Regional Energy – Global Synergy

9TH TURKEY ENERGY SUMMIT

17TH ERRA ENERGY INVESTMENT & REGULATION CONFERENCE

9-10 October 2018/ANTALYA, TURKEY

Organised by:
Energy Regulators Regional Association

Hosted by:
Energy Market Regulatory Authority

Co-organised with:
Turkey Energy Summit

WWW.ERRANET.ORG
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Dear Participants,

I have been with the ERRA family since 2001, thus, I have seen numerous Investment Conferences and this will be the 3rd one for me in Turkey. Each Investment Conference is a new challenge and a new story in the life of ERRA, but this year’s event makes everybody thrilled with its special character that is doubling our efforts with the 9th Turkey Energy Summit and elevating the ERRA Conference to a next level. When ERRA received the invitation from its Presidium Member, Mr. Mustafa Yilmaz, President of EMRA, Turkey, I felt very privileged and honoured!

EMRA, the Turkish regulator is one of the truly pro-active members of our organization representing high professional expertise in all fields of the energy sector. A country with vast potential, untapped capacities and endless will to do more and more. I am always amazed when meeting with our Turkish colleagues. We at ERRA know the keyword for a long time now: Turkey is always ready... Indeed, they are always ready to host, to share, to cooperate and to think further. Looking at ERRA’s past, allow me to highlight two colleagues, who were working hard for our association’s sustainability and development, and now they are bright minds of the Ministry of Energy and Natural Resources of Turkey:

- Mr. Fatih Dönmez, Minister of Energy and Natural Resources of Turkey, former Presidium Member of ERRA
- Mr. Alparslan Bayraktar, Deputy Minister of Energy and Natural Resources of Turkey, former Chairman of ERRA, currently Chairman of ERRA Strategic Advisory Board

Messieurs Dönmez and Bayraktar are expected to be with us in Antalya and we hope that they will enjoy meeting again with old ERRA friends-colleagues.

We could have hardly found a better motto: Regional Energy – Global Synergy. These four words unite and express the essence of ERRA and this year’s event. ERRA indeed started as a regional association, as its name still suggests. But the past 18 years formed the association into a global one stretching from the Americas to Africa and to remote parts of Asia. This year ERRA will continue serving its regulatory audience and focus on issues affecting the agenda of regulatory authorities, while our sister event, the 9th Turkey Energy Summit will equip participants with all the information about the local Turkish and regional challenges of the industry, besides it will showcase the trends on a wider scale, looking far beyond the borders of Turkey.

The first session, delivering an insight to the current status of the ENERGY SECTOR OF TURKEY will be structured around the exclusive opening speech of Minister Dönmez. Customers are assuming an increasingly proactive role in electricity market thus Session II is focusing on EMPOWERED CUSTOMER in particular Regulators’ Role in Improving Demand-Side Dynamics. The EU is currently debating the long-term role of Gas in Europe’s energy consumption and the chosen scenario of the future of gas in Europe will have an impact on global markets hence room for talks on...
EMERGING TRENDS IN GAS POLICY – Perspectives for Regional and Global Markets (Session III). Over the past decade, wholesale electricity prices have generally been below price levels required to attract new infrastructure investments. At the same time, an increasing number of countries are moving towards sector reform and introducing competition in wholesale and retail markets thus it is fundamental to offer a discussion platform on ENHANCING SECURITY OF SUPPLY (Session IV). Please stay with us until the very last Session in order to support our outstanding speakers and panellists and to appreciate their preparations.

This year the Investment Conference will see unprecedented number of participant regulators and unexpected high share of regulators among conference speakers and panelists. Thus, the Agenda foresees exciting regulatory discussions and will provide listeners with an insight to the regulatory world.

Participants will see for the first time in ERRA’s history a poster exhibition of abstracts flashing new and ongoing research in the energy sector, particularly related to energy regulation and development of energy markets.

Our prestigious partner, the Turkey Energy Summit (TES) is more than a joint organizer: they are the host, one of the sponsors and supporters of this event, delivering valuable services to ERRA. The union of the two events will provide new standards in interregional conferences and offers unique opportunities both for participants and sponsors.

Last but now least, let me commemorate some important players of the Conference, ERRA’s returning sponsors: the State Oil Company of Azerbaijan (SOCAR) has been providing generous support to ERRA for 10 years and ERRA is honoured to call SOCAR its primer sponsor. Our “Godmother” Association, the National Association of Regulatory Utility Commissioners (NARUC) and DNV GL have been supporting ERRA since 2002 continuously, thus they can be called our veteran sponsors. We remain thankful to all the other companies who provide financial support in order to make this year’s event a success.

To sum it up, the event will be a union, an unexpected and unique gathering along the „silk road of energy‟.

So, don’t be puzzled, enjoy the event!

Märt Ots
Chairman, ERRA
General Director, Estonian Competition Authority
Ladies and Gentlemen,

I would like to warmly welcome you to Antalya, the gemstone of the Turkish Riviera!

EMRA is pleased to host the ERRA Energy Regulation and Investment Conference, 3rd time in Turkey. We are always happy to see our friends in Turkey, this time in Antalya for the 17th edition of the ERRA Energy Regulation and Investment Conference.

Hospitality is not just an empty word for the Turkish people, when we invite, we really mean it and want all our visitors to have memorable times in our extraordinary country. Therefore we did our best to find a perfect location and to design the sessions and side events in a way that they allow you to meet Turkey and enjoy its beauties.

EMRA is the proud host of the event with an expectation that the ERRA Conference will allow the élite of the regulatory community to meet with the top level representatives of lead energy companies inside and outside of Turkey through the Turkish Energy Summit. We also expect that the two events will be real eye-openers not only for the Turkish energy industry, but on the regional and global perspectives.

Please allow Turkey and the two high-scale Conferences to impress you, to engage you and allow our sea cost to pamper you before and after the busy conference sessions.

I wish you unforgettable time in Turkey and Antalya!

Mustafa Yılmaz
ERRA Presidium Member
President, EMRA, Turkey
HOST ORGANISATION

The Energy Market Regulatory Authority of Republic of Turkey (EMRA) is an administratively and financially autonomous Authority established under the Law No. 4628 of 2001.

EMRA is the sole regulator of electricity, gas and downstream oil (fuel and lubricants) markets in Turkey.

EMRA fulfils its duties and uses powers assigned it by:

- Natural Gas Market Law No. 4646 (2001),
- Petroleum Market Law No. 5015 (2003),
- LPG Market Law No. 5307 (2005),

The objective of the aforementioned Laws is to establish a financially viable, stable and transparent energy market, which functions as per the provisions of private law and within a competitive environment to ensure the independent regulation and supervision of the market in order to provide sufficient electricity, natural gas, petroleum and LPG of good quality to consumers, at low cost, in a reliable and environment friendly manner.

