



Agenda

Low Carbon Solutions for Our Green Future

16-18 October 2019

BROAD Town, Changsha, Hunan Province, People's Republic of China

Time	16 OCTOBER (WED)
08:00 – 08:30	Registration
08:30 – 08:40	Cultural Performance
08:40 – 10:00	<p>Opening Plenary <i>Venue: Pyramid</i></p> <p>Moderator: CHEN Wenhao, Vice Governor, Hunan Province</p> <p>Welcome Remarks</p> <ul style="list-style-type: none">• XU Dazhe, Governor, Hunan Province• Deborah Stokes, VP for Administration and Corporate Management, Asian Development Bank• ZHUANG Guotai, Vice Minister, Ministry of Ecology and Environment <p>Keynotes</p> <ul style="list-style-type: none">• Ban Ki-moon, The Eighth Secretary-General of the United Nations• XIE Zhenhua, China's Special Representative on Climate Change Affairs & President, Institute of Climate Change and Sustainable Development at Tsinghua University• ZHANG Yue, Chairman, Broad Group
10:00 – 10:20	Tea Break

<p>10:20 – 12:00</p>	<p style="text-align: center;">Transformative Technologies <i>Venue: Pyramid</i></p> <p>Moderator: ZHAI Yongping, Chief, Energy Sector Group, ADB</p> <p>Presentations:</p> <ul style="list-style-type: none"> • Cyril Cassisa, Energy and Climate Analyst, International Energy Agency, “Setting the Scene: Future of Clean Energy” • Yuki Hanyu, CEO, Integriculture Inc., “Cellular Meat Revolution” • Daniel Aklil, CEO, Pure Energy Centre, “Power Shift: hydrogen in our energy future” • KOU Weiwei, CEO, Tianjin Climate Exchange, “Digital Technology Promotes Environment Protection and Sustainable Development” • Daniel Zhang, Vice President, Broad Group, “From meta-technology to meta-civilization: architecture against misinformation” <p>Panel Discussion</p> <ul style="list-style-type: none"> • C. Cassisa, Y. Hanyu, D. Aklil, KOU W., D. Zhang • HUANG Jing, Director General, ACCA21 • XU Huaqing, Director General of NCSC • Brent Habig, Vice President, International Program, ISC 			
<p>12:00 – 13:30</p>	<p style="text-align: center;">Lunch</p>			
<p>12:45 – 13:30</p>	<p style="text-align: center;">Roundtable Discussion for ADB’s Developing Member Countries (By Invitation Only)</p>			
<p>13:30 – 15:00</p>	<p style="text-align: center;">South-South Cooperation: Renewable Energy Technology Transfer <i>Venue: Scotland Classroom</i></p>	<p style="text-align: center;">City Carbon Emission and Air Pollution Co-control and Co-management <i>Venue: Pyramid</i></p>	<p style="text-align: center;">Multi-Energy Systems & Future Energy Services <i>Venue: Lecture Theatre</i> APEUA, DBDH, and IVL</p>	<p style="text-align: center;">Low-Carbon Technology and Industrial Transformation <i>Venue: Golden Hall</i> NCSC and IUC</p>

	<p>ACCA21, UNDP, and Technology Transfer South-South Cooperation Center</p> <p>Moderator: ZHANG Xian, Deputy Director, ACCA21</p> <p>Opening Remarks: HUANG Jing, Director General, ACCA21</p> <p>Presentations</p> <ul style="list-style-type: none"> • HUANG Yan, Deputy Director General, International Center on Small Hydro Power, “South-South Cooperation: Practical Research Small Hydropower” • LI Fengting, Executive Deputy Dean, UNEP-Tongji Institute of Environment for Sustainable Development, “Case Study on China-Africa Environmental and Energy Cooperation” • WANG Yu, Associate Professor, Tsinghua University, “Analysis on 	<p>EFC and ISC</p> <p>Supported by ISP-CEP</p> <p>Moderator: ZENG Lei, Country Director for China, ISC</p> <p>Opening Remarks:</p> <ul style="list-style-type: none"> • Brent Habig, VP, International Program, ISC • WANG Zhigao, Program Officer, Low-carbon Cities, EFC <p>Presentations:</p> <ul style="list-style-type: none"> • XU Huaqing, Director General, NCSC, “Key Issues and Institutional Research on the 14th Five-Year Plan for Cooperative Control of Carbon and Air Pollutants” • PAN Shengqiang, Director, Changsha City DEE, “Experience of Co-control and Co-management in Changsha Low-carbon City Construction” 	<p>Moderator: Lars Hummelrose, DBDH</p> <p>Welcome Remarks & Program Overview: Peter Lundberg, APEUA</p> <p>Opening Remarks: LU Xuedu, Lead Climate Change Specialist, ADB</p> <p>Presentations:</p> <ul style="list-style-type: none"> • LU Xuedu, “ADB’s efforts on developing low-carbon cities” • Allen Zhang, President, Hunan Innovative Low Carbon Center, “Xiangtan Sector Program on Low-Carbon City Development” • WU Hao, IPEEC, “Introduction to the G20 Task Group of District Energy Systems” • YANG Guangyao, Vice 	<p>Moderator: YANG Xiu, NCSC</p> <p>Opening Remarks:</p> <ul style="list-style-type: none"> • XU Huaqing, Director General, NCSC • Representative of the EU in China <p>Presentations:</p> <ul style="list-style-type: none"> • WANG Can, Tsinghua University, “Policy framework for low-carbon technologies in China” • Gianluca Fabbri, IUC Specialist, “European experience in promoting low-carbon technology” • SHENG Lei, Director, Academic Committee, State Information Center, “Case study on low-carbon development and transformation in China” • Craig Banks, Personal Chair, Electrochemical and
--	--	--	---	---

