

ACTIVITY REPORT 2013-2016





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DIRECTOR

Prof. Carmine DIFIGLIO has recently become the Director of Istanbul International Center for Energy and Climate. Prior to this position, Professor DIFIGLIO served as the Deputy Assistant Secretary for Policy Analysis at the U.S. Department of Energy and Head of Technology Policy at the International Energy Agency (IEA). DIFIGLIO is a featured speaker on topics ranging from the international oil market, improving energy security, how to reduce greenhouse gas emissions and the prospects for avoiding the worst consequences of global climate change. His speaking engagements include Chatham House, the Aspen Institute, the International Seminars on Planetary Emergencies and numerous conferences in London, Istanbul, Paris, Vienna, Amsterdam, Lisbon, Geneva, Madrid, Rome, Milan, Delhi, Mexico City, Rio de Janeiro, and many American cities. Professor DIFIGLIO also serves as Co-Chair of the World Federation of Scientists' Permanent Monitoring Panel on Energy and has chaired several professional committees in various organizations including the U.S. National Academy of Sciences and the International Energy Agency. His publications include a wide variety of modeling and policy assessments concerning energy efficiency, motor-vehicle fuel economy, alternative energy supplies, greenhouse gas emissions, international oil markets and energy security. Professor DIFIGLIO received his Ph. D. from the University of Pennsylvania.

VISION & MISSION

Istanbul International Center for Energy and Climate (IICEC) is a future-oriented independent research and policy center designed to conduct objective, high-quality economic and policy studies in energy and climate. IICEC efforts will help the development of solutions to a sustainable energy future for the region and the world.

Working with governments, partners from industry, international organizations, think tanks and other research bodies, establishing a network of cooperation with other universities in the region and in the world; IICEC aims to inform policy makers, industry, academics and opinion leaders on key energy challenges and provide them with objective and in-depth analysis. We foster the exchange and development of ideas by providing a distinguished platform gathering key stakeholders involved in energy and climate fields.

The decision to form IICEC was motivated by the growing role of Turkey in the international energy landscape and the strategic position of Istanbul, where Europe and Asia meets. The Center, at Sabanci University Karaköy Minerva Palace in Istanbul, is located at the crossroads of almost all current and emerging energy players, both on the producing and consuming sides of global energy markets. Utilizing this strategic position, IICEC serves to fill the need for an international approach with international resources to the future of energy and climate topics, as a globally recognized networking center.

FOREWORD



A continuous, safe, economical, and environmentally friendly supply of energy is one of the leading requirements for economic and social development, improvements in quality of life, and an increase in welfare. Recent technological and geostrategic changes in the energy business have become critical driving factors in the need to develop effective strategies that will lead to an economical and environmentally friendly way of meeting the world's energy requirements, and the building of a sustainable energy future.

Based on this and inspired by Turkey's increasing role and importance in the global energy equation, we established the Istanbul International Center for Energy and Climate (IICEC) in a location where not only continents meet, but global energy focuses as well. The leading players in the energy business took part in IICEC, making it into a growing Community and an interactive platform for providing input to decision makers, empowering them to make timely and accurate assessments on issues related to energy and the environment. IICEC will continue to grow in the future, becoming a "Polar Star" that will lead energy into the future with high-quality, objective research and policy recommendations.

IICEC International Energy Forums, annually organized by IICEC, bring together the leaders of the energy industry and top level representatives of international organizations, who direct their respective regional and global strategies with their ideas. The President of the Republic of Turkey, Abdullah Gül; Minister of Energy and Natural Resources of the Republic of Turkey, Taner Yıldız; Minister of Petroleum and Mineral Resources of the Kingdom of Saudi Arabia, Ali Al-Naimi; Minister of the Environment of Republic of Poland, Maciej H Grabowski; Special Advisor to Prime Minister of Japan, Eiichi Hasegawa and Energy Counselor of the US Secretary, Melanie Kenderdine were among the distinguished speakers of the Forum in the previous years IICEC 4th International Energy Forum "Towards a New Global Energy Landscape: What Role for Turkey?" IICEC 5th International Energy Forum "Global Energy Investments: Challenges and Opportunities" and IICEC 6th International Energy Forum, "On the Road to Antalya G-20 Summit: Global Energy Security Today and Tomorrow". These high level Forums, encompassing the development of policy recommendations on energy and climate received brilliant feedback accompanied by huge media coverage

I am confident that the visionary perspectives laid out at annual IICEC International Energy Forums, where the most important technical, economic, and geostrategic changes and Turkey's developing role in this context were extensively discussed, will make significant contributions to the efforts of decision makers, investors, and researchers in the field of energy.

Güler Sabancı

Founding Chairman of the Board of Trustees Sabancı University

CONTENTS

EVENTS 2016

"World Energy Outlook 2016"	Turkey Presentation by D	r. Fatih Birol 1
-----------------------------	--------------------------	--------------------

20 December 2016, Sabancı Center, Istanbul

The Future of Energy 13

31 October 2016, Sabancı Center, Istanbul

IICEC 7th International Energy and Climate Forum I 5

"Paris COP21: What Implications for Energy Industry?" 10 June 2016, Conrad Hotel, Istanbul

Certificate of Appreciation Presented to Dr. Johanness Tyssen & Eiichi Hasegawa 17

10 June 2016, Conrad Hotel, Istanbul

Energy Technologies and Management (ETM) Master Program Students Met Dr. Fatih Birol 18

10 June 2016, Conrad Hotel, Istanbul

Turkey - Sweden Cooperation on Energy Meeting 19

20 April 2016, Consulate General of Sweden, Istanbul

Talk by Prof. Carmine Difiglio (US Department of Energy) | 10

"Energy Markets: Energy and Climate Policy Challenges" 18 April 2016, Sabancı University Minerva Palace, Istanbul

