



澜沧江-湄公河环境合作中心
Lancang-Mekong Environmental Cooperation Center

Newsletter

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Young Entrepreneurs Dialogue on Climate Resilient Infrastructure Innovation in the Lancang-Mekong Region Experts' Opinions

On April 21, 2022, Young Entrepreneurs Dialogue on Climate Resilient Infrastructure Innovation in the Lancang-Mekong Region, a branch of the “Green Lancang-Mekong Initiative: Roundtable Dialogue on Green, Low-carbon and Sustainable Infrastructure”, was held in Beijing in the form of hybrid meeting. The meeting was hosted by the Lancang-Mekong Environmental Cooperation Center (LMEC) / the Foreign Environmental Cooperation Center (FECO) of the Ministry of Ecology and Environment (MEE) and supported by UNICEF. Nearly 200 representatives from the climate or environment authorities of the Lancang-Mekong countries, regional and China-based agencies of UNICEF, enterprises, relevant international organizations, and research institutes attended the meeting.

During the conference, exchanges and discussion are conducted on challenges and opportunities of climate-resilient infrastructure development, the importance of resilient infrastructure for vulnerable people such as children to cope with climate change, practical cases of climate-resilient infrastructure projects, actions and contributions of young entrepreneurs to help with climate change mitigation and adaptation, the co-construction of the Knowledge Hub for South-South Cooperation on Climate Change, etc. The views of relevant experts are summarized as below.

Sae-Ryo Kim

Senior Advisor of Public Partnerships Section, UNICEF



Climate change poses a serious challenge to all mankind, and the current raging COVID-19 pandemic is hindering economic development while increasing poverty and inequality. As a result of the pandemic, by the end of 2020, 117 million more children were living in poverty globally. Promoting green, low-carbon and sustainable development in the region has become a common demand of the whole society, including governments, the private sector and civil society groups. Developing quality and reliable, sustainable and resilient infrastructure will not only promote economic recovery, enhance people's well-being and promote social equity, but will also strengthen the social well-being and climate resilience of communities, families and children. As part of the Young Entrepreneurs Dialogue Series, we expect business representatives to actively share practical cases and concrete proposals for climate action in the infrastructure sector, and to foster more positive climate action and cooperation.



Dr. Brooke Yamakoshi
Water, Sanitation and Hygiene Specialist,
East Asia and Pacific Regional Office, UNICEF

About 92% of disasters in the Asia-Pacific region are climate-related, and the scale and number of disasters such as floods, droughts, heat waves, tornadoes, and typhoons are still increasing due to climate change impacts. In the coming decades, about 200 million children are expected to be affected by climate change every year, especially those in poor and vulnerable families. Therefore, it is urgent to help children cope with environmental and climate challenges through improved community infrastructure. When promoting the development of resilient infrastructure, we need to consider how it is managed, who will benefit from it, and how it can bring more benefits to people, and we need to involve more children and young people in the policy-making process, having their opinions and voices heard.

YU Zhihong
President / Chief Editor, China Sustainability Tribune



There is an urgent need to respond to climate change, and what we need are "mitigation" and "adaptation". At present, the global awareness of and attention paid to climate change are increasing, but climate action is mostly focused on climate mitigation, and investment and action on climate adaptation still need to be strengthened. Besides, to promote the development of climate-resilient infrastructure in the Lancang-Mekong region requires both sustained financial support and innovative ideas and technologies such as nature-based solutions (NbS). In the future, we need to further promote knowledge and experience sharing on regional and global responses to climate change, especially the sharing of best practical cases on addressing climate change at the national level, and actively promote joint regional responses to climate change.



