# Asia Pacific Climate Service Workshop 2021

## Climate Service for Resilience and Sustainable Development Towards A Net Zero Emission World



## **First Announcement**

21-22 October 2021, 09:00-17:30 (UTC +8, Taipei, Taiwan)/ 01:00-09:30 (UTC)

Virtual conference via Cisco Webex (Live Stream via YouTube)

The well-known adage "climate is what you expect and weather is what you get" clarifies the difference between the climate and weather. Climate information services prepare users for the weather they will actually experience. Climate services provide climate information in a way that assists decision making by individuals and organizations. Such services require appropriate engagement along with an effective access mechanism and must respond to user needs."

- GFCS/WMO









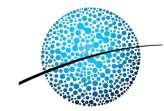
## **Organizers**



#### **Central Weather Bureau (Host)**

Central Weather Bureau (CWB) is the central government meteorological research and forecasting institution of Taiwan, distinctively taking the responsibility for meteorological, seismological,

and related marine and astronomical operations of the nation by making meteorological observations, reporting on marine meteorological conditions, and conducting research into seismology and providing earthquake reports. CWB provides all kinds of meteorological information and services to government agencies and general public. CWB is headquartered in Taipei City and is administered under the Ministry of Transportation and Communications.



#### **APEC Climate Center (Co-host)**

APEC Climate Center (APCC) is established in 2005 with the unanimous endorsement and warm welcome of APEC senior officials and leaders. The mission of APCC is to enhance the socio-economic

well-being of member economies by utilizing up-to-date scientific knowledge, applying innovative climate prediction techniques, and promoting application of climate information through various programs for capacity building and reducing climate risks in the region. Since its establishment, APCC has played an important role in the region in providing climate information products and services based on a multi-model ensemble prediction system.



#### **Chung-Hua Institution for Economic Research (Co-host)**

Chung-Hua Institution for Economic Research (CIER) is founded by the Taiwan government in 1981, serving as a national policy think-tank for making major economic policy recommendations, for which it has

gradually gained prestige and recognition in the last 40 years. As globalization in the economic and industrial sectors has proceeded, CIER has had to represent the country in conducting exchanges with international policy think-tanks. CIER has also engaged in further consolidating the academic foundation of policy research by carrying out economic analysis of policy issues related to government and industries. By playing as a platform for exchange among academia, government, and industry, CIER continues to serve to promote the sustainable development of Taiwan's economy.

### **International Climate Development Institute (Co-host)**



International Climate Development Institute (ICDI) is a non-profit organization which concerns the right of development under climate change impacts. By providing its professional knowledge and skills on climate governance, this think tank engages in planning and implementing of national climate policy with the public-private partnership (PPP) approach; supporting local communities and

vulnerable groups on capacity building to achieve climate-resilient and sustainable lives.

# **Organizing Committee**

Central Weather Bureau (CWB)	Mr. Chia-Ping Cheng (Chair)
	Dr. Chin-Tzu Fong (Co-Chair)
	Dr. Jing-Shan Hong
	Dr. Tzay-Ming Leou
	Ms. Meng-Shih Chen
	Dr. Wei-Peng Huang
	Dr. Jen-Hsin Teng
APEC Climate Center (APCC)	Dr. Jong Ahn Chun
	Ms. Sangwon Moon
Chung-Hua Institution for Economic Research (CIER)	Dr. Hen-I Lin
	Dr. Dean P.T. Liu
Chung Yuan Christian University (CYCU)	Prof. Yu-Chun Wang
International Climate Development Institute (ICDI)	Mr. Kung-Yueh Camyale Chao
Taiwan Climate Service Partnership (TCSP)	Prof. Hong-Yang Tseng
Utah State University (USU)	Prof. Simon S.Y. Wang