The Cyprus Settlement and Eastern Mediterranean Hydrocarbon Scenarios | 11

18 March 2016, Sabancı University Minerva Palace, Istanbul

World Energy and Climate Outlook After Paris Climate Summit Presentation by Dr. Fatih Birol | 12

11 January 2016, Sabancı Center, Istanbul

EVENTS 2015

Talk by Prof. Sergey Paltsev (MITei) | 14

"Economics and Geopolitics of Natural Gas" 7 September 2015, Sabancı University, Minerva Palace, Istanbul

IICEC 6th International Energy Forum | 15

"On The Road to G-20 Antalya Summit: Global Energy Security Today and Tomorrow" 15 May 2015, Conrad Hotel, Istanbul

IICEC Energy Forum Luncheon 2015 | 17

15 May 2015, Conrad Hotel, Istanbul

Hotel Les Ottomans, Special IICEC Cocktail & Dinner | 18

15 May 2015, Hotel Les Ottomans, Istanbul

Honorary Reception at Çırağan Palace | 20

26 March 2015, Çırağan Palace Kempinski, Istanbul

EVENTS 2014

22 December 2014, Sabancı Center, İstanbul

Energy Business Leaders Luncheon | 41 1 April 2013, Feriye Restaurant, Istanbul

U.S. Secretary of Energy Ernest J. Moniz's Visit to Sabancı University - IICEC 24 21 November 2014, The Seed, Sakıp Sabancı Museum, Istanbul
"World Energy Outlook 2014 - Africa Special Report" Turkey Presentation by Dr. Fatih Birol 125 20 October 2014, Sabancı Center, Istanbul
IICEC Report Workshop with IICEC Co-Chairs and Members' Representatives 27 "Energy Import Bills In The Current Account Deficit Of Turkey: What Can Be Done?" 26 September 2014, Sabancı Univesity, Minerva Palace, Istanbul
IICEC 5 th International Energy Forum 128 *Global Energy Investments: Challenges and Opportunities" 13 June 2014, Conrad Hotel, Istanbul
IICEC Energy Forum Luncheon 2014 31 13 June 2014, Conrad Hotel, Istanbul
Müzedechanga Special IICEC Cocktail & Dinner 32 13 June 2014, Sakıp Sabancı Museum, Istanbul
EVENTS 2013
"World Energy Outlook 2013" Turkey Presentation by Dr. Fatih Birol 34 20 December 2013, Sabancı Center, Istanbul
"Natural Gas in Eastern Mediterranean: Opportunities and Challenges" Workshop 36 19 November 2013, Sabancı University, Minerva Palace, Istanbul
IICEC 4 th International Energy Forum 1 37 "Towards a New Global Energy Landscape: What Role for Turkey?" 10 May 2013, Conrad Hotel, Istanbul
IICEC Energy Forum Luncheon 2013 39 10 May 2013, Conrad Hotel, Istanbul
Müzedechanga Special IICEC Cocktail & Dinner 40 10 May 2013, Sakıp Sabancı Museum, İstanbul

"World Energy Outlook 2014" Turkey Presentation by Dr. Fatih Birol I 22

"WORLD ENERGY OUTLOOK 2016" TURKEY PRESENTATION

20 December 2016, Sabancı Center, İstanbul

Sabanci University Istanbul International Center for Energy and Climate (IICEC) hosted the Turkey presentation of the World Energy Outlook 2016 report. International Energy Agency Executive Director and IICEC Honorary Chairman **Dr. Fatih BİROL** presented the World Energy Outlook 2016 report at the meeting.

In her opening remarks, **Güler SABANCI** said, "We witness highly influential global trends. Rapid urbanization, digitalization and electrification make energy even more vital. Energy has strategic importance for the quality of life in societies and the healthy functioning of economies. It continues to be a major priority.

According to the World Energy Outlook, global energy demand is expected to increase by 30% until 2040. The most growth will occur in renewable energies. Forecasts suggest that the share of renewables in the production of electricity will increase from 23% to 37%. According to other calculations, an additional investment of 44 trillion dollars in today's prices will take place until 2040. A further 23 trillion dollars will be spent for improvements in energy efficiency."

SABANCI continued: "Energy is a strategic sector for our country. Our energy demand grew by 496 over the last decade, which is high above the global average. Despite this growth, energy consumption per capita is still at 4096 of the OECD average. This points to an immense potential for growth in energy demand. Our main priority is to cater for this demand with reliable, competitive and sustainable means. We must manage energy supply and demand very well.





"Growth will be enabled by renewable energies." Güler SABANCI

We are aware that the Ministry dedicates significant resources to this matter. We are enthusiastically supportive of their efforts. The energy sector in Turkey underwent great changes lately. 75 billion dollars were invested in the electricity sector in Turkey in the last 10 years. Most of these investments were made by private actors relying on the belief that the Turkish energy industry would grow and a competitive, liberal market would emerge.

"Current commitments are not enough to limit global temperature increase to below 2°C. Taking this down to 1.5°C is unimaginable at best."

Or. Fatih BiROL



The electricity and natural gas sectors in Turkey overtook many other critical sectors with a combined market volume of TL 100 billion. Great steps were taken for the liberalization of our electricity market, led by the Ministry of Energy and the Energy Market Regulatory Authority."

Following introductory remarks, International Energy Agency Executive Director and IICEC Honorary Chairman Dr. Fatih BİROL presented the World Energy Outlook 2016 report. Fatih BİROL said: "In 2015 and 2016, approvals for new conventional crude oil projects have been at the lowest level since the 1950s. If this were to continue for another year, oil markets can face a new risk in the near future: lack of enough new projects. If this occurs, exceptional efforts will be needed to ensure that a great divide does not occur between supply and demand in a few years. If investments cannot recover or the growth in demand does not fall sharply, oil may enter another period of fluctuations.