	<p>financing mechanisms for South-South renewable energy technology transfer”</p> <ul style="list-style-type: none"> • LI Yanfei, Economic Research Institute for ASEAN and East Asia, “Renewable Technology Transfer: Theory, Practices, and Policies for Technology Catching-up and Innovation” • JIA Hongjie, Associate Dean, Graduate School of Tianjin University, “User-side Integrated Energy System: An Effective Way for Renewable Energy Integration” <p>Panel Discussion</p> <ul style="list-style-type: none"> • HUANG Y., LI F., WANG Y., Li Y., JIA H. • WANG Ying, Professor of Environmental Science, College of Environmental Science and Engineering, Tongji University 	<ul style="list-style-type: none"> • WANG Dong, Director, Shenzhen Research Center on Climate Change, “Case Study on Shenzhen Co-benefits of Carbon Emission Peaking and Air Quality” • MA Jun, Director, Institute of Public and Environmental Affairs (IPE), “Information disclosure in promoting synergy of co-benefits” • WANG Zhigao, Program Officer, Low-carbon Cities, EFC, “Cases and Experiences of Cities Achieving Air Quality Standards and Carbon Emissions Peaking” 	<p>President, Broad Group, “Efficient utilization of urban energy”</p>	<p>Nanotechnology, Manchester Metropolitan University</p> <ul style="list-style-type: none"> • CHEN An, Project Manager, TEDA Eco-Center, Tianjin, “Application and promotion of low-carbon technology” • ZHANG Xian, Deputy Director, ACCA21, “Application of CCUS technology in low-carbon transformation of coal-fired power plants in China”
15:00 – 15:30	Tea Break			

<p>15:30 – 17:00</p>	<p>South-South Cooperation: Renewable Energy Technology Transfer (continued)</p> <p><i>ACCA21, UNDP, and Technology Transfer South-South Cooperation Center</i></p> <p>Technology Showcase:</p> <ul style="list-style-type: none"> • China Renewable Energy Engineering Institute • TENG Aihua, Chairman, Poly Solar Technologies (Beijing) Co., Ltd. • Jay Koo (Jeong-Ung Koo), CEO, GDChem • William Gang, Industrial Sales Manager, ABB <p>Panel Discussion</p> <ul style="list-style-type: none"> • WANG Y., TENG A., J. Koo, W. Gang • XU Rong, Founder and CEO, Umore Consulting Ltd. • Cyril Cassisa, Energy and Climate Analyst, International Energy 	<p>City Carbon Emission and Air Pollution Co-control and Co-management (continued)</p> <p><i>EFC and ISC Supported by ISP-CEP</i></p> <p>Moderator: LIN Weiwei, Program Officer, Low-carbon Cities, EFC</p> <p>Report Launch:</p> <ul style="list-style-type: none"> • JIANG Yang, Deputy Director, China Sustainable Transportation Center, “Technical Guidelines on Co-Control of Air Pollutants and Greenhouse Gases in Urban Transportation” • PAN Tao, Urban Director, ISC, “CZT Cluster Carbon Emission Peaking and Actions” <p>Panel Discussion:</p> <ul style="list-style-type: none"> • LU Xuedu, Lead Climate Change Specialist, ADB 	<p>Multi-Energy Systems & Future Energy Services (continued)</p> <p><i>APUEA, DBDH, and IVL</i></p> <p>Presentations:</p> <ul style="list-style-type: none"> • Kristina Lygnerud, IVL/Smart City Sweden, “Introduction to IVL and District Heating” • Peter Lundberg, APEUA, “Unlocking the potential of district cooling” • Elena Markova, ABB, Integrated Energy Systems for Cities <p>Panel Discussion: Low-Carbon City Development</p> <p>Moderator: Peter Lundberg, APEUA</p> <p>Panel Discussion</p> <ul style="list-style-type: none"> • Kristina Lygnerud, IVL • WU Hao, IPEEC 	<p>Low-Carbon Technology and Industrial Transformation (continued)</p> <p><i>NCSC and IUC</i></p> <p>Moderator: SHI Xin, IUC</p> <p>Roundtable Discussion:</p> <ul style="list-style-type: none"> • WANG C., SHENG L., CHEN A., ZHANG X. • Amanda Reid, Chartered Waste and Resource Circular Economy Manager, MMU • YAN Luhui, Founder, Carbonstop
----------------------	--	--	---	--