EMRA is a member of the Energy Regulators Regional Association (ERRA) and the Association of Mediterranean Regulators for Electricity and Gas (MEDREG) and observer to the Energy Community Regulatory Board (ECRB). At the same time, EMRA is represented in the Steering Committee of ICER as the Chair of Gas and Other Fuels Working Group.

www.epdk.org.tr
What Is ERRA

The Energy Regulators Regional Association (ERRA) is a voluntary organization comprising of independent energy regulatory bodies primarily from Europe, Asia, Africa, Middle East, South and North America. There are now 31 full and 10 associate members working together in ERRA.

The Association’s main objective is to increase exchange of information and experience among its members and to expand access to energy regulatory experience around the world.

ERRA Full Members are:

- Albanian Energy Regulator Authority
- Public Services Regulatory Commission of Armenia
- Tariff (Price) Council of Azerbaijan
- Bhutan Electricity Authority
- State Electricity Regulatory Commission of Bosnia and Herzegovina
- Energy and Water Regulatory Commission of Bulgaria
- Electricity Sector Regulatory Agency of Cameroon
- Croatian Energy Regulatory Agency
- Estonian Competition Authority
- Georgian National Energy and Water Supply Regulatory Commission
- Hungarian Energy and Public Utility Regulatory Authority
- Committee on Regulation of Natural Monopolies, Protection of Competition and Consumer Rights of Kazakhstan
- State Agency for Fuel and Energy Complex Regulation of Kyrgyzstan
- Public Utilities Commission of Latvia
- National Commission for Energy Control and Prices of Lithuania
- Energy Regulatory Commission of Macedonia
- National Energy Regulatory Agency of Moldova
- Energy Regulatory Commission of Mongolia
- Nigerian Electricity Regulatory Commission
- Authority for Electricity Regulation of Oman
- National Electric Power Regulatory Authority of Pakistan
- Palestinian Electricity Regulatory Council
- Energy Regulatory Office of Poland
- Romanian Energy Regulatory Authority
WHAT IS ERRA

Federal Antimonopoly Service of the Russian Federation
Electricity and Co-Generation Regulatory Authority of Saudi Arabia
Energy Agency of Serbia
Regulatory Office for Network Industries of Slovakia
Energy Market Regulatory Authority of Turkey
National Energy and Utilities Regulatory Commission of Ukraine
Regulatory and Supervisory Bureau for Electricity and Water of Dubai, United Arab Emirates

ERRA Associate Members are:

Azerbaijan Energy Regulatory Agency
Regulatory Commission for Energy in Federation of Bosnia and Herzegovina
Regulatory Commission for Energy of Republika Srpska, Bosnia and Herzegovina
ERERA: ECOWAS Regional Electricity Regulatory Authority
Gas Regulatory Authority of Egypt
Public Utilities Regulatory Commission of Ghana
Energy and Mineral Regulatory Commission of Jordan
Energy Regulatory Office of Kosovo*
Peru’s Regulatory Agency for Investment in Energy and Mining
National Association of Regulatory Utility Commissioners, USA

New Member Applicants: E-Control, Austria
Energy Regulatory Office of the Czech Republic

ERRA has firmly established a sustainable association focused on energy regulation. To date more than 1 billion people receive energy services from companies regulated by ERRA members.

The ERRA website (www.erranet.org) gives access to information on ERRA members, numerous issue papers and analytical documents of the standing committees, conference proceedings of the ERRA Energy Investment and Regulation Conferences, training programs and training podcasts and other useful documents and publications of international organizations engaged in the energy sector worldwide.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.
# AGENDA AT A GLANCE

## Conference Venue

**Regnum Carya Golf & Spa Resort**  
*Address:* Kadriye Bölgesi, Üçkum Tepesi Mevkii, Belek-Antalya  
*Tel.:* +90 (242) 710 34 34  

## Conference Registration

### Monday, October 8

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 – 18:45</td>
<td>Conference Registration</td>
<td>Xanadu Resort Hotel Lobby</td>
</tr>
<tr>
<td>09:00 – 10:00</td>
<td>Golf Cup Registration</td>
<td>Regnum Carya Golf &amp; Spa Resort</td>
</tr>
<tr>
<td>10:00 – 17:00</td>
<td>Golf Cup</td>
<td>Regnum Carya Golf &amp; Spa Resort</td>
</tr>
<tr>
<td>19:00 – 20:00</td>
<td>Golf Coctail and Golf Cup Award Ceremony</td>
<td>Regnum Carya Golf &amp; Spa Resort</td>
</tr>
</tbody>
</table>

### Tuesday, October 9

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Registration and Coffee</td>
<td>Regnum Carya Golf &amp; Spa Resort</td>
</tr>
<tr>
<td>09:30</td>
<td>Introductory Remarks and Keynote Addresses</td>
<td>ERRA – Turkey Energy Summit</td>
</tr>
<tr>
<td>10:00</td>
<td>Ministerial Session</td>
<td>Joint Session</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
<td>Regnum Carya Golf &amp; Spa Resort</td>
</tr>
</tbody>
</table>

### ERRA Sessions

**Conference Room „Pinus II“**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td>Session II Presentations: Empowered Customers: Regulator's Role In Improving Demand-Side Dynamics</td>
</tr>
<tr>
<td>11:00</td>
<td>Conference Family Photo</td>
</tr>
<tr>
<td>13:30</td>
<td>Coffee Break/ Networking</td>
</tr>
<tr>
<td>15:00</td>
<td>Session II Panel Discussion: Empowered Customers: Regulator's Role in Improving Demand-Side Dynamics</td>
</tr>
<tr>
<td>15:45</td>
<td>Coffee Break/ Networking</td>
</tr>
<tr>
<td>17:00</td>
<td>Session Concludes</td>
</tr>
</tbody>
</table>

### Turkey Energy Summit Sessions

**Conference Room „Carya“**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Power &amp; Gas Markets: Retail and Distribution</td>
</tr>
<tr>
<td>15:00</td>
<td>Exclusive Session: TÜSİAD</td>
</tr>
<tr>
<td>16:30</td>
<td>Turkish LPG Markets</td>
</tr>
<tr>
<td>17:00</td>
<td>Turkish Gas Markets &amp; Trading</td>
</tr>
<tr>
<td>18:30</td>
<td>Integration of RES into the Turkish Transmission System</td>
</tr>
</tbody>
</table>

**Conference Room „Pinus I“**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:30</td>
<td>Turkish Petroleum Markets</td>
</tr>
<tr>
<td>17:00</td>
<td>Solar Power in Turkey: Current State and Future Expectations</td>
</tr>
<tr>
<td>18:30</td>
<td>Session Concludes</td>
</tr>
</tbody>
</table>

### Gala Dinner

**Xanadu High Class Resort Hotel**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>20:00</td>
<td>Gala Dinner</td>
</tr>
</tbody>
</table>

Last updated on October 1, 2018. ERRA and TES reserves the right to change the published agenda at any time during the organisation and implementation of the programme.
## AGENDA AT A GLANCE