Coal had been the greatest contributor to energy in the last twenty-five years. However, coal consumption will fall considerably over the next 25 years.

The largest growth will occur in renewable energy. Coal is still important. China accounts for half of the world's coal consumption. But it has been on the decline for the last two years. The reason for this is not climate change but air pollution and the health of people living in cities. Meanwhile, coal consumption in India and Southeast Asia are on the rise. Coal remains the cheapest means to produce electricity. It is a great luxury for people who do not have refrigerators at home to worry about possible climate change in 2050. This must be a consideration when fulfilling Paris commitments. The Paris Convention is a framework agreement, and its impact on energy will depend on how the objectives of the convention reflect on the actual policies of governments. While the world's need for energy grows, millions of people are still deprived of energy. In our main scenario, 30% growth in global energy demand until 2040 means an increase in the consumption of all current fuels; however, global totals mask important trends and significant changes in the fuel mix. Furthermore, hundreds of millions of people will still have no access to energy services by 2040."



THE FUTURE OF ENERGY

31 October 2016, Sabancı Center, İstanbul

Sabanci University Istanbul International Center for Energy and Climate (IICEO) and Hello Tomorrow Turkey held an event entitled "The Future of Energy" at Sabanci Center on October 31, 2016. The high-level organization brought together leading innovators, science-entrepreneurs, corporate executives, investors and industry experts and the event was hosted by **Prof. Ayşe KADIOĞLU**, Acting President of Sabanci University.

The opening remarks of the event were conducted respectively by Hello Tomorrow Turkey Ambassador **Timur TOPALGÖKÇELi**; French Consul General to Istanbul **Bertrand BUCHWALTER**; President & Chair of the Board of Directors, TUSIAD **Cansen BAŞARAN-SYMES**; Executive Director of International Energy Agency (IEA) and Steering Committee Honorary Chairman of IICEC **Dr. Fatih BIROL** (via video); Deputy Minister of Science, Industry & Technology of the Republic of Turkey, **Dr. Hasan Ali ÇELİK.**

"We need two key factors to reach our goal in terms of economy and society. These are: entrepreneurship and innovativeness. He added "Today we see that many companies which lead global economy were founded by very young people. A start-up firm with a small number of employees reaches 15-20 billion dollar market value." Dr. Hasan Ali ÇELİK





"I believe that Turkey, with its young, dynamic and tech-savvy population as well as its entrepreneurial spirit and growing startup scene, is well positioned to play a leading role in this energy transformation. We are proud to see Turkey's start-up scene growing exponentially in the last couple of years." Cansen BASARAN-SYMES

Following the introductory remarks, the first Panel named "Creating New Synergies Between Science-Entrepreneurs & Industry Leaders" began under the moderation of **Murat ÖZYEĞİN**; President of Fiba Group and **Didem ALTOP**, Co-Founder & Managing Director of Endeavor Turkey. Panelists: CEO of EnerjiSA **Kıvanç ZAİMLER**; CEO of Sanko Energy Group **Adil TEKİN**; Senior Partner & Managing Director of Boston Consulting Group **Harald RUBNER** discussed how to establish an effective relation between scientific startups and companies.

After coffee break, Vice Chairman of Eczacibaşi Group and Chairman of TBV **Faruk ECZACIBAŞI** delivered his special visionary keynote speech on "Transforming Resource Scarcity into Global Abundance".





The second panel which **Didem ALTOP** and **Emre KURTTEPELi** (Chairman Mynet, Galata Business Angels and Endeavor Turkey) moderated was entitled "Creating a High-impact Science Entrepreneurship Ecosystem in Turkey" and the panelists were Co-Founder & CEO of Pronet **Alp SAUL**; Partner & CEO of Vispera Information Technologies **Aytül ERÇİL**; Managing Director of Revo Capital **Cenk BAYRAKDAR**; and Business Development Leader of TTA Turkey **Doğan TAŞKENT**.

Start-up talks mainly discussed scientific vision with the specified topics of commercialized products driving impact, prototypes with high potential impact. And the speakers included Ceo-Founder & CEO of Nuvia Cem GÜL; Co-Founder & CTO of Reengen Energy, Sahin ÇAĞLAYAN;

Founder & CEO of Artesis **Prof. Dr. Ahmet DUYAR**; Co-Founder and VP of Strategy of CivicSolar **Kerim BARAN**; Business Development Manager of Highview Power Storage **David KAYE**, Founder & CTO of SolarPaint **Eran MAIMON**; Co-Founder & CSO of Episome Biotechnologies **Dr. Murat BALABAN**; Founder & Director for Center for Energy Environment Economy of Özyeğin University **Prof. Dr. M. Pınar MENGÜÇ**; Smart Grid & Clean Energy Technology Innovator **Rish GHATIKAR**

The event ended with the networking activities such as an investor panel titled "Investing in Science Start-ups and IP Commercialization", workshop named "How Corporates and Start-ups Can Scale and Succeed Together" and AMA (ask me anything) session with the speakers.



IICEC 7TH INTERNATIONAL ENERGY AND CLIMATE FORUM "PARIS COP21: WHAT IMPLICATIONS FOR ENERGY INDUSTRY?"