	Agency	<ul style="list-style-type: none"> • YANG Xiu, NCSC • HU Yongfeng, Beijing Research Center on Climate Change • YANG Yanli, Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences • PAN Zhiming, Natural Resources Defense Council • ZENG Chenxi, Walkthrough Xiang River Environmental Protection Public Welfare Society 	<ul style="list-style-type: none"> • Terry Deng, Johnson Controls • Allen Zhang, HILCC <p>Closing Remarks: Peter Lundberg, APEUA</p>	
18:00 – 20:00	Welcome Dinner hosted by Hunan Government <i>Venue: Mediterranean Club</i>			
09:00 – 16:30	EDGE Training Organized by International Finance Corporation, World Bank Group and HILCC <i>Venue: Changsha International Convention and Exhibition Center</i>			
17 OCT (THU)				
08:00 – 09:00	Registration			
09:00 – 10:30	Multi-Energy Systems & Future Energy Services (continued)	Biomass-to-Energy Technology Assessment & Dissemination (TAD)	Zero-Waste Cities <i>Venue: Pyramid</i>	

	<p style="text-align: center;">Venue: Lecture Theatre</p> <p style="text-align: center;">APEUA, DBDH, and IVL</p> <p>Opening Remarks: Peter Lundberg, APEUA</p> <p>Presentations:</p> <ul style="list-style-type: none"> • WANG Chuan, Assistant General Manager, Energy Development Company of Fengxi New City, “Green energy development in Fengxi New City” • Terry Deng, Johnson Controls, “Heat Recovery from Industries” • Kristina Lygnerud, IVL/Smart City Sweden, “The Future of District Energy (DC and 4GDH)” 	<p style="text-align: center;">Venue: Golden Hall</p> <p style="text-align: center;">Beijing Energy Club</p> <p>Moderator: Xavier Chen, President, Beijing Energy Club</p> <p>Welcome Address: ZHAI Yongping, Chief, Energy Sector Group, ADB</p> <p>Introduction of Clean Energy Technology Assessment & Dissemination (TAD)</p> <p>Platform: Xavier Chen, President, Beijing Energy Club</p> <p>Presentations:</p> <ul style="list-style-type: none"> • ZHANG Yue, General Manager, BioGTS (Shanghai) Co., Ltd., “BioGTS® Biogas Technology & Its Applications” • MA Zhengmin, General Manager, ENN Energy Biomass (Tianjin) Co., Ltd., “Biomass Fast Pyrolysis Technology & Its Applications” • Willy Johansen, Vice President and Advisor to Chairman, Golden State Environmental Group, “MPE AMI Biogas 	<p style="text-align: center;">Broad Group</p> <p>Moderator: ZHOU Muzhi, Chairman, Yunhe Urban Research Institute</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Kamiel S. Gabriel, Elected Member, Canadian Academy of Engineering • ZHANG Jing’an, Former Deputy Minister, Ministry of Science and Technology • Richard Liu, Director, Institute for Transportation & Development Policy • LIU Bo, General Manager, Minmetals Land Limited • ZHANG Yue, Chairman, Broad Group
--	--	---	---

		Technology”	
10:30 – 10:45	Tea Break		
10:45 – 12:00	<p style="text-align: center;">Multi-Energy Systems & Future Energy Services (continued)</p> <p style="text-align: center;"><i>APEUA, DBDH, and IVL</i></p> <p>Presentations:</p> <ul style="list-style-type: none"> • Eric Shao, Kamstrup, “Consumption-based billing and tariffs” • PENG Ziyang, Wärstilä, “Co-generation and energy storage” • Tommy Jacobson, Danfoss, “Artificial Intelligence-based Services for District Heating” <p>Panel Discussion</p> <p>Moderator: Lars Hummellose, DBDH</p> <ul style="list-style-type: none"> • Elena Markova, ABB • Eric Shao, Kamstrup • Tommy Jacobson, Danfoss • PENG Ziyang, Wärstilä • PENG Guoping, Broad Group 	<p style="text-align: center;">Biomass-to-Energy Technology Assessment & Dissemination (TAD) Workshop (continued)</p> <p style="text-align: center;">Beijing Energy Club</p> <p>Expert Assessment & Recommendations:</p> <ul style="list-style-type: none"> • YAN Weijiang, Deputy General Manager, CGN Energy Service Co., Ltd. • YUAN Baorong, Deputy General Manager and Senior Engineer, CECEP Consulting Co., Ltd. • Steve Szymanski, Vice President (Funding), Asia Pacific Biogas Alliance • Stephen Peters, Senior Energy Specialist (Waste-to-Energy), ADB <p>Summary</p>	<p style="text-align: center;">Building Revolution</p> <p style="text-align: center;"><i>Venue: Pyramid</i></p> <p style="text-align: center;">Broad Group</p> <p>Moderator: ZHANG Yue, Chairman, Broad Group</p> <p>Panel Discussion:</p> <ul style="list-style-type: none"> • Jeff Leung, CEO, JET Studios Inc. • Raymond Hoe, Director, Scott Browning • ZHAN Shilin, Vice Dean, Architectural Design and Research Institute of Tsinghua University Co., Ltd. • Daniel Zhang, VP, Broad Group