### Wednesday, October 10

<table>
<thead>
<tr>
<th>Time</th>
<th>Session III Presentations: Emerging Trends in Gas Policy – Perspectives for Regional and Global Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td></td>
</tr>
<tr>
<td>09:30</td>
<td>Renewable Energy Investments in Turkey and YEKA Model</td>
</tr>
<tr>
<td>10:45</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:15</td>
<td>Current State &amp; Future Expectations in Power Generation</td>
</tr>
<tr>
<td>12:05</td>
<td>Regional Energy Hubs: Opportunities &amp; Challenges</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30</td>
<td>EV Cars, Oil Demand &amp; Future Expectations</td>
</tr>
<tr>
<td>14:00</td>
<td>Global LNG Markets</td>
</tr>
<tr>
<td>15:15</td>
<td>Coffee Break/ Networking</td>
</tr>
<tr>
<td>15:30</td>
<td>Digital Transition on Power Trading &amp; Grids</td>
</tr>
<tr>
<td>16:00</td>
<td>Mediterranean Gas Markets</td>
</tr>
<tr>
<td>17:00</td>
<td>Session Concludes</td>
</tr>
</tbody>
</table>

### Turkey Energy Summit Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Conference Room „Carya“</th>
<th>Conference Room „Pinus I“</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Upstream Oil &amp; Gas Strategies for Turkey</td>
<td></td>
</tr>
</tbody>
</table>

### ERRA INTERNAL MEETINGS

**Meeting Venue**

**Xanadu Resort Hotel**

*Address:* Belek Turizm Merkezi Acısu Mevkii PK 49, Belek-Antalya  
*Tel.:* +90 (242) 710 00 00  

### Thursday, October 11

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 16:15</td>
<td>Chairmen Meeting (incl. Ad-Hoc General Assembly)</td>
<td>Kubilayhan I</td>
</tr>
<tr>
<td>09:00 – 17:15</td>
<td>Licensing/ Competition Committee Meeting</td>
<td>Kubilayhan II</td>
</tr>
<tr>
<td>09:00 – 17:15</td>
<td>Tariff/ Pricing Committee Meeting</td>
<td>Kubilayhan III</td>
</tr>
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</table>

### Friday, October 12

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 12:30</td>
<td>Joint Meeting of the Licensing/ Competition and Tariff/ Pricing Committee</td>
<td>Kubilayhan I</td>
</tr>
</tbody>
</table>
USEFUL INFORMATION – LOGISTICS

AIRPORT TRANSFER
TES will provide airport shuttle services (incoming and outgoing) to those registered ERRA participants, who reserved the accommodation by the help of TES. In order to secure this service, please share your arrival and departure information with Mr. Sadi Algan (E-mail: sadi.algan@efo.com.tr; +90 533 658 8928). After your arrival to Antalya airport, please look for the TES–ERRA Conference banner.

For ordering the airport transfer for your return flight, please proceed to the TES information desk in the hotel lobby 1 day earlier than your actual flight date.

TRANSFER BETWEEN XANADU AND REGNUM CARYA HOTELS
TES will provide free shuttle services between Xanadu and Regnum Carya Hotels to all registered ERRA participants. For more information on the the schedule, please proceed to the TES information desk in the lobby of both hotels.

OFFICIAL LANGUAGES
All sessions will have simultaneous interpretation in English and Turkish languages. Headsets will be distributed at the entrance of the Conference room by providing an ID. Please return the interpretation headsets at the entrance of each conference room at the end of each day.

REGISTRATION DESK
Conference registration available:
- on Monday (October 08) from 12:00 –18:45 in the Lobby of Xanadu Hotel
- on Tuesday (October 09) available in the Lobby of Regnum Carya Hotel from 08:30
- on Wednesday (October 10) from 08:30 in the Lobby of Regnum Carya Hotel

Please stop by the registration desk and receive your conference materials and nametag which will allow you to enter all Conference functions.

WEARING YOUR BADGE IS CRUCIAL
After registering you will receive your Conference kit in which you will find your Name Badge. You are kindly asked to wear your badge during all Conference sessions and events. Since the hotels are not open for the public, access to functions will be denied without your badge!

CONFERENCE MATERIALS
Please note that the Conference Agenda is structured around presentations and panel discussions. The presentations and other related materials are posted on the Conference website in the order of receipt from the speakers. The presentations are password protected and available for registered conference delegates at: https://erranet.org/conference/investment-conference-2018/?tab=materials

EMERGENCY PHONE NUMBERS
In case of any problems or emergency issues, please contact the ERRA Secretariat on the following mobile number: +36 70 392 5986 (Viber, Whatsapp available).
Local organizers’ contact number: +90 533 658 8928 (Mr. Sadi Algan).
SOCIAL PROGRAMMES

Golf Cup
Date: 8 October, Monday, 09:00-17:00
Registration: 09:00-10:00
Venue: Regnum Carya Golf & Spa Resort
Fee: Complimentary for Conference Participants

All you need to know:
The program is available not only for professional golf players, but to amateurs and to those who would like to try this sport for the first time.

Schedule:
- Registration: 09:00 – 10:00 in the Lobby
- Driving to the course: 10:00
- First shot at 12:30
- Lessons start at 13:30

Lunch will be available at the cafe at the course.
For more information on the course and the Cup, please contact Mr. Hasan Ceylan (Carya Golf Club) at hasanceylan@caryagolf.com.

Golf Coctail and Golf Cup Award Ceremony
Date: 8 October, Monday, 19:00 – 20:00
Venue: Regnum Carya Hotel Pool
(Check the info desk for latest updates in case of bad weather.)

Please don’t forget to have your badge with you since it will allow you to enter Regnum Hotel!

Start the 17th ERRA Conference with a glass of coctail – celebrating the Golf Cup winner and the players of the golf day! Please join us for a welcome drink served at the Regnum Pool in Regnum Carya Hotel.

Gala Dinner
Date: 9 October, Tuesday, 20:00
Venue: Xanadu High Class Resort Hotel
Restaurant „Kebab House“ (seaside)

The Xanadu High Class Resort Hotel will hold the Gala Dinner of the Conference this year where you will be able to enjoy authentic Turkish food as well as Turkish cultural shows performed during the dinner.

Participation in the Social Programmes is available for the registered participants and is included in the registration fee. We would like to kindly ask you to wear your badges during the social events and show the Conference and/or Hotel Staff upon entry.

For accompanying persons the events are available for 50 EUR. Registration is possible electronically by sending an e-mail to the ERRA Secretariat or at the Registration Desk during the conference registration hours.
Social Media Contest
Win a free registration to the 2019 ERRA Conference!*

If you are active on Facebook and/or LinkedIn, let’s share/ repost or comment ERRA’s posts regarding the upcoming Antalya event!
You can participate in the contest from **8 October** 8.00 am until **10 October** at 15.00 pm.