10 June 2016, Conrad Hotel, Istanbul

The 7th International Energy and Climate Forum of Sabanci University's Istanbul International Center for Energy and Climate (IICEC) was held in Istanbul on June 10, 2016. The event was hosted by Sabanci University Board of Trustees Chairman **Güler SABANCI** and IICEC International Steering Committee Honorary Chairman **Dr. Fatih BİROL**





The Forum began with the speeches from the lectern by the top leaders of energy sector, including IEA Executive Director and IICEC Honorary Chairman Dr. Fatih BİROL; Undersecretary of the UAE Ministry of Energy, Dr. Matar AL NEYADI; Member of the Parliament and President of the Grand National Assembly of Turkey, Industry, Energy, Natural Resources, Information and Technology Committee, Ziya ALTUNYALDIZ; Special Advisor of the Prime Minister of Japan, Eilchi HASEGAWA, and Chairman and CEO of EON SE, Dr. Johannes TEYSSEN.











I. Panel: How to Reconcile Energy and Climate Objectives? (I)

Moderator:

Dr. Fatih BİROL Executive Director. IEA

Participants:

Eiichi HASEGAWA, Special Advisor of the Prime Minister of Japan Hansjoerg HABER, Ambassador of European Union to Turkey Dr. Sergiy KORSUNSKIY, Ambassador of Ukraine to Turkey Willi MEIXNER, Power and Gas CEO of Siemens AG





"IICEC would continue to contribute to energy" and climate related topics with future research studies .The global energy system continues to pose very diverse challenges as well as significant opportunities. These challenges and opportunities largely evolve in today's dynamic world with a variety of global trends such as urbanization, digitalization, connectedness and electrification posing new dimensions as to how the energy sector of today will transform. In this very dynamic energy landscape, last year's historical agreement in Paris COP21 meeting perhaps is the most critical development in shaping the future of the global energy supply and demand." Güler SABANCI

II. Panel: How to Reconcile Energy and Climate Objectives? (II)

Moderator:

Prof. Dr. Nihat BERKER, President, Sabancı University

Participants:

Ahmet ERDEM, Country Chairman of Shell Turkey

Canan ÖZSOY, President and CEO of GE Turkey

Mehmet GÖÇMEN, President of Sabancı Holding Energy Group

CERTIFICATE OF APPRECIATION PRESENTED TO DR. JOHANNES TEYSSEN & EIICHI HASEGAWA

10 June 2016, Conrad Hotel, Istanbul

In gratitude for participation of **Eiichi HASEGAWA**, Special Advisor to PM of Japan, and **Dr. Johannes TEYSSEN**, Chairman & CEO of E.ON, in IICEC International Energy and Climate Forum series with their invaluable contribution and insights, **Dr. Fatih BİROL** and **Güler SABANCI** presented Certificate of Appreciation respectively, on behalf of the Board of Directors of the Sabanci University IICEC. In memory of their contribution in creating a more secure, sustainable and prosperous global energy future, a hundred saplings for each were donated in their names to become a future forest.





ENERGY TECHNOLOGIES AND MANAGEMENT (ETM) MASTER PROGRAM STUDENTS MET DR. FATIH BIROL

10 June 2016, Conrad Hotel, Istanbul



Sabanci University Energy Technologies and Management (ETM) Master Program students who are professionals with backgrounds in engineering, fundamental sciences, economics, management, politics and public policy, met **Dr. Fatih BİROL** The students had an intimate

talk session with Dr. Birol in which they introduced themselves and were informed about future career paths in energy industry. The meeting ended with question & answer session regarding professional opportunities in the global energy sector.



TURKEY - SWEDEN COOPERATION ON ENERGY MEETING

20 April 2016, Consulate General of Sweden, Istanbul

Sabanci University Istanbul International Center for Energy and Climate (IICEC) in cooperation with Consulate General of Sweden organized Turkey - Sweden Cooperation on Energy Meeting at the Consulate General of Sweden. IICEC Board of Directors met with Swedish Minister for Energy HE İbrahim BAYLAN and representatives of the leading Swedish energy corporations in Turkey.

The participants of the meeting included **HE İbrahim BAYLAN**, Minister for Energy, Sweden; **HE Jens ODLANDER**, Consul General of Sweden in Istanbul; **Güler SABANCI**, Sabancı University Founding Chairman of the Board of Trustees; **Prof. Dr. A. Nihat BERKER**, Sabancı University President; **Ahmet Ümit DANIŞMAN**, Akenerji General Manager; **Hüseyin GELİS**, SIEMENS Turkey President and CEO; **Mehmet GÖÇMEN**, Sabancı Energy Group President; **Serhat CAN**, ÅF Consult Country Manager; **Thomas GÜR**, Teliasonera Advisor; **Sami SEVİNÇ**, ABB Managing Director; **Ziya ERDEM**, General Manager Ericsson; **Antoine FANOUN**, Trade Commissioner to Sweden.







TALK BY PROF. CARMINE DIFIGLIO (US DoE), "ENERGY MARKETS: ENERGY AND CLIMATE POLICY CHALLENGES"

18 April 2016, Sabancı University Minerva Palace, İstanbul





Sabancı University Istanbul International Center for Energy and Climate (IICEO) organized a talk on Energy Markets: Energy and Climate Policy Challenges by **Prof. Dr. Carmine DIFIGLIO**, Deputy Director for Energy Security, Office of Energy Policy and Systems Analysis (EPSA) at the U.S. Department of Energy (DoE). Sabancı University Founding Chairman of the Board of Trustees **Güler SABANCI**, Sabancı University President **Prof. Dr. A. Nihat BERKER**; Sabancı University Energy Technologies and Management (ETM) MSc students, energy industry executives, and high level representatives from energy related associations attended the event, and a cocktail followed the talk.

"Significant energy investments are needed to support a growing global economy and meet the growing demand for energy services and reduce greenhouse gas emissions. However, the current stagnant world economy and commodity index do not favor sustainable energy and climate policies. Sustainable policies must meet multiple policy objectives." Prof. Carmine DIFIGLIO

THE CYPRUS SETTLEMENT AND EASTERN MEDITERRANEAN HYDROCARBON SCENARIOS

18 March 2016, Sabancı University Minerva Palace, İstanbul

IICEC in cooperation with Atlantic Council organized a panel on "The Cyprus Settlement and Eastern Mediterranean Hydrocarbon Scenarios" at Sabancı University Karaköy on March 18, 2016.