	Q&A Closing Remarks: Peter Lundberg, APEUA		
12:00 – 13:00	Lunch		
12:45 – 13:30	Roundtable Discussion: De-carbonization of Hydrogen Production through CCUS (By Invitation Only)		
13:00 – 15:00	Hot Pot Business Matchmaking <i>Venue: Pyramid</i> Participating organizations		
	<ul style="list-style-type: none"> • Procurement, Portfolio, and Financial Management Department, ADB • Bin-E (Poland) AI-Augmented Smart Waste Bin • Boson Energy (Luxembourg) Waste-to-Resources • DAIS Analytic (US) Nanoporous Membrane Technology • DCT (Italy) Solvent Recovery and Gas Treatment • Dragon Power Space (US) Online Corrosion Monitoring • GDChem (Korea) De-NOx and Clinker Removal 	<ul style="list-style-type: none"> • SAP (Germany) Smart Solution • SunOyster (Germany) Solar Cogeneration System • Sanyi Heavy Energy (China) Wind Energy • TECAM (Spain) VOC and Solid Waste Treatment • Hunan Yuxu Environmental Technology (China) Wastewater Treatment • BROAD Group (China) HVAC and Clean Air Technology • Hunan Yuebo Energy (China) New Energy • Hunan Vary Group (China) Solid Waste Treatment 	
15:00 – 15:15	Tea Break		
15:15 – 17:00	Climate Investment and Finance <i>Venue: Pyramid</i> Moderator: LU Xuedu, Lead Climate Change Specialist, ADB		

	<p>Presentations:</p> <ul style="list-style-type: none"> • DING Hui, Director, Department of Climate change, Ministry of Ecology and Environment, PRC • YAN Pin, The People's Bank of China Financial Research Institute • Johann Elysee, Senior Portfolio Specialist, Office of Portfolio Management, Green Climate Fund • LIANG Xi, Director, Centre for Business and Climate Change, University of Edinburgh • Representative, Xiangtan City, Hunan Province, PRC <p>Panel Discussion</p> <ul style="list-style-type: none"> • YANG Yuerong, Vice President of Shanghai Pudong Development Bank Co., Ltd. and Investment Bank • Naeeda Chrisna-Morgado, Climate Finance Specialist • Alex Fisher, Director, Sino-German Cooperation on Climate Change, Environment and Urban Development, GIZ China • XIE Wenhong, China Program Manager, Climate Bonds Initiative
<p>17:00 – 17:30</p>	<p style="text-align: center;">Closing Plenary <i>Venue: Pyramid</i></p> <p>Moderator: Allen Zhang, President, Hunan Innovative Low Carbon Development Center</p> <p>Closing Remarks:</p> <ul style="list-style-type: none"> • ZHUANG Dali, Deputy Director General, Hunan Provincial Finance Department • ZHANG Zaifeng, Deputy Director General, Hunan DEE <p>Recap: ZHAI Yongping, Chef, Energy Sector Group, SDCC, ADB</p>
<p>18:00 – 20:00</p>	<p style="text-align: center;">Farewell Dinner hosted by Broad Group <i>Venue: Mediterranean Club</i></p>
<p>18 OCT (FRI)</p>	

	<p>Site Visits</p> <ul style="list-style-type: none"> • Changsha Huanghua International Airport Multi-Energy Project • Broad Town Multi-Energy System
--	--

Time	15 OCT (TUE)
	Arrival of Participants
	Opening of Exhibition
	16 OCT (WED)
08:00 – 08:30	Registration
08:30 – 08:40	Cultural Performance
08:40 – 10:00	<p style="text-align: center;">Opening Plenary <i>Venue: Pyramid</i></p> <p>Moderator: CHEN Wenhao, Vice Governor, Hunan Province</p> <p>Welcome Remarks</p> <ul style="list-style-type: none"> • XU Dazhe, Governor, Hunan Province • Deborah Stokes, VP for Administration and Corporate Management, Asian Development Bank • ZHUANG Guotai, Vice Minister, Ministry of Ecology and Environment <p>Keynotes</p>

	<ul style="list-style-type: none"> • Ban Ki-moon, The Eighth Secretary-General of the United Nations • XIE Zhenhua, Former Deputy Director General, National Development and Reform Committee • ZHANG Yue, Chairman, Broad Group
10:00 – 10:20	<p style="text-align: center;">Tea Break</p>
10:20 – 12:00	<p style="text-align: center;">Transformative Technologies <i>Venue: Pyramid</i></p> <p>Moderator: ZHAI Yongping, Chief, Energy Sector Group, ADB</p> <p>Presentations:</p> <ul style="list-style-type: none"> • Cyril Cassisa, Senior Carbon Market Analyst, International Energy Agency, “Setting the Scene: Future of Clean Energy” • Yuki Hanyu, CEO, Integriculture Inc., “Cellular Meat Revolution” • Daniel Aklil, CEO, Pure Energy Centre, “Power Shift: hydrogen in our energy future” • KOU Weiwei, CEO, Tianjin Climate Exchange, “Digital Technology Promotes Environment Protection and Sustainable Development” • Daniel Zhang, Vice President, Broad Group, “From meta-technology to meta-civilization: architecture against misinformation” <p>Panel Discussion</p> <ul style="list-style-type: none"> • C. Cassisa, Y. Hanyu, D. Aklil, KOU W., D. Zhang • HUANG Jing, Director General, ACCA21 • XU Huaqing, Director General of NCSC • Brent Habig, Vice President, International Program, ISC