<table>
<thead>
<tr>
<th>Only 3 steps to win:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1) <strong>Like, Follow</strong> ERRA (Energy Regulators Regional Association) on Facebook or LinkedIn</td>
</tr>
<tr>
<td>Step 2) <strong>Post</strong> a photo during the conference using <strong>#ERRAConference</strong></td>
</tr>
<tr>
<td>Step 3) <strong>Tag</strong> @ ERRA (Energy Regulators Regional Association)</td>
</tr>
</tbody>
</table>

The winner will be announced on **October 10th** right after the last presentation.

*The travel, accommodation and visa expenses are not included.

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Visit us at the Exhibition Area

ERRA will have a stand in the exhibition foyer area. Please stop by and sign our guest book!

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Poster Exhibition

Abstract publications submitted to ERRA’s Conference Poster project are presented in the coffee break foyer area. Please don’t miss to stop by and view them. The best 2 abstracts will be presented during the Conference!
## OPENING CEREMONY (JOINT)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>08:30</td>
<td>Registration and Coffee</td>
</tr>
<tr>
<td>09:30</td>
<td>Introductory Remarks</td>
</tr>
<tr>
<td></td>
<td>• Mustafa Karahan, 9th Turkish Energy Summit Chair</td>
</tr>
<tr>
<td></td>
<td>• Sponsors’ Remarks</td>
</tr>
<tr>
<td>10:00</td>
<td>Keynote Address</td>
</tr>
<tr>
<td></td>
<td>• Mart Ots, Chairman, Energy Regulators Regional Association (ERRA)</td>
</tr>
<tr>
<td></td>
<td>• Mustafa Yılmaz, President, Energy Market Regulatory Authority (EMRA), Turkey</td>
</tr>
<tr>
<td></td>
<td>• Mustafa Elitas, The Grand National Assembly of Turkey, President of the Committee on Industry, Trade, Energy, Natural Resources, Information and Technology</td>
</tr>
<tr>
<td></td>
<td>• The Honorable Fatih Dönmez, Minister of Energy and Natural Resources, Turkey</td>
</tr>
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## SESSION I: MINISTERIAL SESSION (JOINT)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>11:00</td>
<td>Current Status of the Turkish Energy Sector</td>
</tr>
<tr>
<td></td>
<td>• The Honorable Fatih Dönmez, Minister of Energy and Natural Resources, Turkey</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
</tr>
</tbody>
</table>
Tuesday, October 9

SESSION II: EMPOWERED CUSTOMERS: REGULATOR’S ROLE IN IMPROVING DEMAND-SIDE DYNAMICS

13:30 Moderator:
  ▸ Tamara Sulukhia, Sustainable Development and Infrastructure Program Leader for Turkey, Europe and Central Asia, The World Bank

  ▸ Oleg Barkin, Member of the Board – Deputy Chairman of the Board, Association „NP Market Council”, Russian Federation

14:00 Presentation: Empowered Customers: Regulator’s Role in Improving Demand-Side Dynamics
  ▸ Gatis Junghans, Member of the Board, Latvian Transmission System Operator AS „Augstsprieguma fikls”, Latvia

14:20 Presentation: Regulatory Framework & Innovation – In Cooperation with DSO
  ▸ Prit Treial, Member of the Management Board, Elektrilevi OÜ, Estonia

14:40 Q&A with the Audience

15:00 Conference Family Photo

15:15 Coffee Break

15:45 Panel Discussion: Empowered Customers: Regulator’s Role in Improving Demand-Side Dynamics

  Moderator:
  ▸ Huseyin Karatas, Former EMRA Commissioner, Turkey

  Panel Members:
  ▸ Afsin Burak Bostanci, Energy Expert, Energy Market Regulatory Authority (EMRA), Turkey
  ▸ David Dgebuadze, Head of Electricity Metering Department, JSC Georgian State Electrosystem, Georgia
  ▸ Jesús Serrano Landeros, Commissioner, Energy Regulatory Commission (CRE), Mexico
  ▸ Dmitry Vasilev, Head of Department, Federal Antimonopoly Service (FAS Russia), Russian Federation

16:45 Q&A with the Audience

17:00 Session Concludes

20:00 Conference Dinner at Xanadu High Class Resort Hotel

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Last updated on October 1, 2018. Latest agenda on the Conference website >>
## SESSION III: EMERGING TRENDS IN GAS POLICY – PERSPECTIVES FOR REGIONAL AND GLOBAL MARKETS

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| 09:00  | **Moderator:**
|        | ‣ Gulefsan Demirbas, Department Head, Strategy Development Department, Energy Market Regulatory Authority (EMRA), Turkey; Head of ICER’s Virtual Working Group 2: Gas and Other Fuel |
| 09:10  | **Presentation:** Future Role of Gas (From a Regulatory Perspective)
|        | ‣ Konstantin Petrov, Managing Consultant, DNV GL - Energy, Germany                               |
| 09:30  | **Presentation:** Effects of Increased LNG Availability
|        | ‣ Wouter Koopman, Gas Advocacy Manager for Europe, Shell                                        |
| 09:50  | **Presentation:** Euro-Mediterranean Gas Markets: Emerging Trends and Perspectives
|        | ‣ Hasan Özkoc, Assistant Secretary General, Association of Mediterranean Energy Regulators (MEDREG) |
| 10:10  | **Presentation:** Baltic Regional Gas Markets
|        | ‣ Rota Šņuka, Commissioner, Public Utilities Commission, Latvia                                 |
| 10:30  | **Q&A with the Audience**                                                                         |
| 10:45  | **Coffee Break**                                                                                  |
| 11:15  | **Panel Discussion:** Emerging Trends in Gas Policy – Perspectives for Regional and Global Markets
|        | **Moderator:**
|        | ‣ Matt Drinkwater, Senior Editor for Electricity, Gas and LNG, Argus                             |
|        | **Panel Members:**
|        | ‣ Aziz Camci, Chairman, Petform, Turkey                                                          |
|        | ‣ Arman Satimov, Advisor to the Chairman, KAZENERGY                                            |
|        | ‣ Michael Thomadakis, Director of the Energy Sector, Grant Thornton, Greece                     |
|        | ‣ Nikola Vištica, Member of the Board of Commissioners, Croatian Energy Regulatory Agency, Croatia |
| 12:30  | **Q&A with the Audience**                                                                         |
| 12:45  | **Lunch**                                                                                         |
## SESSION IV: ENHANCING SECURITY OF SUPPLY UNDER TRANSITIONAL MARKET CONDITIONS

### 14:00 Moderator:
- Hammad Zafar Hundal, Country Manager, Islamic Development Bank Group

### 14:10 Abstract Presentation: ECRA’s Regulatory Approach to Maintaining Security of Supply
- Fayez Al Jabri, General Director for Technical Affairs, Electricity and Co-Generation Regulatory Authority (ECRA), Saudi Arabia

### 14:30 Presentation: The Role of New Power Exchanges and Market Coupling to Enhance Security of Supply
- Hans-Arild Bredesen, CEO, Nord Pool Consulting

### 14:50 Presentation: The Implications of Organized Natural Gas Markets on Security of Supply and Predictability in Energy Markets
- Bagdagul Kaya Caner, Head of Group for Natural Gas Network Operation Regulations, Energy Market Regulatory Authority (EMRA), Turkey

