Support the exchange of emission data to fill the existing gaps in global and regional emission inventories;
    - Promote wider participation of stakeholders in subregional cooperation on air pollution; and
    - Liaise with multilateral, regional and global mechanisms on transboundary air pollution and develop partnership activities

4.2. Nature Conservation

- **Objectives:** By 2020, implement joint plans or projects for all target species under the NEASPEC Nature Conservation Strategy with enhanced and strengthened transboundary cooperation among all stakeholders.
- **Activities:**
    - Implement the strategy for habitat conservation and rehabilitation of White-naped Cranes, Hooded Cranes, and Black-faced Spoonbills
    - Strengthen linkages between policy framework and scientific basis, and improve harmonization of data, methods and techniques, to conserve Amur tigers and leopards in transboundary areas in North-East Asia;
    - Strengthen bilateral and multilateral, and multi-level cooperation and capacity with a particular focus on supporting information exchange and joint study among national stakeholders
    - Support coordination among major stakeholders to improve existing transboundary ecological corridors and facilitate the establishment of transboundary protected areas
    - Promote dialogue and cooperation among stakeholders on biodiversity-related Sustainable Development Goals

4.3. Marine Protected Areas

- **Objectives:** By 2020, fully operationalize NEAMPAN to support partnerships among target MPAs and stakeholders, and enhance capacity to achieve, inter alia, the Aichi Biodiversity Targets related to marine and coastal biodiversity in a holistic manner.
- **Activities:**
    - Facilitate the sharing and exchange of knowledge, information, experiences and practices with regard to strengthen MPA management effectiveness;
    - Create partnerships that can provide targeted capacity-building and technical assistance in support of on-the-ground implementation priorities;
    - Enhance interactive communication among policy makers, scientific community and local stakeholders in NEASPEC in light of ecological network of MPAs;
    - Monitor progress on Aichi Biodiversity Targets related to marine and coastal biodiversity in NEASPEC countries;
    - Facilitate multi-sectoral and multi-stakeholder communication network at local and sub-regional/regional levels and across subregion/region
    - Share experiences in achieving a balance between the conservation and sustainable use of marine biodiversity, and promoting flexible and diverse approaches towards this end

4.4. Climate Change and Low Carbon Cities

- **Objectives:** By 2020, fully operationalize a subregional platform for low carbon cities to support communications and cooperation among stakeholders, and link cities and major stakeholders both within and beyond the subregion and promote awareness and capacity
- **Activities:**
    - Facilitate information sharing and communications with regard to subregional LCC progress, case studies, relevant activities, platform events and publications, etc.;
    - Enhance provision of technical assistance by linking, mobilizing and connecting peers and experts to review and analyze city's LCC approach, as well as providing recommendations and technical support;
    - Conduct analytical studies to identify gaps, generate practical knowledge and address specific for LCC development in North-East Asian context; and
    - Promote capacity building by matching the demand and supply of knowledge and experiences especially within the subregion to enhance local capacity and enable first-hand experiences to be shared

4.5. Desertification and Land Degradation

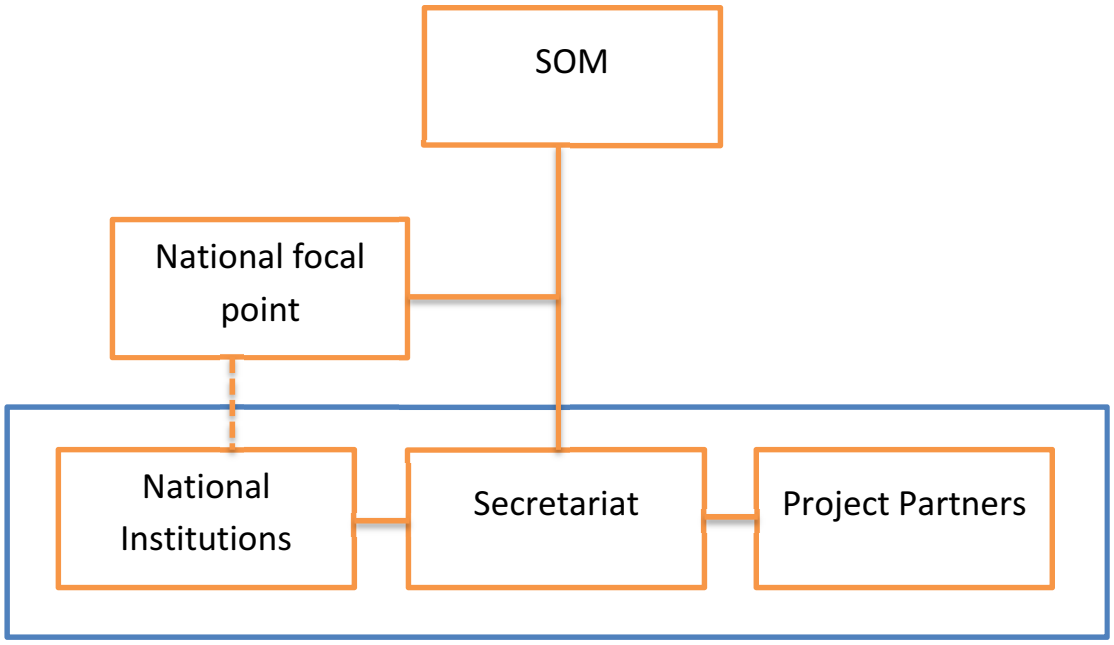
- **Objectives:** By 2020, implement a number of partnership projects recommended by the North-East Asia Multi-stakeholder Plan (NEAMSP) on Combating Desertification and Land Degradation for more coordinated and efficient actions in combating desertification amongst key stakeholders.
- **Outcomes and Activities:**
    - Map activities and capacity in the subregion to coordinate, complement and enhance efficiency of DLD–related activities carried out by key stakeholders in North-East Asia;
    - Develop and maintain an open subregional network that addresses the multidisciplinary aspects and impact of DLD;

- Build partnerships, joint activities, and mobilizing financial and technical resources for NEAMSP partners; and
- Promote subregional DLD actions under wider sustainable development context in connection with the SDGs

5. Strengthening Institutional Support

5.1. Overall Direction

- Increase ownership of member States by encouraging participation of national institutions and other stakeholders in programme development and implementation
- Strengthen linkages and coordination with other relevant initiatives of member States for enhanced effectiveness and potential upscaling of programmes



5.2. Senior Officials Meeting

- Improve the effectiveness of its primary function as the governing body of NEASPEC by ensuring senior level participation and regularizing the annual session
- Promote SOM as a key subregional platform for joint review and dialogue among major stakeholders on subregional environmental cooperation

5.3. Secretariat

- Simultaneously strengthen the secretariat capacity and national capacity of subregional cooperation by the secondment of national experts to the Secretariat
- Supplement the secretariat capacity by encouraging engagement of the research and coordination by national institutions for programme development and implementation

5.4. Working Groups of National Institutions

- Identify key national institutions as members of a working group in each programmatic area to promote regular consultations and enhance ownership of member States over NEASPEC
- Provide mandates and financial resources to the national members of each working group for programme development and implementation
- Encourage national institutions to initiate NEASPEC projects and/or link national projects with NEASPEC if such projects have subregional or multilateral dimensions.

5.5. Financial Resources

- Improve financial resources of NEASPEC by scaling up and making more stable and predictable national contributions to the Core Fund
- Mobilize financial resources and in-kind contributions from national donor agencies and ministries for projects
- Build partnership with national and international institutions, and civil society organizations to diversify the modality of financial and in-kind contributions
- Encourage participation of stakeholder groups and self-financing of beneficiaries to participate in the programme.