12:00 – 13:30	<p>Lunch sponsored by the China Green Cities Development Fund</p> <p>This project is financed by the European Union with KfW as Implementing Partner</p> <p><i>Venue: Mediterranean Club</i></p>			
12:45 – 13:30	<p>Roundtable Discussion for ADB’s Developing Member Countries (By Invitation Only)</p>			
13:30 – 15:00	<p>South-South Cooperation: Renewable Energy Technology Transfer</p> <p><i>Venue: Scotland Classroom</i></p> <p><i>ACCA21, UNDP, and Technology Transfer South-South Cooperation Center</i></p> <p>Moderator: ZHANG Xian, Deputy Director, ACCA21</p> <p>Opening Remarks: HUANG Jing, Director, ACCA21</p> <p>Presentations</p> <ul style="list-style-type: none"> • HUANG Yan, Deputy Director, International Center on Small Hydro Power, “A Practical Study on South-South Cooperation in Small Hydropower Projects” • LI Fengting, Vice Director, 	<p>City Carbon Emission and Air Pollution Co-control and Co-management</p> <p><i>Venue: Pyramid</i></p> <p><i>EFC and ISC</i></p> <p><i>Supported by ISP-CEP</i></p> <p>Moderator: ZENG Lei, Country Director for China, ISC</p> <p>Opening Remarks:</p> <ul style="list-style-type: none"> • Brent Habig, VP, International Program, ISC • WANG Zhigao, Program Officer, Low-carbon Cities, EFC <p>Presentations:</p> <ul style="list-style-type: none"> • XU Huaqing, Director General, NCSC, “Key Issues and Institutional Research on 	<p>Multi-Energy Systems & Future Energy Services</p> <p><i>Venue: Lecture Theatre</i></p> <p><i>APEUA, DBDH, and IVL</i></p> <p>Moderator: Lars Hummelrose, DBDH</p> <p>Welcome Remarks & Program Overview: Peter Lundberg, APEUA</p> <p>Opening Remarks: Xuedu Lu, Lead Climate Change Specialist, ADB</p> <p>Presentations:</p> <ul style="list-style-type: none"> • LU Xuedu, “ADB’s efforts on developing low-carbon cities” • Allen Zhang, President, Hunan Innovative Low 	<p>Low-Carbon Technology and Industrial Transformation</p> <p><i>Venue: Golden Hall</i></p> <p><i>NCSC and IUC</i></p> <p>Moderator: YANG Xiu, NCSC</p> <p>Opening Remarks:</p> <ul style="list-style-type: none"> • XU Huaqing, Director General, NCSC • Representative of the EU in China <p>Presentations:</p> <ul style="list-style-type: none"> • WANG Can, Tsinghua University, “Policy framework for low-carbon technologies in China” • Gianluca Fabbri, IUC Specialist, “European experience in promoting

	<p>UNEP-Tongji Institute of Environment for Sustainable Development, “Case Study on China-Africa Environmental and Energy Cooperation”</p> <ul style="list-style-type: none"> • WANG Yu, Associate Professor, Tsinghua University • LI Yanfei, Economic Research Institute for ASEAN and East Asia, “Renewable Technology Transfer: Theory, Practices, and Policies for Technology Catching-up and Innovation” • JIA Hongjie, Associate Dean, Graduate School of Tianjin University, “User-side Integrated Energy System: An Effective Way for Renewable Energy Integration” <p>Panel Discussion</p> <ul style="list-style-type: none"> • HUANG Y., LI F., WANG Y., 	<p>the 14th Five-Year Plan for Cooperative Control of Carbon and Air Pollutants”</p> <ul style="list-style-type: none"> • PAN Shengqiang, Director, Changsha City DEE, “Experience of Co-control and Co-management in Changsha Low-carbon City Construction” • WANG Dong, Director, Shenzhen Research Center on Climate Change, “Case Study on Shenzhen Co-benefits of Carbon Emission Peaking and Air Quality” • MA Jun, Director, Institute of Public and Environmental Affairs (IPE), “Information disclosure in promoting synergy of co-benefits” • WANG Zhigao, Program Officer, Low-carbon Cities, EFC, “Cases and Experiences of Cities Achieving Air Quality 	<p>Carbon Center, “Xiangtan Sector Program on Low-Carbon City Development”</p> <ul style="list-style-type: none"> • WU Hao, IPEEC, “Introduction to the G20 Task Group of District Energy Systems” • KANG Qiong, Vice President, Broad Group, “Efficient utilization of urban energy” 	<p>low-carbon technology”</p> <ul style="list-style-type: none"> • SHENG Lei, Director, Academic Committee, State Information Center, “Case study on low-carbon development and transformation in China” • Craig Banks, Personal Chair, Electrochemical and Nanotechnology, Manchester Metropolitan University • CHEN An, Project Manager, TEDA Eco-Center, Tianjin, “Application and promotion of low-carbon technology” • ZHANG Xian, Deputy Director, ACCA21, “Application of CCUS technology in low-carbon transformation of coal-fired power plants in China”
--	--	---	---	--