### 15:10 Q&A with the Audience

### 15:25 Coffee Break

### 16:00 Panel Discussion: Enhancing Security of Supply under Transitional Market Conditions

**Moderator:**
- Matthias Finger, Professor, Lausanne Federal Institute of Technology (EPFL), Lausanne, Switzerland

**Panel Members:**
- Mehmet Ertürk, Former EMRA Vice President; General Manager, Cayırhan Electricity Generation & Mining Co., Turkey
- Maria Manicuta, Director General, Network Access and Authorisation Department/Electricity/, Romanian Energy Regulatory Authority (ANRE), Romania; ERRA Presidium Member
- Giorgi Pangani, Commissioner, Georgian National Energy and Water Supply Regulatory Commission, Georgia; President, Energy Community Regulatory Board (ECRB)
- Dietmar Preinstorfer, Head of the International Relations Department, E-Control, Austria

### 17:00 Q&A with the Audience

### 17:15 Conference Concluding Statement and Announcement of the 2019 ERRA Conference Location
- Märt Ots, Chairman, Energy Regulators Regional Association (ERRA)
- Rolands Irklis, Chairman, Public Utilities Commission (PUC), Latvia; ERRA Presidium Member

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<td><strong>Fayez AL JABRI</strong></td>
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<td>General Director for Technical Affairs</td>
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<td><strong>Afşin Burak BOSTANCI</strong></td>
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<td><strong>Aziz CAMCI</strong></td>
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<td><strong>Gulefsan DEMIRBAS</strong></td>
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<td>Strategy Development Department Head</td>
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<td>Head of ICER’s Virtual Working Group 2: Gas and Other Fuel</td>
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<td><strong>David DGEBUADZE</strong></td>
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<td>Senior Editor for Electricity, Gas and LNG Argus</td>
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<td>Mehmet ERTÜRK</td>
<td>Former EMRA Vice President, General Manager Cayirhan Electricity Generation &amp; Mining Co., Turkey</td>
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<td>Gatis JUNGHANS</td>
<td>Member of the Board, Latvian transmission system operator AS “Augstsprieguma tīkls”, Latvia</td>
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<td>Maria MANICUTA</td>
<td>ERRA Presidium Member; Director General Romanian Energy Regulatory Authority (ANRE) Romania</td>
<td>Member of Panel Discussion on Enhancing Security of Supply</td>
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<tr>
<td>Hasan ÖZKOC</td>
<td>Deputy Secretary General Association of Mediterranean Energy Regulators (MEDREG)</td>
<td>Presentation: Euro-Mediterranean Gas Markets: Emerging Trends and Perspectives</td>
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<td>Giorgi PANGANI</td>
<td>Commissioner Georgian National Energy and Water Supply Regulatory Commission (GNERC) Georgia; President Energy Community Regulatory Board (ECRB)</td>
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<td>Konstantin PETROV</td>
<td>Managing Consultant DNV GL – Energy Germany</td>
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<td>Dietmar PREINSTORFER</td>
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<td>Arman SATIMOV</td>
<td>Advisor to the Chairman KazEnergy Association Kazakhstan</td>
<td>Member of Panel Discussion on Emerging Trends in Gas Policy</td>
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Jusús SERRANO LANDEROS
Commissioner
Energy Regulatory Commission (CRE)
Mexico
Member of Panel
Discussion on Empowered Customers
Day 2 Session II

Rota ŠŅUKA
Commissioner
Public Utilities Commission (PUC)
Latvia
Presentation: Baltic Regional Gas Markets
Day 2 Session III

Tamara SULUKHIA
Sustainable Development and Infrastructure Program Leader for Turkey, Europe and Central Asia
The World Bank
Moderator of Session II: Empowered Customers: Regulator’s Role in Improving Demand-Side Dynamics
Day 1 Session II

Michael THOMADAKIS
Director of the Energy Sector
Grant Thornton
Greece
Member of Panel
Discussion on Emerging Trends in Gas Policy
Day 2 Session III

Priit TREIAL
Member of the Management Board
Elektrilevi OÜ
Estonia
Regulatory Framework & Innovation – In Cooperation with DSO
Day 1 Session II

Dmitry VASILIEV
Head of Electricity Regulation Department
Federal Antimonopoly Service (FAS Russia)
Russian Federation
Member of Panel
Discussion on Empowered Customers
Day 2 Session II

Nikola VIŠTICA
Member of the Board of Commissioners
Croatian Energy Regulatory Agency (HERA)
Croatia
Member of Panel
Discussion on Emerging Trends in Gas Policy
Day 2 Session III

Last updated on October 1, 2018.
ECRA’s Regulatory Approach to Maintaining Security of Supply

Foyez Ghulth Al Jabri, Mohammed Al Ghwazi, Shareef Al-Barrak
Electricity & Co-Generation Regulatory Authority, Saudi Arabia

Security of electricity supply is a priority for Saudi Electricity and Co-Generation Regulatory Authority (ECRA). This paper sets out our approach to maintaining security of supply in response to significant demand growth and continuity of supply as shown below:

### Saudi Electricity at Glance
- Peak Load: 61.7 GW
- Available Capacity: 81 GW
- Consumers Number: 9.2 M
- Distribution Lines: 273k KM
- Transmission Lines: 26k KM

ECRA is confident that the current arrangements are sufficient to:
- Effectively monitor the security of power system
- Enhance security of supply.
ECRA will continue to assess the appropriateness of the current framework and identify where any improvements can be made to the existing documents.

### C. Key Performance Indicators

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### A. The Electricity Industry Restructuring Plan (EIRP)

The development of open, competitive markets has the potential to deliver security of supply benefits for KSA. It opens up possibilities for greater supply diversification, mitigating local supply risks, allows flexible trading within and between neighboring countries.

### B. Planning and Standards

To monitor Security of Supply, several documents have recently been developed as follows:

- Generation Expansion Planning Criteria
- Distribution Security of Supply
- Transmission and Distribution Capability Statements

### iv. Renewable Generation
- Small scale solar PV regulations
- Grid and distribution codes amendments to enable renewable generation

### Reference Materials
- ECRA’s KPIs regulatory framework, Distribution security Standards, Transmission Planning Criteria, Grid and Distribution codes

### Keywords
- Security of supply, Continuity, Renewable, Restructuring, Planning and Standards

In case of interest, please contact us at:
fgjabri@ecra.gov.sa, smbarrak@ecra.gov.sa, mmghawazi@ecra.gov.sa
Oleg Barkin, Vladislav Berezovsky
Association "NP Market Council"

**Association at NP Market Councils:**
- Unites participants of the wholesale market
- Arranges the commercial activities of the wholesale market
  (The Association owns the Trade System Administrator & the Financial Settlement Center)
- Develops market rules
- Takes part in the regulation of the power industry
- The Supervisory Board consists of government, generators, resellers and consumers representatives

**Power Industry 4.0**
A regulator has to adapt different technologies according to their maturity level.
In the first levels, we select and assess useful technologies.
In the second step, the technologies are piloted to show their efficiency and competitiveness.
The mature technologies need actions that support their promotion in the energy market.