# Agenda (subjective to change)

# Thursday, October 21, 2021

Time(UTC +8)	Session	Speaker
9:30	Opening Ceremony	
09:30-10:00	Welcome and Opening Remarks	Ming-Dean Cheng (Director-General, Central Weather Bureau, Taiwan) Won-Tae Kwon (Executive Director, APEC Climate Center, Korea) Chuang-Chang Chang (President, Chung-Hua Institution for Economic Research, Taiwan) Tze-Luen Lin (President, International Climate Development Institute, Taiwan)
10:00-12:00	Keynote Session	Chair: Ming-Dean Cheng (CWB)
10:00-10:40	Climate Services for a Climate-resilient Society	Won-Tae Kwon (Executive Director, APEC Climate Center, Korea)
10:40-11:00	Break and Transition Time	
11:00-11:40	Challenge of Data-driven Climate Services in Japan: Case Studies of Weather x Business Consortium (WXBC) toward Net Zero-Emission World	Noboru Koshizuka (Professor, Interfaculty Initiative in Information Studies, The University of Tokyo, Japan)
11:40-13:00	Lunch Break	
13:00-16:45	Session I: Climate Service Development : Policy Trend and Involvement	Chair: Vicente B. Malano (PAGASA) Chia-Ping Cheng (CWB)
13:00-13:15	From Climate Information to Climate Services: The Philippine Experience	Vicente B. Malano (Administrator, Department of Science & Technology, Philippine Atmospheric, Geophysical and Astronomical Services Administration, Philippines)
13:15-13:30	The Sustainable Climate Service	Nattapon Nattasomboon (Director-General, Thai Meteorological Department, Thailand)
13:30-13:45	Climate Services Implemented by Case Studies for Construction and Local Agriculture Sectors in Viet Nam	Pham Thi Thanh Nga (Deputy Director-General, Institute of Meteorology, Hydrology and Climate Change, Vietnam Ministry of Natural Resources and Environment, Vietnam)
13:45-14:20	Wrap-up and Discussion	
14:20-14:40	Break and Transition Time	
14:40-14:55	Enhancing Climate Services by Building Partnerships in Taiwan	Jing-Shan Hong (Director, Research and Development Center, Central Weather Bureau, Taiwan)
14:55-15:10	From Research to Operation on the Development of Climate Information Services in Indonesia	Nelly Florida Riama (Director, Center for Research and Development, Indonesian Agency for Meteorology, Climatology and Geophysics, Indonesia)
15:10-15:25	Time to Act: Regional Climate Change Information for Social Transformation	Daniela Jacob (Director, Climate Service Center Germany, Germany)
15:25-16:00	Wrap-up and Discussion	

# Friday, October 22, 2021

Session   Speaker	Department,  for Applied Maryland School s Section, Japan Weather  Nepal)  External Affairs and
09:15-09:30  Early Warning Systems for Addressing Climate Change Driven Infectious Diseases Burden  O9:30-09:45  Our Services for Climate Change Mitigation and Adaptation in Japan's Energy Sector  O9:45-10:20  Wrap-up and Discussion  Break and Transition Time  Climate Services for Climate Decision Making in the Hindu Kush Himalayan Region  10:55-11:10  The Intersectoral Needs for Climate Services in the Face of Climate Change  Responding to the Worst Drought on Record in Taiwan: Climate Services in Support of Water Management Decision-making  11:25-12:00  Wrap-up and Discussion  Responding to the Worst Drought on Record in Taiwan: Climate Services in Support of Water Management Decision-making  Wrap-up and Discussion  Lunch Break  Session III: Public-Private Partnership and  (Research Fellow, Prediction Research Department, APEC Climate Center, Korea)  Amir Sapkota  (Research Fellow, Prediction Research Department, APEC Climate Center, Korea)  Amir Sapkota  (Research Fellow, Prediction Research Department, APEC Climate Center, Korea)  Manyland Institute for Appli Environmental Health, University of Maryland Schoof Public Health, USA)  Kiichi Shirakawa  (Group Leader, Environmental Analysis Section, Environment and Energy Department, Apender Association, Japan)  Mandira Singh Shrestha  (Programme Coordinator, ICIMOD in Nepal)  Bo Ra Kim  (Senior International Project Manager, External Affa Department, APEC Climate Center, Korea)  Meng-Shih Chen  (Senior Technical Specialist, Research and Development Center, Central Weather Bureau, Taiwan Development Center, Cent	for Applied Maryland School s Section, Japan Weather Nepal) External Affairs area)
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Session III: Public-Private Partnership and Chair: Jaiho Oh (Nano C&W Co. Ltd.)	
A Role of the Private Sector to Weather and Climate Service  A Role of the Private Sector to Weather and (CEO/ Prof. Emeri., Nano C&W Co. Ltd., Korea)	td., Korea)
How Open Government Can Encourage the Public-Private Partnership to Make A Well Weather-industry Ecosystem  Chi-Ming Peng (General Manager, WeatherRisk Explore Inc., Taiwan	re Inc., Taiwan)
A Private Sector View of Weather and Climate Services towards Net Zero Goals  Daisuke Abe (Executive Officer, Service Operation and Development, Weathernews Inc., Japan)	
14:15-14:50 Wrap-up and Discussion	
14:50-15:10 Break and Transition Time	
Enhance Climate Services Partnerships in the Asia Pacific Region  Kung-Yueh Camyale Chao (Executive Director, International Climate Development Institute, Taiwan)	ate Development
ClimApp – A Personalized Heat and Cold Stress Warning Tool with Integrated Weather Forecast, Human Thermal Models and Indices  Chuansi Gao  (Associate Professor, Thermal Environment Laborato Division of Ergonomics and Aerosol Technolog Department of Design Sciences, Faculty of Engineerin Lund University, Sweden)	sol Technology,
Elisabeth Simelton  15:40-15:55  What Apps Are Up for Farmers?  Elisabeth Simelton  (Climate Change Scientist, World Agroforestry Asia Program, Vietnam country office, CIFOR-ICRAF in Viet Nam)	
15:55-16:30 Wrap-up and Discussion	
16:30-17:00 Conclusion Each Session Chairs	
17:00-17:10 Closing Remarks	