	<p>Li Y., JIA H.</p> <ul style="list-style-type: none"> • WANG Ying, Professor of Environmental Science, College of Environmental Science and Engineering, Tongji University 	Standards and Carbon Emissions Peaking”		
15:00 – 15:30	Tea Break			
15:30 – 17:00	<p>South-South Cooperation: Renewable Energy Technology Transfer (continued)</p> <p><i>ACCA21, UNDP, and Technology Transfer South-South Cooperation Center</i></p> <p>Technology Showcase:</p> <ul style="list-style-type: none"> • China Renewable Energy Engineering Institute • TENG Aihua, Chairman, Poly Solar Technologies (Beijing) Co., Ltd. • Jay Koo (Jeong-Ung Koo), CEO, GDChem • William Gang, Industrial Sales Manager, ABB <p>Panel Discussion</p>	<p>City Carbon Emission and Air Pollution Co-control and Co-management (continued)</p> <p><i>EFC and ISC Supported by ISP-CEP</i></p> <p>Moderator: LIN Weiwei, Program Officer, Low-carbon Cities, EFC</p> <p>Report Launch:</p> <ul style="list-style-type: none"> • JIANG Yang, Deputy Director, China Sustainable Transportation Center, “Technical Guidelines on Co-Control of Air Pollutants and Greenhouse Gases in Urban Transportation” 	<p>Multi-Energy Systems & Future Energy Services (continued)</p> <p><i>APUEA, DBDH, and IVL</i></p> <p>Presentations:</p> <ul style="list-style-type: none"> • Kristina Lygnerud, IVL/Smart City Sweden, “Introduction to IVL and District Heating” • Peter Lundberg, APEUA, “Unlocking the potential of district cooling” • Elena Markova, ABB, Integrated Energy Systems for Cities <p>Panel Discussion: Low-Carbon City Development</p>	<p>Low-Carbon Technology and Industrial Transformation (continued)</p> <p><i>NCSC and IUC</i></p> <p>Moderator: SHI Xin, IUC</p> <p>Roundtable Discussion:</p> <ul style="list-style-type: none"> • WANG C., SHENG L., CHEN A., ZHANG X. • Amanda Reid, Chartered Waster and Resource Circular Economy Manager, MMU • YAN Luhui, Founder, Carbonstop

	<ul style="list-style-type: none"> • WANG Y., TENG A., J. Koo, W. Gang • XU Rong, Founder and CEO, Umore Consulting Ltd. • Cyril Cassisa, Senior Carbon Market Analyst, International Energy Agency 	<ul style="list-style-type: none"> • PAN Tao, Urban Director, ISC, “CZT Cluster Carbon Emission Peaking and Actions” <p>Panel Discussion:</p> <ul style="list-style-type: none"> • LU Xuedu, Lead Climate Change Specialist, ADB • YANG Xiu, NCSC • HU Yongfeng, Beijing Research Center on Climate Change • YANG Yanli, Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences • PAN Zhiming, Natural Resources Defense Council • ZENG Chenxi, Walkthrough Xiang River Environmental Protection Public Welfare Society 	<p>Moderator: Peter Lundberg, APEUA</p> <p>Panel Discussion</p> <ul style="list-style-type: none"> • Kristina Lygnerud, IVL • WU Hao, IPEEC • Terry Deng, Johnson Controls • Allen Zhang, HILCC <p>Closing Remarks: Peter Lundberg, APEUA</p>	
18:00 – 20:00	<p align="center">Welcome Dinner hosted by Hunan Government <i>Venue: Mediterranean Club</i></p>			

09:00 – 16:30	EDGE Training Organized by International Finance Corporation, World Bank Group and HILCC <i>Venue: Changsha International Convention and Exhibition Center</i>		
17 OCT (THU)			
08:00 – 09:00	Registration		
09:00 – 10:30	<p style="text-align: center;">Multi-Energy Systems & Future Energy Services (continued)</p> <p style="text-align: center;"><i>Venue: Lecture Theatre</i></p> <p style="text-align: center;"><i>APEUA, DBDH, and IVL</i></p> <p>Opening Remarks: Peter Lundberg, APEUA</p> <p>Presentations:</p> <ul style="list-style-type: none"> • WANG Chuan, Assistant General Manager, Energy Development Company of Fengxi New City, “Green energy development in Fengxi New City” • Terry Deng, Johnson Controls, “Heat Recovery from Industries” • Kristina Lygnerud, IVL/Smart City Sweden, “The Future of District Energy (DC and 4GDH)” 	<p style="text-align: center;">Biomass-to-Energy Technology Assessment & Dissemination (TAD)</p> <p style="text-align: center;"><i>Venue: Golden Hall</i></p> <p style="text-align: center;">Beijing Energy Club</p> <p>Moderator: Xavier Chen, President, Beijing Energy Club</p> <p>Welcome Address: ZHAI Yongping, Chief, Energy Sector Group, ADB</p> <p>Introduction of Clean Energy Technology Assessment & Dissemination (TAD) Platform: Xavier Chen, President, Beijing Energy Club</p> <p>Presentations:</p> <ul style="list-style-type: none"> • ZHANG Yue, General Manager, BioGTS (Shanghai) Co., Ltd., “BioGTS® Biogas Technology & Its Applications” • MA Zhengmin, General Manager, ENN Energy Biomass (Tianjin) Co., Ltd., “Biomass Fast Pyrolysis Technology & Its Applications” • Willy Johansen, Vice President and 	<p style="text-align: center;">Zero-Waste Cities</p> <p style="text-align: center;"><i>Venue: Pyramid</i></p> <p style="text-align: center;">Broad Group</p> <p>Moderator: ZHOU Muzhi, Chairman, Yunhe Urban Research Institute</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Kamiel S. Gabriel, Elected Member, Canadian Academy of Engineering • ZHANG Jing’an, Former Deputy Minister, Ministry of Science and Technology • Richard Liu, Director, Institute for Transportation & Development Policy • LIU Bo, General Manager, Minmetals Land Limited • ZHANG Yue, Chairman, Broad Group