**The role of the regulator:**
- Developing of standards
- Expert assessment of legislation changes
- Resist cross subsidiization

**Demand Response in the Russian Wholesale Electricity Market**
For example, Demand Response technologies decrease value of peaking generation units and prices in the Day-Ahead market. Since 2016 there has been DR market mechanism for wholesale consumers that was created by the System Operator and the Trade System Administrator. Since 2018 DR mechanism for retail consumers is going to be piloted.

**Reference Materials**
- [http://www.or.np-sr.ru](http://www.or.np-sr.ru)
- [https://asi.ru/eng/nti/](https://asi.ru/eng/nti/)

**Keywords**
energy market, demand response, regulation, industry 4.0

In case of interest, please contact us at:
ogb@np-sr.ru; v.berezovsky@np-sr.ru
An Efficient European Regulatory Framework for Disclosure Information

Phil Moody, Dirk Van Evercooren
Association of Issuing Bodies (AIB)

- European Directives prescribe that electricity consumers be informed about the source of the electricity they are supplied with (‘disclosure information’).
- It is impossible to physically track electrons, so once electricity is injected into the grid it is impossible to distinguish between electrons from different energy sources.
- To substantiate claims that electricity supplied is from renewable sources, a reliable tracking instrument is needed: Guarantees of Origin (GOs).

Guarantees of Origin – The principles

- The RE-DISS project achieved a coordinated approach, rating reliability of disclosure information for Europe’s electricity consumers.

From AIB to CEER and ERRA

- GOs and Disclosure information provide a process chain that tracks electricity from production to consumption.

Regulatory Framework GOs

- AIB (Association of Issuing Bodies) is the voluntary not for profit umbrella of issuing bodies of GOs.
- CEER (Council of European Energy Regulators) is the voluntary not for profit umbrella of energy regulators, who oversee disclosure information.
- The RE-DISS projects ended in 2015 meaning the end of a governance platform involving many relevant stakeholders, representing the different segments of the process chain from electricity producer to customer.

Recommendations:

- To achieve effective and efficient regulation to ensure correct information for and protection of electricity consumers, coordination is needed.
- Regulators and issuing bodies of all countries that comply with European Energy law, need to formally cooperate to harmonise and further develop the disclosure process.

Reference Materials

- CEER Advice on Customer Information on Sources of Electricity: REC 2014-CM-7038, March 2015
- Gilscheffts, Van Evercooren, Moody: Realising the Potential of Guarantees of Origin to Empower Consumers. CEER Chronicle Edition 4

Keywords

- Regulation, energy transition, consumer empowerment, consumer information, renewables, trust, energy demand

In case of interest, please contact us at:

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Dirk Van Evercooren, President AIB, dirk.venevercooren@aib-net.org, +32 (0) 2 5531360
Energy Trends and Perspectives in South Caucasus Region
Sopio Khozrevanidze, Lia Gvazava
Georgian National Energy and Water Supply Regulatory Commission

The research uses common analytical approach for the three South Caucasus countries:
- First, the key stakeholders in the energy sector (state and non-state; local, national and international) of each country are mapped, and
- Second, analysis of narratives on renewable energy in media articles, expert discussions and policy documents are analysed.

Based on the high importance of the research topic, authors use historical and logical generalization methods of research as well.

The research is largely exploratory and aims to offer a new angle in the studies and policy debates on energy sector in South Caucasus. In this sense, it presents a first sketch of how future of energy is perceived in the South Caucasus and what are the implications of these perceptions for regional energy policy.

Incorporating experience and clearly understanding the needs of the Turkish and other Black Sea countries’ markets are essential for the development of the energy sector in South Caucasus.
- To ensure secure and affordable energy supplies in South Caucasus countries energy diversification has a huge importance.
- Establishment of energy corridors has a potential to strengthen its role in implementation of East-West and North-South transit projects. Effective utilization of its geopolitical location, will contribute to South Caucasus countries’ energy security and economic development.

Establishment of new energy corridors, and the possibility for Turkey to become a regional energy hub, can mitigate external pressure on energy security in the region.
- To protect critical energy infrastructure, the governments of Armenia, Azerbaijan, and Georgia should accelerate the adoption and implementation of relevant technical regulations, guidelines, standards and recommendations for harmonization of legislation with the EU within existing cooperation programmes and regulations.

Reference Materials
- https://gsep.mckinseyenergyinsights.com/

Keywords
- Energy Security, diversification, infrastructure, EU legislation

In case of interest, please contact us at:
s.khozrevanidze@gnerc.org; l.gvazava@gnerc.org


**A Modern View of Energy Security**

Pavol Chropovský, Marián Parkányi  
Regulatory Office for Network Industries (URSO)

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Our views on the importance of electricity in our daily routines have changed dramatically.
- High rate of population growth + higher demand for electricity.
- The world's economy is growing.
- More and more electrically-powered devices are being used.

To reduce carbon emissions, fossil fuels are being replaced by new technologies which also entail higher electricity consumption. Each country needs a secure long-term supply of electricity that is economically viable and ecologically acceptable.

Our Study evaluates:
- previous experiences and effects of a different composition of energy mixes and experiences from the functional market coupling;
- the question, if there is a need to change rapidly the energy mix in some countries;
- the security of supply through the market coupling concept;
- importance of independent regulation in energy market of the present.

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Do we need to change our energy mix?

Energy mix has fundamental role in the energy security of countries and especially for security of supply.
- Consumers expect that they will receive energy products regularly and at stable prices.
- Today we obtain energy mainly from fossil fuels, but under pressure of reducing CO2 in the air we try to change our energy mix and we start to use renewable sources.
- Therefore, countries try to motivate people to produce energy from renewable sources through feed-in tariffs especially. It causes high price of energy for ordinary consumers.

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The independent regulatory authority in terms of transitional energy markets

The integration of electricity markets creates new challenges to the regulatory authorities in their commitment to guarantee security of supply at affordable prices. Even at a national level, designing policies for electricity markets is an extremely complex task but this is exacerbated in the case of market coupling, since different policies may be applied at the two ends of an interconnector.

In our opinion, in the light of the globalization and liberalization the national regulatory authorities ("NRAs") are losing the justification of their original reason for the establishment. NRAs are becoming more and more passive among the other players on the energy market in the European Union. This type of policy will in the future pose a threat for households and small enterprises.