The speakers were **Matthew BRYZA**, Dinu Patriciu Eurasia Center Nonresident Senior Fellow; **Charles ELLINAS**, Eurasian Energy Futures Initiative Nonresident Senior Fellow; **Ahmet EVIN**, Emeritus Faculty Member, Sabancı University; **Mithat RENDE**, Ambassador (R), Former Chairman of the Executive Committee, OECD; and **Harry TZIMITRAS**, Senior Fellow of Atlantic Council. The Panel was moderated by the Atlantic Council's Turkey Representative and Director of the Atlantic Council's Energy and Economic Summit, **Defne SADIKLAR ARSLAN**.



"Being geographically best positioned, one of the largest and fast growing energy markets, and a strategic player in the Southern Gas Corridor, would be the ideal destination for Israeli gas and that this also conforms to Turkey's interest in diversifying its energy resources. Whether Israeli politics and law allow for integrated energy relations with Turkey remains to be seen and stands as a separate geopolitical conflict from any resolution in Cyprus." HE Mithat RENDE

In the first part of the discussion, the panelists shared their perspectives on developments in the Cyprus settlement. All of the panelists admitted that the parliamentary elections in Cyprus this May are slowing the negotiation process but that the climate will become clearer after May. In the second part of the discussion the panelists explored the latest political and market developments related to Eastern Mediterranean hydrocarbon resources. All panelists agreed that global gas developments and the low price environment represent a significant challenge to upstream energy projects everywhere, including the Eastern Mediterranean. It was commonly acknowledged that Cyprus will not be able to export its gas alone and needs to partner with Israel and/or Egypt to ensure its gas exports will be commercially viable.



WORLD ENERGY AND CLIMATE OUTLOOK AFTER PARIS CLIMATE SUMMIT

11 January 2016, Sabancı Center, İstanbul

Sabanci University Istanbul International Center for Energy and Climate (IICEC) and TÜSİAD held annual "World Energy Outlook Turkey Presentation" meeting, this year titled as "World Energy and Climate Outlook After Paris Climate Summit" at Sabanci Center. International Energy Agency (IEA) Executive Director **Dr. Fatih BİROL** presented the World Energy Outlook 2015 report.

Introductory remarks of the meeting were delivered by Sabanci University Founding Chairman of the Board of Trustees **Güler SABANCI**, TÜSİAD President of the Board of Directors **Cansen BAŞARAN-SYMES**, and Undersecretary of the Ministry of Energy and Natural Resources **Fatih DÖNMEZ**

In her opening remarks, Güler SABANCI said, "In addition to the breakthrough needed in energy efficiency and renewable energies, improvements made possible by energy technologies may transform the energy industry from being the cause of climate change to its solution. All the countries in the world must work together on the transformation that will ensure sustainability in the energy sector. This is the only way we can leave a sustainable world to future generations. In distribution, the guidelines for the new tariff for the 2016-2020 were





established. Liberalization and free market are indispensable to us. We have had some headway in retail liberalization, albeit not at the desired level. Looking forward, we must quickly take further steps in liberalization and have a fully-functional market that favors the consumer. To do so, we must strengthen our energy markets with better regulatory framework, more competitiveness, transparency and predictability. We must seize the opportunity yielded by excess supply and low energy prices to take bold steps in this direction."

Cansen BAŞARAN-SYMES said, "Last year, in the launch event for the 'World Energy Outlook 2014' Report, we as TÜSİAD had said that 'we cannot be fooled into indifference by low energy prices; we need to implement regulations to liberalize the energy market and expedite the shift to low-carbon technologies as well as investments in energy efficiency.' Renewable energy sources play a large part in the shift to a low-carbon economy while also providing better security of supply. We have had considerable momentum in utilizing our renewable energy sources recently. If we persist in this direction, I believe there will come a time when all the equipment used can be manufactured in Turkey. The production, employment and export opportunities that equipment manufacturing brings will be a great boost to our economy. Maintainining investment incentives and implementing measures to improve the investment environment will be crucial in accelerating the push towards maximum utilization of Turkey's renewable energy potential. We are confident that liberal and transparent energy markets will encourage efficient investments and energy efficiency, and we know that such investments will empower our shift to a low-carbon economy. We take every opportunity to advocate coordination between this transformation in the energy sector and a change in our manufacturing industry. This is the only way we can harmonize our growth requirements with our environmental responsibilities."

Energy Undersecretary Fatih DÖNMEZ stated that domestic resources are key for the supply security. Mentioning the four axes on which the energy policy will be built upon, DÖNMEZ indicated, "These four axes are: resources, infrastructure, technology and trade. Regarding these axes, our priorities are domestic resources, supply security and diversity, energy efficiency, growing trade and transition to the uttermost energy infrastructure. Private sector has been the driving force behind the growth and development of the energy sector in the last ten years. We will maintain a regulated, foreseeable, and free market economy without surprises." DÖNMEZ concluded by stating, "Energy deprivation and climate change are significant debates that Turkey needs to participate in."

Following introductory remarks, IEA Executive Director Dr. Fatih BİROL presented the World Energy Outlook 2015 report.