		Advisor to Chairman, Golden State Environmental Group, "MPE AMI Biogas Technology"	
10:30 – 10:45	Tea Break		
10:45 – 12:00	<p style="text-align: center;">Multi-Energy Systems & Future Energy Services (continued)</p> <p style="text-align: center;"><i>APEUA, DBDH, and IVL</i></p> <p>Presentations:</p> <ul style="list-style-type: none"> • Eric Shao, Kamstrup, "Consumption-based billing and tariffs" • PENG Ziyang, Wärstilä, "Co-generation and energy storage" • Tommy Jacobson, Danfoss, "Artificial Intelligence-based Services for District Heating" <p>Panel Discussion</p> <p>Moderator: Lars Hummelose, DBDH</p> <ul style="list-style-type: none"> • Elena Markova, ABB • Eric Shao, Kamstrup • Tommy Jacobson, Danfoss • PENG Ziyang, Wärstilä 	<p style="text-align: center;">Biomass-to-Energy Technology Assessment & Dissemination (TAD) Workshop (continued)</p> <p style="text-align: center;">Beijing Energy Club</p> <p>Expert Assessment & Recommendations:</p> <ul style="list-style-type: none"> • YAN Weijiang, Deputy General Manager, CGN Energy Service Co., Ltd. • YUAN Baorong, Deputy General Manager and Senior Engineer, CECEP Consulting Co., Ltd. • Steve Szymanski, Vice President (Funding), Asia Pacific Biogas Alliance • Stephen Peters, Senior Energy Specialist (Waste-to-Energy), ADB <p>Summary</p>	<p style="text-align: center;">Building Revolution</p> <p style="text-align: center;"><i>Venue: Pyramid</i></p> <p style="text-align: center;">Broad Group</p> <p>Moderator: ZHANG Yue, Chairman, Broad Group</p> <p>Panel Discussion:</p> <ul style="list-style-type: none"> • Jeff Leung, CEO, JET Studios Inc. • Raymond Hoe, Director, Scott Browning • ZHAN Shilin, Vice Dean, Architectural Design and Research Institute of Tsinghua University Co., Ltd. • Daniel Zhang, VP, Broad Group

	<ul style="list-style-type: none"> • PENG Guoping, Broad Group <p>Q&A</p> <p>Closing Remarks: Peter Lundberg, APEUA</p>		
12:00 – 13:00	<p>Lunch</p> <p>Venue: Mediterranean Club</p>		
12:45 – 13:30	<p>“Friends of CCUS” Roundtable Discussion (By Invitation Only)</p>		
13:00 – 15:00	<p>Hot Pot Business Matchmaking</p> <p><i>Venue: Pyramid</i></p> <p>Participating organizations</p> <ul style="list-style-type: none"> • Procurement, Portfolio, and Financial Management Department, ADB • Bin-E (Poland) AI-Augmented Smart Waste Bin • Boson Energy (Luxembourg) Waste-to-Resources • DAIS Analytic (US) Nanoporous Membrane Technology • DCT (Italy) Solvent Recovery and Gas Treatment • Dragon Power Space (US) Online Corrosion Monitoring • GDChem (Korea) De-NOx and Clinker Removal • SAP (Germany) Smart Solution • SunOyster (Germany) Solar Cogeneration System • Sanyi Heavy Energy (China) Wind Energy • TECAM (Spain) VOC and Solid Waste Treatment • Hunan Yuxu Environmental Technology (China) Wastewater Treatment • BROAD Group (China) HVAC and Clean Air Technology • Hunan Yuebo Energy (China) New Energy • Hunan Vary Group (China) Solid Waste Treatment 		
15:00 – 15:15	<p>Tea Break</p>		

15:15 – 17:00

Climate Investment and Finance

Venue: Pyramid

Moderator: LU Xuedu, Lead Climate Change Specialist, ADB

Presentations:

- **DING Hui**, Director, Department of Climate change, Ministry of Ecology and Environment, PRC
- **YAN Pin**, The People's Bank of China Financial Research Institute
- **Johann Elysee**, Senior Portfolio Specialist, Office of Portfolio Management, Green Climate Fund
- **LIANG Xi**, Director, Centre for Business and Climate Change, University of Edinburgh
- **Representative**, Xiangtan City, Hunan Province, PRC