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**Reference Materials**

- EU Energy Markets in 2014
- Look at "Pros and cons of different energy sources"
- Financing Renewables

**Keywords**

energy mix; renewable energy; electricity market; market coupling; transmission capacity; independent regulatory authority

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TURKISH ENERGY SECTOR AT A GLANCE

Area: 783,562 km²
Population: 80,810,525 (31 December, 2017)
Capital: Ankara
Constitution: 18 October, 1982
Form of Government: Presidential Republic
President: Recep Tayyip Erdoğan
Language: Turkish
Currency: TL (₺) – Turkish Lira
Time Zones: UTC+3 hours

Snapshot of the Turkish Economy, 2017

<table>
<thead>
<tr>
<th>GDP (purchasing power parity)</th>
<th>$ 851 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita (PPP)</td>
<td>$ 10,597</td>
</tr>
<tr>
<td>Inflation</td>
<td>11.92%</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>$10.8 billion</td>
</tr>
</tbody>
</table>

Europe’s Biggest Economies
(GDP based on Purchasing Power Parity, Trillion Dollar, 2017)

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP (Trillion Dollar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>3.9</td>
</tr>
<tr>
<td>UK</td>
<td>2.8</td>
</tr>
<tr>
<td>France</td>
<td>2.2</td>
</tr>
<tr>
<td>Italy</td>
<td>1.9</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.4</td>
</tr>
<tr>
<td>Spain</td>
<td>1.4</td>
</tr>
<tr>
<td>Poland</td>
<td>1.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.9</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.6</td>
</tr>
<tr>
<td>Romania</td>
<td>0.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.6</td>
</tr>
<tr>
<td>Austria</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Share of Economic Activities in GDP (2017)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>53%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>6%</td>
</tr>
<tr>
<td>Industry</td>
<td>21%</td>
</tr>
<tr>
<td>Construction</td>
<td>9%</td>
</tr>
<tr>
<td>Taxes-Subsidies</td>
<td>11%</td>
</tr>
</tbody>
</table>

Turkey’s 2023 Targets in the Energy Sector Include
- Increasing share of electricity produced from domestic and renewable resources to 65%,
- Commissioning first unit of Akkuyu NPP,
- Reducing the technical & non-technical losses in the electricity distribution system below 10%,
- Ensuring total natural gas storage capacity to be able to meet 20% of annual consumption,
- Extending underground natural gas storage capacity to 10 BCM,
- Adding annually 1 GW solar and 1 GW wind power plant (including the ones under the Renewable Energy Resources Area (YEKA) model),
- Achieving 14% improvement in primary energy consumption and saving of 23.9 MTEP energy.
**Electricity Market, 2017**

General Market Overview
- Generation: 292.6 TWh
- Installed Capacity: 85.2 GWe
- Generation (unlicensed): 3 TWh
- Installed Capacity (unlicensed): 3,173 MWe
- Consumption: 292 TWh
- Peak Demand: 47,660 MW
- Import: 2,729 TWh
- Export: 3,300 TWh
- Number of Consumers: 42.5 million

Licensed Installed Capacity by Source

Licensed Generation by Source

Invoiced Consumption by Sectors

Licensed Installed Capacity by Generators

Licensed Generation by Generators

**Natural Gas Market, 2017**

General Market Overview
- Consumption: 53.85 bcm
- Conversion: 38.1%
  - Industry: 24.8%
  - Household: 25.3%
  - Services: 6.9%
  - Others: 4.9%
- Import: 55.24 bcm
  - Pipeline: 80.5%
  - LNG: 19.5%
- Production: 354 mcm
  - 2 production areas
  - 9 active firms
- Export: 630 mcm
- End-users: 14 million

Imported Natural Gas by Source Countries

**Petroleum Market, 2017**

General Market Overview
- Refined Petroleum Products Production: 28,937,115 ton
- Refined Petroleum Products Consumption: 28,460,979 ton
- Import (crude oil): 25,766,549 ton
- Import (petroleum products): 16,886,871 ton
- Export (petroleum products): 10,081,991 ton

Import and Export of Petroleum by Countries
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ERRA highly appreciates the continuous support of SOCAR on its primer event for the 10th time this year!

State Oil Company of Azerbaijan Republic (SOCAR) is one of the largest oil companies in the world. SOCAR was established by the Presidential Decree on 13 September 1992 (by merging two state oil companies – Azneft and Azneftkimiya) in accordance with Azerbaijani legislation and is domiciled in the Republic of Azerbaijan. In order to improve its operational efficiency based on the wise and successful state policy and oil strategy started by national leader of Azeri people – Heydar Aliyev, SOCAR has been restructured several times and is now comprised of 26 business units (“Azneft” Production Union, „Azerigas” PU, „Azerikimya” PU, Geophysics and Geology department, Investments department, Oil Pipelines Department, H. Aliyev Baku Oil Refinery, H. Aliyev Baku Deep Water Jacket Factory, Marketing and Operations Department, Security Department, Social Development Department, Environmental department, IT and Communications Department, Gas export department, Oil and Gas Construction Trust, Complex Drilling Works Trust, Oil and Gas Scientific-researches and projects Institute Institute, Oil and Gas Petrochemical Complex, etc) dealing with their particular areas of business. SOCAR and the business units are involved in upstream, midstream and downstream operations. SOCAR's main functions pertain to managing the extraction, refining, transportation of oil, gas and gas condensates, and sale of gas and oil and gas products.

SOCAR is 100 per cent owned by the government of the Republic of Azerbaijan. SOCAR satisfies the Republic’s internal demand for the oil and oil products. For implementation of all above mentioned works SOCAR employs high level specialists and has special education programme, according to which young talented students are educated abroad with subsequent employment at SOCAR. Risk management has been successfully introduced in the company and is being implemented in almost all business units. There are 18 oil deposits in the Azerbaijani sector of the Caspian Sea, the rest are onshore. Baku-Tbilisi-Ceyhan, Baku-Novorossiysk oil pipeline, South Caucasus gas pipeline (also known as Baku-Tbilisi-Erzurum) are major pipelines providing stable flow of Azeri oil and gas and delivering it to European markets. In general it must be mentioned that first oil wells in the world were drilled using technology in the Republic of Azerbaijan in Bibiheybat oil field in 1847. In 1901 Azerbaijan was on the first place in the world while producing 11.5 mln tons of oil. Azerbaijan’s oil extraction has reached a historic record volume of 23.5 mln tons of oil in 1941, comprising 71.4% of former Soviet Union’s oil. SOCAR has signed up to 34 production sharing agreements up to now with various foreign oil and gas companies the largest of such agreements being production sharing agreement on joint development of Azeri, Chirag and Gunashli (deep water section) fields signed on 20 September 1994 (so called “Contract of the Century”). Currently SOCAR employs more than 50,000 people.

http://www.socar.az/socar/en/home
Diamond Sponsor:

Turkey Energy Summit has been organised annually since 2010 by Enerji Fuarcilik Inc. in a variant city of Turkey. The summit being an important and established communication platform that gathers the most distinguished representatives from politics, administration, and the private sector to discuss economic issues and environmental policies. Also, brings the entire energy sector together creating an ambience for discussions on current subjects between the delegates. Having a unique exhibition area for the companies to present products and new technologies, it is carried out with the participation of important guests in renewable energy and nuclear power fields, particularly in electricity and natural gas industries and successfully continuing to grow each year.