ZHOU Ying
Associate Research Fellow,
Lancang-Mekong Environmental Cooperation Center /
Foreign Environmental Cooperation Center, MEE

Addressing regional climate risks through infrastructure improvements is an important direction for global climate governance. Infrastructure contributes 79% of global greenhouse gas emissions, and low- and middle-income countries lose USD 390 billion annually in infrastructure due to climate change impacts. It is predicted that between 2010 and 2050, approximately 88% of global climate adaptation funding will be spent on infrastructure. Climate-resilient infrastructure plays a pivotal role in addressing climate change. Therefore, the Foreign Environmental Cooperation Center, Ministry of Ecology and Environment actively promotes the construction of the Knowledge Hub for South-South Cooperation on Climate Change, focusing on sustainable infrastructure, climate innovation networks, and NbS to enhance regional climate change adaptation and mitigation capacities and promote knowledge sharing on climate-resilient infrastructure.



LIN Fanyuan

Director of the Chinese Overseas Investment, AECOM

Different organizations have different definitions of climate-resilient infrastructure, but they are all based on the whole life cycle of infrastructure, covering the whole process of design, construction, management and demolition. AECOM focuses on the design phase of the infrastructure. For example, for the saltwater desalination project in Singapore, AECOM focuses on the climate resilience of the infrastructure from the design phase to ensure a continuous supply of fresh water for the surrounding residents even in extreme weather conditions such as drought. In addition, the project also adopted NbS at the beginning of the design phase to build a natural system of rainwater treatment mechanism, by naturally filtering pollutants from rainwater through the roof garden, and filtering eutrophic materials through 3 different layers of plant substrate.



WANG Sudan

Senior Economist of the Department of Strategic Development and Synergy Management, China Machinery Engineering Cooperation

China Machinery & Engineering Corporation (CMEC) has constructed integrated system-based renewable energy projects such as natural gas-fired power generation, wind power, photovoltaic generation, hydropower and biomass power generation in Nigeria, Pakistan and Serbia, improving local energy and power supply problems while reducing CO2 emissions and supporting local energy transition and sustainable development. By building water supply systems, constructing hospitals and clinics, renovating the transportation infrastructure, etc., CMEC also provides communities with safe and clean drinking water, reduces the spread of diseases, improves local public health, increases the efficiency of food transportation and trade, and effectively improves community living standards and climate change resilience.



Lyn

Regional General Manager, CHINT Global

Currently, Myanmar's power system mainly relies on hydropower, thermal power and diesel power generation. However, its hydropower is often restrained by the dry season, and thermal power and diesel power generation have environmental pollution problems such as greenhouse gas emissions. Therefore, Myanmar needs to develop more stable and cleaner renewable power. CHINT Global is actively exploring a project development model that suits Myanmar's national conditions, with the abundant local light resources, to vigorously promote photovoltaic power generation and explore overall solutions for photovoltaic systems and integrated energy solutions such as energy storage, distribution and sales, and microgrids, so as to support energy conservation, carbon reduction and energy transformation while ensuring stable power supply, and promote sustainable development of local energy and power systems.



LV Cathy
China Director, Ramboll Studio Dreiseitl

To address the risks of water scarcity, flooding, and water pollution, Ramboll Studio Dreiseitl focuses on creating sustainable public spaces that are closely integrated with the natural environment, taking into account the integration of infrastructure with humanity and nature, and providing cities with the best solutions for climate-resilient infrastructure to effectively address the challenges of climate change. For example, by summarizing different types of water systems in urban and landscape spaces, the company creates waterfront landscapes that are integrated with nature; by using the concepts of "rainwater use" and "sponge cities", the company creates pleasant and comfortable spaces at the edge of cities and abandoned land through ecological purification communities. This will not only save communities' water expenses, but also effectively reduce the drainage pressure of rainfall on the surrounding urban areas and enhance the city's flood prevention and capabilities to respond to climate disasters.

LV Weiju
International Development Project Manager,
Meihua Environment Engineering Co. Ltd



In terms of enhancing the climate resilience of infrastructure, Meihua Environmental Engineering Co., Ltd adopts relevant international standards to assess the impacts of extreme weather conditions on infrastructure such as wind power plants, and designs risk management tools to provide system solutions to improve the climate resilience of infrastructure. In terms of promoting the sustainable development of society, the project design takes into account challenges such as the aging population and aging infrastructure at the very beginning, while providing practical solutions for communities to cope with climate hazards, so as to facilitates climate-resilient infrastructure construction and sustainable community development.