## **Overview**

### **Asia Pacific Climate Service Workshop 2021**

Climate Service for Resilience and Sustainable Development Towards A Net Zero Emission World

#### **Background**

It is now more certain than ever that climate change has become one of the major challenges of our times. Unexpected severe weather events are occurring more frequently all around the globe and climate extremes have become the new norm. The impacts are profound and the challenges are multifaceted. One recent major response to this issue was made when the 2015 UNFCCC Climate Conference (COP21) adopted the Paris Agreement, setting the global warming at the end of the 21st century not to exceed 1.5 °C as the goal of joint global efforts which requires global carbon emissions in 2030 to be reduced by 45% compared to 2010, and net zero carbon emissions to be reached by 2050. Since then, the action plan of and commitment to net zero carbon emissions has become a global joint effort by governments and multinational companies.

The other line of response is to enhance adaptation with the notion of 'climate service' which has been promoted by the World Meteorological Organization (WMO) since 2009 to advocate cross-sectorial partnerships between meteorological information providers and users to cooperate and to augment climate resilience together. In particular, WMO has emphasized the importance of public-private partnerships (PPPs) in the long-term development of climate services in the future net-zero mission and low-carbon economy. Immediate and enriched cooperation among countries and among different professional areas are urgently needed.

At the Asia Pacific Climate Service Workshop (APCSW) 2019, hosted by the Central Weather Bureau (CWB), speakers and professionals from meteorological administrations, disaster prevention agencies, private sectors and academia of countries in the Asia-Pacific region gathered to discuss trends and challenges in climate services and to share experiences and stories of their own. The workshop concluded that, with constant information sharing and co-development, leveraging local partnerships, encouraging private-sector involvement and embracing information technology would be crucial to developing climate service further.

It is with the same intent that the CWB firmly continues to support this valuable platform so that regional and global colleagues and partners who work towards the same goal can meet again to learn from each other, to realign our efforts, and to create possibilities. The APCSW 2021 will be hosted by the CWB and co-hosted by APEC Climate Center (APCC), Chung-Hua Institution for Economic Research (CIER) and International Climate Development Institute (ICDI) under the theme "Climate Service for Resilience and Sustainable Development Toward A Net Zero Emission World." Due to the COVID-19 pandemic, the workshop will be held in the form of online conference with pre-recorded presentations and live panel discussions. Objectives and preliminary program descriptions are provided below.

#### **Objectives**

The key objectives of APCSW 2021 are:

- To look into policy trends, challenges, and opportunities for further development of climate services from national and international perspective
- To share cases and results of the application of climate information in various sectors to support actions for adaptation and/or mitigation toward high resiliency and net-zero emissions as well as to discuss the challenges of integrating climate services in various applications
- To facilitate the exchange of knowledge and ideas between climate service institutions, practitioners, experts in public and private sectors to share experiences in different areas aiming at achieving sustainable development

In summary, this workshop aims to bring together experts, scientists, policy-makers, and stakeholders to discuss current and future developments in climate services, share their success stories, and strengthen partnerships between international climate service organizations and cross-sectorial researchers.

#### **Keynote Session**

- Providing an overview of regional and global governance issues of innovative climate service, climate risk management, and the application of climate information to enhance countries' resilience to climate change
- Promoting the utilization of climate knowledge and information service in various application sectors, enhancing linkages and cooperation between the public and private sectors, supply and demand sides, and jointly overcoming climate-related challenges

### Session I: Climate Service Development: Policy Trend and Involvement

• Exploring the integrated development of climate services in government agencies or related organizations in recent years, as well as future policy trends and possible changes

### Session II: Climate Service, Products, and Applications

- Discussing utilization of climate products and services in various application sectors
- Advancing the understanding of how climate change and climate prediction affect various application sectors and how climate services or products can enhance resilience to climate change in that area

### Session III: Public-Private Partnership and Sustainable Development

- Sharing success stories of public-private cooperation in various settings and environments among international organizations, local government agencies, NGOs and enterprises that aim at achieving sustainable development
- Exploring the key elements in developing public-private partnerships with respect to application, scientific knowledge dissemination, communications and management from national level to community level

## **Financial Support**

This event is financially sponsored by the Central Weather Bureau (CWB) and the Ministry of Transportation and Communications, Taiwan.

## **APCSW 2021 Webpage Online**

Please check the latest news on the APCSW 2021 online at: <a href="https://apcsw.cier.edu.tw/">https://apcsw.cier.edu.tw/</a> (effective in late September, 2021)



## Registration

No Registration fee is required. For more details, please check the APCSW 2021 website: <a href="https://apcsw.cier.edu.tw/">https://apcsw.cier.edu.tw/</a>

## **Contact Information**

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