Organised under the auspices and support of the Ministry of Energy and Natural Resources, the Turkey Energy Summit is an excellent communication platform where the legal deposits and regulations are adjusted to a free market model in the country's renewable energy, electricity and natural gas industries that are made to attract both domestic and foreign investors.

Turkey Energy Summit also delivers achievement awards. Golden Voltage and Golden Valve awards by Gas&Power Network and Green Power newspapers and Golden Barrel and Golden Bottle awards are presented by Energy Petrol Gas newspapers during the gala dinner organised within the scope of Turkey Energy Summit. The awards are given in order to encourage the companies, operating in the energy industry to carry out social responsibility projects.

http://turkeyenergysummit.com
ERRA would like to extend a heart-felt thank you to our longstanding sponsors for their commitments to making the ERRA Conferences so successful!
UPCOMING ERRA EVENTS

The 6th edition of ERRA’s Natural Gas Training Course builds upon the previous similar training programs. It aims to give a general introduction into the gas value chain with special emphasis on upstream gas supplies. It is supposed to give a good understanding of the restructuring process of the gas industry and of wholesale markets. It puts special emphasis on regulators approaches of gas infrastructures, gas storage and security of supply issues.

**MAIN AGENDA TOPICS:**
- Global Gas Market Developments: Demand & Supply
- Wholesale Gas Markets, Trade
- Transportation, Access to Infrastructure and Tariffs
- Security of Supply and Flexibility
- Retail Market Issues and Consumer Protection
  + Weekly Group Assignment
  + Case Studies

**CONFIRMED SPEAKERS:**
- Borbála Takácsné Tóth, *Course Director*, Regional Centre for Energy Policy Research (REKK)
- Nick Haralambopoulos, *Economic Consulting Associates* (ECA)
- Andrius Šimkus, *Energy Community Secretariat, Austria*
- Martin Martinoski, *Energy Regulatory Commission (ERC)*, Macedonia
- Bálint Andó, *MET Hungary Ltd.*
- Pálma Szolnoki, Hungarian Energy and Public Utility Regulatory Authority (HEA)

**REGISTRATION & COURSE WEBSITE:**
https://erranet.org/training/gas-regulation-2018/

**TUITION FEE:**
- **ERRA Full Members:** €1 130
- **ERRA Associate Members:** €1 340
- **Non-Member Regulators:** €1 550
- **Non-Members:** €2 075
  * Tuition fee includes: training materials, lunches, coffee breaks during the 5-day course and a social programme.
  * 27% VAT will be added to the indicated rates.

**NEW COURSE VENUE:**
Lion’s Garden Hotel ****
Cházár András u. 4, 1146 Budapest, Hungary
http://www.lionsgarden.hu/en

  * Accommodation is not included. Negotiated rate for Training Participants at the course venue is 69 EUR/ person/ night (incl. buffet breakfast, wellness, WIFI and all applicable VAT). Room reservations should be settled directly with the hotel by October 22, 2018.

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For more information please contact the ERRA Secretariat:
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UPCOMING ERRA EVENTS

6th Training Course: Principles of Natural Gas Market Regulation

“The program included wide variety of topics related to the whole gas value chain. Besides the diversity of interesting topics what I liked the most in the training was its practical orientation and the fact that all instructors were practitioners sharing their experience from the real market life.” by Maria GEROVA – Transparency Adviser, ENTSOG

Student Testimonial

Course Programme*

Day 1, November 12 – Global Gas Market Developments: Demand & Supply
✔ Opening address and introduction of Participants. Course outline and main messages
✔ Introducing the Value Chain. Global Picture and Players. Geopolitical Dimension
✔ The Role of Natural Gas in Turkey. Role of Turkey in the Regional Gas Market
✔ Economics of Upstream Oil and Gas
✔ Off-class Teamwork Assignment for the Week

Day 2, November 13 – Wholesale Gas Markets, Trade
✔ LNG Supply: Impact on Global Trade Patterns
✔ Restructuring of Gas Markets, Liberalization, Role of the Regulator
✔ Natural Gas Wholesale Trade: Opportunities and Obstacles
✔ Gas Exchange Trading
✔ Hot Topics in Gas Markets Regulation. Round table discussion based on case studies by participants

Day 3, November 14 – Transportation, Access to Infrastructure and Tariffs
✔ Principles of Calculating the Revenue Requirement of Regulated Segments of the Sector and Tariff Setting in the Natural Gas Sector
✔ Transmission Tariff Systems
✔ Entry/ Exit Tariff Setting Simulation
✔ Role and Operation of the TSO. Unbundling, System Planning, Operation (Nomination, Allocation, Measurement, Balancing, Financial Settlement)
✔ Capacity Allocation on the Transmission System, Principles, Models, Platforms

Day 4, November 15 – Security of Supply and Flexibility
✔ Future of Gas. Gas Demand Characteristics and International Developments
✔ Hot Topics in Gas Markets Regulation. Round table discussion based on case studies by participants
✔ Financing Investments Related to Security of Supply and Regulatory Tools to Foster Investment
✔ Gas Storage Regulation in a Restructured Gas Sector

Day 5, November 16 – Retail Market Issues and Consumer Protection
✔ Market Monitoring, Non-payment, Metering, Switching
✔ Principles of Consumer Protection; Role of the Regulator
✔ Final Test
✔ Presentation of the Off-Class Assignment by Participants
✔ Course Evaluation, Farewell

*ERRA reserves the right to change the published agenda at any time during the organisation and implementation of the programme.

Check for Recent Updates: https://erranet.org/training/gas-regulation-2018/
UPCOMING ERRA EVENTS

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Are you interested in learning about?

1. Market Power
2. Wholesale Market Monitoring
3. Retail Market Monitoring

This three-day course is specially designed for experts from regulatory authorities who would like to extend their skills on wholesale and retail market monitoring in the electricity sector.

On the first day, we will approach the fundamentals of competitive markets and discuss market power in generation, accompanied by a case study. On the second day, we will discuss the EU regulation (REMIT) as well as the Turkish transparency platform called EXIST and we will look at the renewable market and ancillary services. On the third and final day, we will look at competition in retail markets and hear about the work of the South East European Electricity Market Monitoring Project. During the course, participants will have the chance to interact through a group task and evaluate their learning progress.

Registration fees:

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA Full Members</td>
<td>EUR 680</td>
</tr>
<tr>
<td>ERA Associate Members</td>
<td>EUR 800</td>
</tr>
<tr>
<td>Non-Member Regulators</td>
<td>EUR 930</td>
</tr>
<tr>
<td>Non-regulators</td>
<td>EUR 1250</td>
</tr>
</tbody>
</table>

Kindly note that accommodation is not included in the tuition fee. Negotiated rate for Training Participants at the course venue is 80 EUR + 8% VAT/ person/ night (incl. buffet breakfast).

Venue:

ISTANBUL MARRIOTT HOTEL SISLI

Capacity is limited to 15 participants!

Make sure you don’t miss the training: REGISTER!

For more information please visit: https://erranet.org/training/monitoring-2018/