Dr. BİROL stated that predictability in the energy sector had never been worse, and explained the four causes of low predictability: "First is the geopolitical situation. There are severe issues in the Middle East, where the world's leading oil producers are located. There are no signs of improvement in the short term. Other producers like Russia have their own problems. The second factor is growth. BRICS nations, which have been the driving force of global growth in the past, are not doing so well. The third cause is the Paris Convention; for the first time in history, all the nations of the world have agreed on a text but one thing remains unknown: will the Convention make meaningful change? Finally, predictability is further crippled by uncertainties regarding low energy prices." Dr. BİROL continued, "Uncertainty in energy prices is a huge question. Energy prices dropped for two consecutive years in 2015 and 2016, and this trend will continue. If sanctions against Iran are lifted in 2016, this may drive energy prices further down. Low prices are good for countries that are import-dependent in energy, such as Turkey, but we must not let this go to our head."

Dr. BİROL explained the two diverging views in petroleum markets: "The first view argues that 30 to 40 dollars is the new norm, while the second view believes that prices will rise again in the near future and bring balance to the market. Personally, I don't think prices will stay in the 30-40 dollar range or lower for long."

Dr. BİROL also added that the Paris Climate Summit was a good first step that sent important messages to the energy sector. Arguing that the Paris Summit would increase investments in innovation across the world, Dr. BİROL said, "In Paris, 20 countries pledged to double their energy research and development investments in the next five years. Investments will reduce the costs of clean energy technologies." Dr. BİROL continued: "As costs drop, renewable energy investments will increase around the world and two-thirds of this investment will be by developing countries. In the next five years, 6.5 out of every 10 dollars invested in the electricity sector will go to renewable energies. Paris sends an important message to the energy sector; their steps will be carefully monitored. Fifty percent of the plants commissioned worldwide last year were renewable. The other 50% included coal, gas, nuclear and

oil power plants. This is statistical proof that renewable energy is no longer a romantic tale but serious business."

Explaining that India would soon replace China as having the largest energy demand, Dr. BİROL said, "We are at the end of the phase where China dictates the growth in global energy demand. Its growth in energy demand is slowing down. Mean while, India took great steps in economy and energy. We see it take center stage in global energy. The greatest demand for coal will originate from India and more ground will be covered in solar energy. They will soon become second only to China in solar energy." Dr. BİROL further stated, "Demand for coal in China is at its peak Demand is faltering in the EU and United States. Demand is on the rise in India and East Asia. There is significant decline in demands worldwide. Developed nations consume less energy. The economy reached a saturation point. Energy is being used more efficiently. We are at the end of a long energy story with China. The economy and energy demand in China are almost parallel. Energy demand is slowing down. The Chinese government resolved to balance the economy. Much is being done for changing into a liberal economy. Demand is declining in China. There are great efforts for energy efficiency. The investment in renewable energies in China is equal to the investments of all the other nations of the world combined. The motive behind this is climate change and severe air pollution in the cities. India took great steps in economy and energy as well. They also assisted in reaching a fairer agreement in Paris. 240 million people still live with no access to power. India's population will exceed that of China in 10 years. India has the largest share of the demand in coal. The largest share of petroleum demand is theirs as well. The country is taking great steps in solar energy." The presentation was followed by an extensive Q & A

After the conference, the meeting of IICEC Board of Directors took place with the participation of **Güler SABANCI**, Sabancı University; **Mehmet GÖÇMEN**, EnerjiSA; **Canan ÖZSOY**, GE Turkey; **Ahmet Ümit DANIŞMAN**, Akenerji; **Ahmet EREN**, Eren Holding; **Murat ÖZGÜL**, Genel Energy; **Hakan YILDIRIM**, Siemens; **Dr. Fatih BİROL**, IEA; **Prof. Dr. Nihat BERKER**, Sabancı University; **Dr. Mehmet Doğan ÜÇOK**, IICEC.





TALK BY PROF. SERGEY PALTSEV (MITei), "ECONOMICS AND GEOPOLITICS OF NATURAL GAS"

7 September 2015, Sabancı University, Minerva Palace, İstanbul



"If you are trying to look at the energy of the future, if you are trying to understand what the role of renewables, solar, wind, geothermal, carbon capture sequestration and biofuels is, you need to understand the main competitors. If you are serious about doing something different, you need to understand what the economics of the current producers is; what the resources are, how the markets are growing into the

future, and what the prospects for the socalled traditional fuels such as natural gas,

oil, and coal are." Prof. Sergey PALTSEV

Sabanci University Istanbul International Center for Energy and Climate (IICEC) organized a talk on Economics and Geopolitics of Natural Gas by **Prof. Sergey PALTSEV**, Deputy Director of the MIT Joint Program on the Science and Policy of Global Change, and Senior Research Scientist at Massachusetts Institute of Technology (MIT), Cambridge, USA. Sabanci University Energy Technologies and Management (ETM) MSc students, energy industry executives, and high level representatives from energy related associations attended the event, and a cocktail followed the talk.





IICEC 6TH INTERNATIONAL ENERGY FORUM, "ON THE ROAD TO G-20 ANTALYA SUMMIT: GLOBAL ENERGY SECURITY TODAY AND TOMORROW"

15 May 2015, Conrad Hotel, Istanbul

Annually organized by Sabancı University Istanbul International Center for Energy and Climate (IICEC), and hosted by Sabancı University Board of Trustees Chairman **Güler SABANCI** and IICEC International Steering Committee Honorary Chairman **Dr. Fatih BİROL**, the 6th IICEC International Energy Forum was held at Conrad Hotel Istanbul on May 15, 2015.

The stakeholders of the governments and the energy industry got together in the IICEC 6th International Energy Forum to discuss the opportunities and responsibilities offered by the G-20 and B-20 Summits to take place in Antalya in November 2015 under the presidency of Turkey along with the threats posed by the climate change and the preparations for the UN Climate Change Conference 2015 in Paris. The Forum, titled as "On the Road to G-20 Antalya Summit: Global Energy Security Today and Tomorrow", served as a platform setting the ground for energy discussions that will become prominent in the G-20 Summit.

