

The socio-economic benefits of renewable energy

The socio-economic benefits of renewable energy have become a key consideration in building the case for its wide deployment. Increasingly, governments see immense opportunities in the development of a renewable energy sector, with a potential to fuel economic growth, create employment opportunities and enhance welfare.

In its co-authored publication "[*Perspectives for the Energy Transition: Investment Needs for a Low-Carbon Energy Transition*](#)", IRENA estimates that reducing global CO₂ emissions in line with the Paris Agreement, through significant uptake of renewables and energy efficiency measures, would boost GDP by 0.8% in 2050 and generate around 25 million jobs in the global renewable energy sector by 2050¹.

Among the co-benefits of renewable energy deployment, job creation has received particular attention. IRENA has built a well-recognized body of knowledge² in the field with its "[*Renewable Energy Jobs – Annual Reviews \(2014, 2015 and 2016\)*](#)". In its latest edition, IRENA estimates that the sector employed 9.4 million people in 2015. Employment opportunities are created in all the segments of the value chain as shown in IRENA's series on the topic. The studies on "[*Requirements in the Renewable Value Chain \(Solar PV, Wind, SWH\)*](#)",³ show that, outside manufacturing, over 50% of jobs can be localised with considerable opportunities to leverage existing industries.

This session will explore the socio-economic benefits of transitioning to a sustainable energy future, and how these findings can apply to specific countries or regions.

¹ IRENA publications related to measuring macro-economic benefits:

- [*Perspectives for the energy transition: Investment needs for a low-carbon energy system*](#)
- [*Renewable Energy Benefits: Measuring the Economics*](#)

² IRENA publications related to renewable energy jobs:

- [*Renewable Energy and Jobs – Annual Review 2016*](#)
- [*Renewable Energy and Jobs – Annual Review 2015*](#)
- [*Renewable Energy and Jobs – Annual Review 2014*](#)
- [*Renewable Energy and Jobs \(2013\)*](#)
- [*Renewable Energy Jobs & Access \(2012\)*](#)
- [*Renewable Energy Jobs & Access - Case studies \(2012\)*](#)
- [*Renewable Energy Jobs: Status, Prospects & Policies \(2012\)*](#)

³ IRENA publications related to the socio-economic benefits of renewable energy:

- [*The Socio-economic Benefits of Solar and Wind Energy*](#)
- [*Requirements in the Renewable Value Chain - Solar PV*](#)
- [*Requirements in the Renewable Value Chain - Onshore Wind*](#)
- [*Requirements in the Renewable Value Chain - Solar Water Heaters*](#)

Venue: Astana Expo
Date: 13 June 2017 - 9:00 - 11:30
Organizer: IRENA and UNECE



Regional cooperation on renewable energy in Central Asia

Countries of Central Asia possess large potential of renewable energy and have been increasingly involved in renewable energy dialogue over the past few years. While they are taking positive steps to accelerate the deployment of renewable energy, there is a need for additional efforts in the region to strengthen the enabling environments through dedicated policies and regulatory frameworks to catalyse, among others, private sector investments as well as raise awareness about the benefits of renewable energy deployment.

Regional collaboration is instrumental in facing challenges and addressing barriers hindering accelerated uptake of renewables in Central Asia. Therefore, IRENA has initiated a regional consultative process to discuss the challenges and opportunities in this regard and identify the areas of priority action in addressing them.

Two round of consultations took place: in Baku, Azerbaijan in October 2016 and in Abu Dhabi, UAE in April 2017. In addition, the Agency conducted a regional gap analysis study to identify and analyse the major obstacles hindering more accelerated renewable energy deployment in the region and map out the current and planned programmes implemented by development partners to support the uptake of renewables.

This consultative process will lead to the elaboration of a regional Action Plan for guiding IRENA's future support to the region in the upcoming years. The Action Plan will be implemented through close collaboration with a wide range of national, regional and international partners. The Communique on Accelerating the Uptake of Renewables in Central Asia will be released at the Energy Ministerial Conference "Meeting the Challenge of Sustainable Energy" on 11 June.

In this context, the session will provide the opportunity to exchange views on how to implement IRENA's Action Plan and will bring together experts from countries of the region and key regional stakeholders to discuss and analyse the priorities for more accelerated development of renewables in Central Asia.

