

中国科协“一带一路”国际科技组织合作平台建设项目  
China Association for Science and Technology (CAST)  
Program of International Collaboration Platform for Science and Technology Organizations  
in Belt and Road Countries



北京工商大学——经济合作组织会科学基金会  
“一带一路”科技与经济合作联合培训中心

**6<sup>th</sup> Joint Training Program**



**Powering Belt and Road –  
Lithium-Ion Batteries**

Accelerating transition to low-carbon and climate-resilient  
development in the Belt and Road Countries

**BTBU-ECOSF Joint Training Center on Scientific, Technological and  
Economic Cooperation under the Belt and Road Initiative**

**September 28, 2022**

## **I. About the BTBTU-ECOSF Joint Training Center**

The Belt and Road Initiative (BRI) is a massive global initiative aimed at connecting international trading partners in the east and the west. The BRI offers a tremendous potential to spur a new era of trade, economic and industrial growth for the countries in the Asia and beyond. In order to maximize the benefits of BRI, the participating countries require to develop adequate technological workforce and engage in an alliance for promotion of cross-border cooperation in the Science, Technology and Innovation (STI) sectors.

Appreciating this need for skill development and capacity building in key economic sectors, the Beijing Technological and Business University (BTBU) in collaboration with Economic Cooperation Organization - Science Foundation (ECOSF) launched a BTBU-ECOSF Joint Training Center on Scientific, Technological and Economic Cooperation under Belt and Road Initiative in September 2020. The Center has won the financial support of China Association for Science and Technology (CAST) Program of International Collaboration Platform for Science and Technology Organizations in Belt and Road Countries.

**BTBU** is renowned as a one of the leading high-level research universities in Beijing. Having long been committed to promoting substantive exchanges and exchanges with overseas first-class universities and academic institutions, BTBU has achieved meaningful results in international exchanges and cooperation, personnel training, academic research, etc.

**ECOSF** is the specialized agency of the Economic Cooperation Organization (ECO), an intergovernmental organization for scientific and technological cooperation, with its 10-member states (Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, Uzbekistan). ECOSF has an extensive exchange and cooperation network with international scientific and technological organizations in Europe, Asia, Africa and other regions, as well as other international organizations.

**BTBU-ECOSF Joint Training Center** aims to promote the sustainable economic and social development of BRI countries through training in the fields of technology application, industrial economics, S&T standards and science communication.

## II. Background

Energy storage market is on rise across the world. Every company, new or old, that is in the field of renewables or electric vehicles, is looking for even more reliable and affordable storage technology. Battery energy storage provides several valuable services and advantages in stationary, renewable grid services and electric mobility. In stationary storage and renewable grid service battery energy storage provides for frequency regulation, peak shaving as well as mitigating the fluctuations in generation from variability in renewable sources.

Lithium-ion (Li-ion) batteries today are poised to become the preferred choice for many applications across the electric mobility, grid storage and consumer electronics. This is because of inherent characteristics of the Li-ion batteries, which last longer and recharge faster, saving time, saving money, being more productive and reducing risk throughout the lifecycle. Hence, Lithium-ion batteries are the key technology to achieve net-zero carbon emissions in transportation, industrial equipment, and consumer electronics for the Belt and Road and ECO Member Countries.

The Joint Training Center fully recognizes the fact that the China has now been the world's largest lithium battery consumer market for five consecutive years. In 2021, the global lithium-ion battery market reached 545 GWh, and China accounted for more than half of the total<sup>1</sup>. Increasing demand for new energy vehicles is one of the main factors underpinning the recent surge in China's lithium battery industry. By the end of 2021, China's power battery production capacity accounted for about 70% of the global total. Additionally, six of the top 10 lithium battery manufacturers in the world are from China (Ref?).

Hence, BTBU-ECOSF Joint Training Center is making this opportunity to bring China's extensive expertise and best practices to help guide entrepreneurs to develop a regional lithium-ion battery manufacturing value chain that creates equitable clean-energy and hi-tech jobs in the Belt and Road (B&R) countries while mitigating climate change impacts. In this respect, BTBU – ECOSF Joint Training Center is planning to host its 6<sup>th</sup> training program entitled on “Powering Belt and Road – Lithium – ion batteries” at **2 PM (Beijing Time - GMT+8) on September 28, 2022.**

In this backdrop, this training program will seek to understand and learn from China's expertise and capabilities about viable options for creating a strong lithium-ion manufacturing based in the B&R region, show case best practices, success stories, and barriers on implementation of policies and programmes promoting low carbon development, and match the potential cooperation among BRI counties in Lithium-ion Battery production.

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<sup>1</sup> 2021 White Paper on China Lithium Battery Industry Development Index

### III. Relevance of this Joint Training Center to the ECO Region

The Economic Cooperation Organization (ECO) region is an epicenter of the ancient silk route and holds great significance as a gateway to connect China with the Middle East, South West Asia and Europe and beyond as three of China supported Economic Corridors (China Pakistan Economic Corridor, China-Tajikistan & westwards and China-Kazakhstan-Russia-Europe) transpires through ECO countries.