Panel Discussion

- **YANG Yuerong**, Vice President of Shanghai Pudong Development Bank Co., Ltd. and Investment Bank
- **Naeeda Chrishna-Morgado**, Climate Finance Specialist
- **Alex Fisher**, Director, GIZ China
- **XIE Wenhong**, China Program Manager, Climate Bonds Initiative

17:00 – 17:30

Closing Plenary

Venue: Pyramid

Moderator: Allen Zhang, President, Hunan Innovative Low Carbon Development Center

Closing Remarks:

- **ZHUANG Dali**, Deputy Director General, Hunan Provincial Finance Department
- **ZHANG Zaifeng**, Deputy Director General, Hunan DEE

Recap: ZHAI Yongping, Chef, Energy Sector Group, SDCC, ADB

18:00 – 20:00	Farewell Dinner hosted by Broad Group <i>Venue: Mediterranean Club</i>
18 OCT (FRI)	
	Site Visits (by sign-up sheet) <ul style="list-style-type: none">• Changsha Huanghua International Airport Multi-Energy Project• Broad Town Multi-Energy System

Plenary: Transformative Technologies

The session will explore the technology options and developments needed to realize the Paris Accord. Technology leaders will share their challenges and ideas on surmounting road blocks in the transformation to low carbon technology.

Sponsored by: Asian Development Bank

Parallel Session 1: South-South Cooperation: Renewable Energy Technology Transfer

The session will focus on renewable energy technology transfer between South-South countries to encourage collaboration and communication among renewable energy technology transfer developers, manufacturers and users from developing countries and foster technical and entrepreneurial cooperation. Speakers and panelists will discuss barriers and solutions to and business models required for solar and hydropower energy technology transfer.

Sponsored by:

- Administrative Centre for China's Agenda 21 (ACCA21)
- United Nations Development Programme (UNDP)
- Technology Transfer South-South Cooperation Center

Parallel Session 2: City Carbon Emission and Air Pollution Co-control and Co-management

The session will explore how cities can co-control air pollutants and carbon emissions, and adopt coordinated measures to achieve the dual goals of air quality attainment and carbon emission peak. Representatives from the cities and experts from the fields of environment protection and climate change will share their experiences and ideas, and discuss with the participants on how to address barriers to co-control and put concepts into implementation.

Sponsored by:

- Energy Foundation China (EFC)
- Institute for Sustainable Communities (ISC)

Supported by: *International Technical Supporting Platform for City Emissions Peaking (ISP-CEP)*

Parallel Session 3: Multi-Energy Systems & Future Energy Services

The workshop will feature leading international and national experts from the industry, sharing experiences from real-world cases, enabling an excellent opportunity to share ideas, get intelligence and discuss relevant topics and business opportunities. The expected audience will include government officials, planning agencies, utility executives, financial and legal experts, planners, developers, design institutes, investors, academia and domestic and international sector associations.

Sponsored by:

- Asia-Pacific Urban Energy Association (APEUA)
- Danish Board of District Heating (DBDH)
- Swedish Environmental Research Institute (IVL)

Parallel Session 4: Low-Carbon Technology and Industrial Transformation

Focusing on the low-carbon and high-quality development needs of the economy, the session will share experiences of promoting low-carbon industry transformation and upgrading and low-carbon technology development and application at home and abroad, analyze the bottlenecks and challenges, and jointly explore how to stimulate new economic growth points in urban development.

Sponsored by:

- National Center for Climate Change Strategy and International Cooperation (NCSC)
- International Urban Cooperation (IUC)

Parallel Session 5: Biomass-to-Energy Technology Assessment & Dissemination

The session will evaluate the BioGTS® BioGas Technology (plug-flow dry fermentation process), originally from Finland, MPE AMI Biogas Technology (wet fermentation process) from Germany, and Biomass Fast Pyrolysis Technology from China, and explore the development prospects of biomass-to-energy industry

Sponsored by: Beijing Energy Club

Parallel Session 6: Zero-Waste Cities

The implementation of the national policy on “zero-waste cities” will launch a revolution in industrial technology: a series of technically mature and economically cost-effective new materials will replace one-off packaging, plastic products with only a few years of life, and reinforced concrete that can last only dozens of years. At the same time, a revolution in urban planning will also be kicked off: the dependence on roads, bridges and cars will be

reduced by city-industry integration, rail transit, and compact buildings.

Sponsored by: Broad Group

Parallel Session 7: Building Revolution

The session aims to identify schemes that can fundamentally change the buildings' status quo through discussions among experts and scholars on concrete replacement, new construction materials, alternatives to air conditioning, heat-recovered fresh air, and multi-paned glass windows, among others.

Sponsored by: Broad Group

Plenary: Climate Investment and Finance

Climate Investment and Finance could be a powerful driver for and backbone to tackling global climate change. The session invites policymakers, research and financial institutions and project developers, to identify key barriers to climate investment and financing, and investigate solutions for accelerating climate investment and finance. The session will also explore opportunities for regional pilots of climate investment and finance, investigate related standards and climate risk management opportunities.

Sponsored by: Asian Development Bank