Draft Agenda	
9:00 – 9:30	<p><u>Welcoming Remarks</u></p> <ul style="list-style-type: none"> • IRENA • UNECE
9:30 – 10:00	<p><u>Presentation of the Action Plan for Central Asia</u></p> <p>This session will provide the outcomes from the Ministerial and present the Action Plan and Communique for the region.</p> <ul style="list-style-type: none"> • IRENA
10:00 – 11:00	<p><u>Panel Discussion – Implementing the Action Plan for Central Asia</u></p> <p>Panellists will discuss implementation of the Action Plan, priorities, activities and partnerships to support deployment of renewables in the region.</p> <p>Moderator:</p> <p>Panellists</p> <ul style="list-style-type: none"> • Azerbaijan • Kazakhstan • Kyrgyzstan (tbc) • EBRD • USAID (tbc) • UNDP (tbc)
Closing 11:15 – 11:30	<p><u>Conclusions and way forward</u></p>

Venue: Astana Expo
Date: 14 June 2017 - 11:00 - 12:30
Organizer: IRENA and EBRD



Renewable Energy Finance

Directing energy sector investment towards renewables can help meet global energy and climate goals. Analysis by the International Renewable Energy Agency (IRENA) shows that the share of renewables in the global energy mix can be doubled by 2030 cost effectively, with existing technologies. In this direction, countries in Central Asia have established targets in support of the development of renewable energy. Kazakhstan has set an ambitious objective of increasing the share of renewable energy in electricity generation from less than 1% currently to 30 per cent by 2030. Similarly, Uzbekistan is aiming to achieve 16% of renewable energy in the overall energy consumption by 2030. Azerbaijan, Kyrgyzstan, and Tajikistan have set renewable energy targets as well.

With limited public funding, however, most of the investment needed to achieve these targets must come from the private sector, which requires addressing a set of barriers and risks. IRENA's publication in 2016, *Unlocking Renewable Energy Investment: The Role of Risk Mitigation and Structured Finance* identified the lack of financial capability at local level and investors' high risk perception in renewables as key areas where public finance institutions and international cooperation could provide support. In this context, enabling national development banks and local financial institutions with effective financing vehicles, and facilitating the use of risk mitigation instruments is key to attracting more private sector players and investment in renewable energy.

The European Bank for Reconstruction and Development (EBRD) has been engaging in various activities focused on scaling up renewable energy investment across a number of countries in which the Bank operates. As an investor, the bank understands project risks related to technology performance and regulatory and/or country settings. In its role as a development bank, the EBRD supports renewable energy project financing with technical cooperation offered to governments in the region to shape the institutional and regulatory frameworks for renewable energy investment, and by implementing climate finance in support of renewable energy projects.

With shared interests and experience, EBRD and IRENA are jointly hosting a panel session on renewable energy finance during the 8th Forum on Energy for Sustainable Development to explore the renewable energy financing landscape and discuss various financial instruments and support schemes that could help improve access to finance at local level and mitigate risks.

Participants will include government officials and representatives of international finance or financial institutions, industry associations, RE project developers and experts in the field.

Draft Agenda	
<p>Opening 11:00 – 11:20</p>	<p><u>Introductory remarks:</u> TBD (EBRD or IRENA)</p> <p><u>Moderator:</u> TBD</p> <p><u>Presentations:</u></p> <p>Title TBD, Henning Wuester, IRENA</p> <p>Title TBD, TBD, EBRD</p>
<p>Panel Discussion 1: 11:20 – 11:50</p>	<p>Improving access to finance at local level</p> <p><u>Potential speakers:</u></p> <ul style="list-style-type: none"> • TBD, EBRD Sustainable Energy Financing Facilities • TBD, Project developers • TBD, Private sector financial institutions <p><u>Questions:</u></p> <ul style="list-style-type: none"> • What are the key barriers limiting access to local capital for renewable energy projects? • Which regulatory framework and policy measures can help to improve access to local finance? • What is the role of national development banks and local financial institutions?
<p>Panel Discussion 2: 11:50 – 12:20</p>	<p>Mitigating risks for renewable energy investments</p> <p><u>Potential speakers:</u></p> <ul style="list-style-type: none"> • KY Choi, CEO, Kyrgyz Investment and Credit Bank • Harald Hirschhofer, Senior Advisor - TCX Investment Management Company • Anand Batsukh, Senior project development officer, XacBank Mongolia <p><u>Questions:</u></p> <ul style="list-style-type: none"> • How can FX risk be mitigated for renewable energy investments and what are the prospects of local currency lending? • Which new instruments and facilities could make a greater impact in mitigating risks for renewables? • What is the role of public finance institutions, including those channelling climate finance in risk mitigation?
<p>Closing 12:20 – 12:30</p>	<p><u>Summary and closing remarks:</u> TBD (EBRD or IRENA)</p>