The Forum began with the opening remarks by Güler SABANQ and Dr. Fatih BİROL. Following the keynote speeches of the Special Advisor to Prime Minister of Japan, Eiichi HASEGAWA, and the Energy Counselor of the US Secretary, Melanie KENDERDINE, two panels were held under the titles of "Energy Security: Expectations of the Governments from G-20" and "Expectations of the Business World from B-20".

"The issue of access to energy for all and energy investments are the central topics in the energy agenda of G-20. As the co-chairman of the B-20 Trade Task Force, I truly believe that the G-20 and B-20 summits will provide effective solutions to the global energy challenges."

Güler SABANCI

State Secretary for Energy of Switzerland, **Dr. Walter STEINMANN**, Former Minister of Foreign Affairs and Member of the Council of State of the Kingdom of Spain, **Ana PALACIO**; President of the Board of Directors of Turkish Industry & Business Association (TUSIAD), **Cansen BAŞARAN-SYMES**; Ambassador of Hungary to Turkey, **Gabor KISS**, Ambassador of Ukraine to Turkey **Dr. Sergiy KORSUNSKIY**; EON SE CEO, **Dr. Johannes TEYSSEN**; GE Vice Chairman, **John G. RICE**, and EWE AG CEO, **Dr. Werner BRINKER** were the prominent speakers of the Forum organized since 2010 for creating a more secure, sustainable, and prosperous global energy future.











I. Panel: Energy Security: Expectations of Government from G-20

Moderator:

Dr. Fatih BİROL, Chief Economist, International Energy Agency (IEA) **Participants:**

HE Ana PALACIO, Member of the Council of State, Kingdom of Spain HE Gabor KISS, Ambassador of Hungary to Turkey Melanie KENDERDINE, Energy Counselor of the Secretary, DOE, USA HE Dr. Sergiy KORSUNSKIY, Ambassador of Ukraine to Turkey HE Dr. Walter STEINMANN, State Secretary for Energy, Switzerland

"A strong direction from Antalya to Paris would be of crucial importance. We are waiting for a signal to the energy world from the Climate Summit 2015 to take place in Paris. There should be more investment on energy efficiency, solar energy, lower carbon technologies, and nuclear energy." Dr. Fatih BiROL

II. Panel: Expectations of Business from B-20

Moderator:

Cansen BAŞARAN-SYMES, President of the Board of Directors, TUSIAD

Participants:

Dr. Johannes TEYSSEN, Chairman & CEO, E.ON SE **John G. RICE**, President & CEO of Global Growth and Operations, GE **Dr. Werner BRINKER**, CEO, EWE AG





IICEC ENERGY FORUM LUNCHEON 2015

15 May 2015, Conrad Hotel, Istanbul



IICEC Energy Forum Luncheon is a traditional gathering held by Sabancı University Istanbul International Center for Energy and Climate (IICEC) in honor of the participants of the IICEC's Annual International Energy Forum.

This distinguished platform brings together top-level government leaders, energy industry executives, and high-level representatives from leading universities, policy centers and international think tanks from around the world. The event, welcoming all the attendees of the forum, fosters the exchange and development of ideas and facilitates networking in energy sector for the development of solutions for a sustainable energy future for the region and the world.

"When we look at the world today, the geopolitical developments in many countries show us that the energy security is and will be a crucial topic for many of us in the next years to come. Here, Turkey plays a crucial role due to its location. When you look at Turkey and the countries around it, Turkey is surrounded by about 70% of oil and gas reserves of the world." (Dr. Fatih BiROL)

HOTEL LES OTTOMANS SPECIAL IICEC COCKTAIL & DINNER

15 May 2015, Hotel Les Ottomans, Istanbul

The Special IICEC Cocktail and Dinner, hosted by **Güler SABANCI**, Chairman of the Board of Trustees of Sabanci University and Dr. Fatih BİROL, IICEC International Steering Committee Honorary Chairman was held at Hotel Les Ottomans to celebrate the "IICEC 6th International Energy Forum." This exclusive IICEC event was held for the honor of invited speakers of IICEC 6th International Energy Forum, IICEC Co-Chairs and Members.

The participants of this special event included the invited speakers of the IICEC 6th International Energy Forum; Eiichi HASEGAWA Special Advisor of Prime Minister of Japan; Melanie KENDERDINE, DOE, USA; Dr. Walter STEINMANN, State Secretary for Energy of Swiss Confederation, Dr. Sergiy KORSUNSKIY Ambassador of Ukraine to Turkey; Cansen BASARAN-SYMES, TUSIAD; Doris PINGEL TEYSSEN and Dr. Johannes TEYSSEN, E.ON SE; Cammie RICE and John G. RICE, GE; Dr. Werner BRINKER, EWE AG. Other guests were Bedia BERKER and Prof. Dr. Nihat BERKER, Sabancı University; Ayşe KURTUL and Zafer KURTUL, Sabancı Holding; Aynil GÖÇMEN and Mehmet GÖÇMEN, Enerjisa; Çiğdem TEKİN and Adil TEKİN, ALSTOM Turkey; Georg OBERREITER, Federal Ministry for European and International Affairs, Austria; Canan ÖZSOY, GE; Selen ZORLU MELİK and Mehmet Bakır MELİK, Zorlu Energy Group; Ahmet EREN, Eren Holding; Sinan BUBİK, Siemens; Alparslan BAYRAKTAR, EPDK; Charles F. HUNTER, Consul General of USA to Turkey; Yetik Kadri MERT, Enerjisa; Zeynep Alp KÖSEOĞLU and Ata KÖSEOĞLU, Sabancı Holding; Ömer Faruk GÜLTEKİN, Sabancı Holding; Andrea KREETZ and Holger KREETZ, Enerjisa; Cara KEYMAN and Prof. Fuat KEYMAN, IPC; Prof. Ahmet EVİN, Sabancı University;