ZHANG Yan,
Partnership Specialist, UNICEF

With one billion children worldwide at climate risk, climate change policies need to be more protective of children's rights. In order to help children better cope with the practical challenges brought by climate change, UNICEF is promoting climate-smart schools, exploring the construction of low-carbon schools and low-carbon communities, and promoting the design, construction and operation and maintenance of climate-resilient infrastructure, while incorporating child protection throughout the process. UNICEF is working with the Foreign Environmental Cooperation Center, Ministry of Ecology and Environment to establish the "Climate Innovation Network" to promote youth participation in climate action through capacity building and dialogue, support young entrepreneurs to provide innovative technologies and solutions for climate mitigation and adaptation and help to explore the best solutions and practices to address climate change.

WANG Hongtao
**Associate Professor, College of Environmental
Science and Engineering, Tongji University**



A key part in addressing climate change is to balance the water-energy-land relationship. In recent years, China has made many attempts in coordinately promoting the management of traditional environmental pollution problems and addressing climate change, and has achieved positive progress. However, some advanced technologies still face practical challenges in the promotion and application process, for instance, taking too much land space, unstable energy supply, water environment management, etc. It is hoped that in the future, enterprises will fully consider the comprehensive coordination of water-energy-land in the process of promoting good cases and advanced technologies, expand the scenarios for best practice application, and better promote regional sustainable development.



SHEN Yiyang
Director of the Inclusive Development Research Center

Cooperation networks such as the Regional Comprehensive Economic Partnership (RCEP) have created a new platform for connecting the Lancang-Mekong region to the globe, providing tremendous opportunities for green and low-carbon infrastructure investment in the region. However, the current low-carbon infrastructure investment and business models are too simplistic in the region, and there is insufficient incentive to promote innovative and good solutions. It is hoped that in the future, enterprises from different countries will make full use of regional cooperation platforms such as the Lancang-Mekong Environmental Cooperation Center to contribute more practical and innovative solutions to jointly promoting regional low-carbon and sustainable development.

ZHOU Yiqi
**Senior Manager, Partner Relations and Cooperation,
German Agency for International Cooperation**



Promoting regional sustainable development requires the participation of various stakeholders. As one of the core areas to promote sustainable development in the region, infrastructure has always been a key concern for all stakeholders. GIZ has carried out numerous practices and accumulated a lot of experience in promoting sustainable infrastructure and hopes to cooperate with partners in the field of sharing good cases of sustainable infrastructure through South-North-South triangular cooperation to promote regional knowledge sharing.



LI Xia
Director / Research Fellow,
Lancang-Mekong Environmental Cooperation Center /
Foreign Environmental Cooperation Center, MEE

Exploring a regional pathway to address climate change requires to raise the awareness of climate change impacts of all sectors of society, and seek practical solutions based on the current situation of each country. In recent years, the Lancang-Mekong countries have been actively exploring sustainable development models in the production and consumption chains, and have achieved many good results in practice, but their commercialization and sustainable application still need more policy support from regional countries. The Lancang-Mekong Environmental Cooperation Center has always been sticking to its original aspiration of improving regional environmental management capacity, and pragmatically promotes the construction of regional joint laboratories, as well as that of urban environmental pollution control infrastructure and other demonstration cooperation, making effective contributions to regional sustainable development. In the future, Lancang-Mekong Environmental Cooperation Center will remain true to the original aspiration of pragmatic cooperation, and work with all parties to promote green, low-carbon and sustainable development in the region.

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About LMEC: Lancang-Mekong Environmental Cooperation(LMEC), established in 2017 in Beijing, China, aims to boost the capacity of environmental governance of each country and achieve regional sustainable development through the promotion of environmental cooperation among the Lancang-Mekong Countries.