Thus, the Joint Training Center will play a crucial role to strengthen the scientific, economic and cultural exchanges among China, ECO Member States and other countries to promote the integrated development of industries, academia and research in the Belt and Road international cooperation.

### IV. Agenda

Time Beijing Time (GMT+8)	Speakers
14:00 - 14:10	<b>Opening Remarks</b> <b>Prof. Seyed Komail Tayebi</b> President, ECO Science Foundation
14:10-14:50	<b>Ms. Aidong Xu</b> Vice Chairman of Nickel Branch of China Non-Ferrous Metal Industry Association, Chief expert of Beijing Antaike Information Co., LTD
14:50-15:30	<b>Mr. Keyu Li</b> Vice President of Green Harbor Investment.
<b>Tea and Coffee Break</b>	
15:40-16:20	<b>Engr. Munan Hong</b> Co-Founder of Hong Zhiliwulian (Hangzhou) Technology Co., LTD.
16:20-17:00	<b>Dr. Zhonghua Chen</b> R&D Director of LongTTech Company LTD.
17:00-17:20	<b>Engr. Khalil Raza,</b> Scientific Officer, ECOSF Wrap up and snapshot of Lithium-ion market in BRI/ECO countries.
<b>Q&amp;A</b>	
17:00-17:10	<b>Closing Ceremony</b> Leader of BTBU

## V. Partners and Collaborators

### Hosted by:

- Beijing Technology and Business University (BTBU)
- Economic Cooperation Organization Science Foundation (ECOSF)

### Organized by:

- BTBU-ECOSF Joint Training Center on Scientific, Technological and Economic Cooperation under Belt and Road Initiative

### Supported by:

- Beijing International Science and Technology Exchange Center
- School of International Economics and Management, BTBU
- Pakistan Study Centre of Science & Technology and Economy, BTBU
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## VI. Registration

Interested participant can register <http://www.ecosf.org/signup.aspx>. Once registered, you will receive further information with login and password to access the training sessions. Interested participants are requested to register themselves by September 26<sup>th</sup>, 2022. On successful registration, participants would receive access to zoom webinar links.

## VII. Target audience/participants

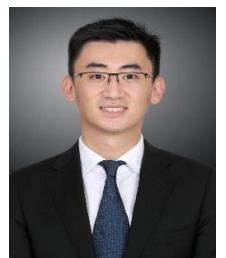
Government officials, academia, business executives, industry experts, electric mobility experts, professional, climate change specialists, and policy research institutes.

## VIII. Resource Persons/Experts

**Xu Aidong**, Vice Chairman of Nickel Branch of China Non-Ferrous Metal Industry Association, Chief expert of Beijing Antaika Information Co., LTD



**Keyu Li**, Vice President of Green Harbor Investment, a private equity Investment fund focused on the intelligent driving, carbon neutral and medical technology industries, with a management size of over 6 billion yuan.



**Munan Hong** received his BE and PhD in the Department of Vehicle and Mobility, Tsinghua University, China, in 2005 and 2010, respectively. From 2005 to 2010, his research focused on model-based hybrid powertrain system control. He worked as a Visiting Fellow in the Department of Engineering and Applied Sciences, Sophia University, Tokyo, Japan in 2008. He used to be the chief engineer of battery system in Changan Automobile Corporation. Now he worked in Zhiliwulian (Hangzhou) Technology Co., Ltd. His research interests include battery system design and Terminal-Cloud cooperated battery management. He has participated a series of projects of battery management and battery system and obtained Chongqing City S&T Progress Award, SAE-China S&T Progress Award, 2020 SAE Environmental Excellence in Transportation (E2T) Award.



**Zhonghua Chen** is the R&D director at LongITech New Energy Ltd. He received his Ph.D in Physics from UiT The Arctic University of Norway. From 2007 to 2012, he worked as engineer and researcher at Renewable Energy Corporation ASA in Norway. After that, he started pursuing his Ph.D as a researcher at SINTEF research institute in Norway. Since the end of 2016, he has been responsible for R&D at state-owned new energy institute, and Li-ion battery companies. He has profound knowledge and experience in materials, electrochemistry, and new energy. His current research interests mainly include Li-/Na-/Fe-ion batteries, all-solid-state batteries, and new materials.



**Khalil Raza** is a sustainable energy professional with extensive experience in strategy management, project development and policy analysis, in the areas of science & technology, and clean energy. Currently, he serves as the Scientific Officer at the Economic Cooperation Organization Science Foundation (ECOSF). Mr. Raza plans, coordinates, and implements ECOSF's research programs, notably in the area of global environmental challenges with a particular focus on sustainable energy, water, and climate change. Previously, Mr. Raza has worked with the World Bank, UNDP, and Planning Commission of Pakistan on vital strategics programmes, including renewable energy, energy planning, electric mobility and Sustainable Energy for All (SE4ALL). Mr. Khalil is a recipient of the prestigious Fulbright Scholarship and holds Masters in Renewable and Clean Energy from Wright State University, Ohio USA.



## IX. Contact Points

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