

## Achieving Energy Security in Central Asia: Role of Renewable Energy

12-13 March 2018  
Baku, Azerbaijan  
Hilton Baku

Central Asian countries are very rich in energy resources however the current situation is still characterized by steady load growth and untapped energy in some countries and inefficient use of regional energy resources. Key concern is energy security. Evidence suggests that by 2035, energy security will notably decrease in Central Asia as domestic resources will meet less than 50 percent of annual average needs. This presents new challenges for the region to search for renewable energy solutions considering their vast potential for increasing deployment. This two-day intensive workshop, comprising of interactive lectures and group discussions, aims to examine the role of renewable energy in promoting energy security in Central Asia. It also aims to improve understanding of various policy, regulatory, technical and financial aspects of renewable energy deployment, including key challenges and opportunities for increasing uptake of renewable energy in the region.

Workshop participants will include senior policy makers, international experts, and representatives from multilateral banks, academia and private sector involved in energy sector development.

Monday 12 March 2018	
8:30- 9:00	Registration
9:00-9:10	<b>Welcoming Remarks</b> Representative from CAREC Institute
9:10-9:15	<b>Objectives of the Workshop</b> Representative from ADB Institute
9:15-10:00	<p><b>Session 1: Renewable Energy and Implications on Energy Security in Central Asia</b></p> <p>This session will define the Energy Security based on 4-A framework (Availability, Applicability Acceptability and Affordability) and will provide result of an empirical study that applied to all CAREC countries to examine the status of energy security. The session will evaluate the results and draw policy implications, especially how the development of renewable energy in CAREC countries help energy security.</p> <p><b>Chang Young Ho</b>, Senior lecturer, Singapore University of Social Sciences, Singapore and <b>Farhad Taghizadeh-Hesary</b>, Faculty member, Keio University, Tokyo, Japan, Senior Assistant to Dean, ADBI, Tokyo, Japan</p> <p>Open Discussion</p>
10:00-10:30	<b>Group Photo and Coffee Break</b>
10:30-11:15	<p><b>Session 2: benchmarking of other regions for the Central Asia: Case of ASEAN</b></p> <p>In order to set the targets for energy security, energy efficiency and development of renewable energy in Central Asia, it is important to study about experiences of other regions. This session provides a framework that integrates the three pillars of the energy security concept-</p>

	<p>sustainability, affordability and secure supply. The policy recommendations that this session provides, are useful for Central Asia.</p> <p><b>Yang Lui, Zhong Sheng and Dina Azhgaliyeva</b> Energy Studies Institute, National University of Singapore</p> <p>Open Discussion</p>
<b>11:15-12:45</b>	<p><b>Session 3: An Analysis of the factors affecting renewable energy prices</b></p> <p>This session will highlight the factors affecting renewable energy prices, specially the solar modules. The cost reduction mechanism in solar modules has become an important topic as the role of solar electricity in overall energy supply and the market value of solar modules grow globally. When analyzing price, the influence of economic factors in addition to technology need to be considered. In addition, the session will shed light on the innovative public policy instruments to establish and enhance the linkage between green technology and finance.</p> <p><b>1- Farhad Taghizadeh-Hesary</b>, Keio University, <b>Naoyuki Yoshino</b>, Dean, ADBI, and <b>Yuko Inagaki</b>, PwC Japan.</p> <p><b>2- Prajwal Baral and KyungJin (Brian) Hyung</b>, Korea Technology Finance Corporation(KOTEC), Republic of Korea</p> <p>Open Discussion</p>
<b>12:45-14:00</b>	Lunch
<b>14:30-16:00</b>	<p><b>Session 4: Country Panels I: Spurring renewable energy development in Central Asia – risks, opportunities and challenges</b></p> <p>Central Asian countries are at different levels of readiness for the adoption of renewable energy solutions as there are several factors that are delaying the opportunity to increase deployment. This session aims to identify the different benefits and opportunities associated with renewable energy deployment, as well as the various constraints and challenges faced by countries in promoting renewable energy and security. All delegations will be requested to offer their views, with resource persons also participating to guide the discussions.</p> <p><b>Speakers:</b> Afghanistan Azerbaijan PRC Georgia Mongolia</p> <p>Open Discussion</p>
<b>18:00-20:00</b>	<p><b>Welcome Dinner hosted by ADBI and CAREC Institute</b> <i>Venue: Hilton Baku Hotel</i></p>
<b>Tuesday 13 March 2018</b>	
<b>09:30-11:00</b>	<p><b>Session 5: Financing renewable energy – green finance and innovative solutions</b></p> <p>This session examines the role of green finance and other financing arrangements to promote renewable energy and efficiency.</p> <p><b>1- Suk Hyun</b>, Korea Capital Market Institute, <b>Donghyun Park</b> and <b>Shu Tian</b>, ADB</p> <p><b>2- Naoyuki Yoshino</b>, Dean, ADBI and <b>Farhad Taghizadeh-Hesary</b>, Keio University</p> <p>Open Discussion</p>

11:00-12:30	<p><b>Session 6: Enhancing regional power trade in Central Asia – role of regional economic integration and cooperation</b></p> <p>This session examines the potential of power trading and the development of a regional energy market to promote energy security and efficiency in Central Asia. Priorities for enhanced cooperation in the development of renewable energy as well as energy infrastructure development will also be examined.</p> <p><b>1- Elena Shadrina</b>, Associate Professor, Waseda University School of International Liberal Studies, Japan  <b>2- Ayhan Gucuyener</b>, Research Fellow, NATO Energy Security Center of Excellence</p> <p>Open Discussion</p>
12:30-13:30	Lunch
13:30-15:00	<p><b>Session 7: Country Panels II: Spurring renewable energy development in Central Asia – risks, opportunities and challenges</b></p> <p>Central Asian countries are at different levels of readiness for the adoption of renewable energy solutions as there are several factors that are delaying the opportunity to increase deployment. This session aims to identify the different benefits and opportunities associated with renewable energy deployment, as well as the various constraints and challenges faced by countries in promoting renewable energy and security. All delegations will be requested to offer their views, with resource persons also participating to guide the discussions.</p> <p><b>Speakers:</b>  Kazakhstan  Kyrgyz Republic  Tajikistan  Turkmenistan  Uzbekistan</p> <p>Open Discussion</p>
15:00-15:30	Coffee Break
15:30-16:15	<p><b>Session 8: Roundtable Discussion: Policies to promote renewable energy and energy security in Central Asia</b></p> <p>This session will serve as a wrap-up session to reinforce discussions in previous sessions by presenting a set of policy options, strategies and best practices to achieve renewable energy, energy efficiency and energy security among Central Asian countries.</p> <p><b>Chair: Farhad Taghizadeh-Hesary</b>, Faculty member, Keio University, Tokyo, Japan</p> <p><b>Speakers:</b>  <b>Donghyun Park</b>, Principal Economist, ADB, Manila, Philippines  <b>Elena Shadrina</b>, Associate Professor, Waseda University School of International Liberal Studies, Tokyo, Japan  <b>Yang Lui</b>, Senior Research Fellow, Energy Studies Institute, National University of Singapore, Singapore</p> <p>Open Discussion</p>
16:15-16:30	Closing Remarks