Prof. Hasan MANDAL, Sabancı University; Prof. Yusuf MENCELOĞLU, Sabancı University; **Prof. Volkan ÖZGÜZ**, Sabancı University; **James** LARSEN, Ambassador of Australia to Turkey; Komelia KLEIN and Balazs HENDRICH, Consul General of Hungary to Turkey; Lina Jalal OMAR, Deputy Consul General of Iraq to Turkey; Mohammed AL-MAGHAZACHI, Commercial Attaché of Iraq to Turkey; Nabil AL-KHOWAITER, Saudi Aramco; Dr. Frank QUANTE, EWE AG; Jørgen KILDAHL, E.ON SE; Akın ÖZKAN, Edison S.p.A.; Pablo BENAVIDES ORGAZ, Consul General of Spain to Turkey; Muriel DOMENACH, Consul General of France to Turkey; Veronika SAUL and Achim SAUL, Enerjisa; Mary MAVROGENI and Costis STAMBOLIS, IENE; Theresa COURAGE and Rafe COURAGE, Deputy Consul General of England to Turkey; Defne ARSLAN, Atlantic Council; Pinar DOST-NİYEGO, Atlantic Council; Greg GERSHUNY, DOE, USA; Dr. $\textbf{Matthias FINGER}, \ \textbf{EPFL}; \ \textbf{Dr. Doğan } \ \ddot{\textbf{U}} \\ \textbf{COK}, \ \textbf{IICEC}. \ \textbf{Distinguished}$ members of the press and the media also attended to the event; Güngör URAS, Milliyet; Servet YILDIRIM, Milliyet; Murat YETKİN, Hürriyet Daily News; Merve ERDİL, Hürriyet; Özlem DALGA, Bloomberg; Mehmet KARA, Dünya; Cem SEYMEN, CNN Türk; Melis KOBAL, El-Cezire.



HONORARY RECEPTION AT ÇIRAĞAN PALACE 26 March 2015, Çırağan Palace Kempinski, İstanbul

In February 2015, Sabancı University International Center for Energy and Climate (IICEC) Honorary Chairman Dr. Fatih BİROL was elected as the Executive Director of the Paris-based International Energy Agency (IEA) with the unanimous vote of the 29 member nations of the world's leading energy institution, becoming the first Executive Director supported by all members in the history of the Agency. Dr. BİROL, who has served at various positions of the IEA since 1995 and is the Chief Economist of the Agency for the past nine years, will hold the position of the Executive Director starting from September 1, 2015 until 2019. Dr. BİROL was responsible for the preparation of the "World Energy Outlook" reports that are widely recognized as the most reliable and informative guide in the global energy market. Dr. BİROL also holds many honors and awards from several countries.







The reception was hosted by Güler SABANCI, Chairman of the Board of Trustees of Sabancı University, on March 26, 2015 for the honor of Dr. Fatih BİROL, who was elected as the Executive Director of the IEA. Speaking on Dr. BİROL's new appointment, SABANCI said, "Dr. Fatih BİROL, who has been the Honorary Chairman of IICEC since its establishment, has become the first Executive Director of the IEA who was elected by the unanimous vote of all 29 member nations. This is a proud moment both for Dr. BİROL and the energy industry in general. At a time when energy and climate issues are at the top of the world agenda and we reached a turning point, it is even more significant that Dr. BİROL was elected to this position. We need effective, multidimensional and sustainable energy policies that span all aspects of energy from generation to consumption on a global level, promote energy security, and improve energy efficiency for a better energy future. International Energy Agency's motto 'to ensure reliable, affordable and clean energy' will be critical in improving our outlook in energy. Mr. BİROL's extensive experience ranging from oil production in OPEC to consumption within the IEA, and his effective efforts everywhere from Davos to the villages of Ethiopia make him the ideal candidate to make immense contributions to the world's most prestigious and influential energy organization."

Minister of Energy and Natural Resources of the Republic of Turkey, Taner YILDIZ, and the $11^{\rm th}$ President of the Republic of Turkey, Abdullah GÜL made speeches to congratulate Dr. BİROL on his new assignment. Top level government officials and high-level executives from leading energy institutions attended the reception to celebrate the significant event.





"WORLD ENERGY OUTLOOK 2014" TURKEY PRESENTATION

22 December 2014, Sabancı Center, İstanbul

Sabanci University International Center for Energy and Climate (IICEC) in cooperation with TÜSİAD organized "World Energy Outlook 2014" Turkey Presentation at Sabanci Center. International Energy Agency (IEA) Chief Economist Dr. Fatih BİROL presented the report. The introductory remarks were made by TÜSİAD President of the Board of Directors Haluk DİNÇER and Minister of Energy and Natural Resources Taner YILDIZ.

In his opening speech, Haluk DİNÇER stated that important developments take place especially in neighboring regions, and they are also influential on the global energy market. DINCER said, "The ongoing developments between Russia and Ukraine, and the observed political surge in Middle East have reached to alarming degrees. By the year 2014, the weak recovery trend in the global economy is shaded by a number of geopolitical risks. Moreover, the increase in those geopolitical risks, which have effects on a global scale, is not a possibility to be underestimated. Entering the year 2015, on the one hand, we are in need of anticipating the best methods to manage these current geopolitical risks. On the other hand, we are faced with the management problem of growth rates, which show a systematic decline both in the developed and developing-country groups. Against such a backdrop, the market trends especially in energy sector turn this year as well as next year into a particularly critical period."

Minister of Energy and Natural Resources Taner YILDIZ indicated that the energy sector will grow together with the private sector, and emphasized that the demands and concerns of the private sector in this regard will be evaluated.

The presentation by Dr. Fatih BİROL covered in detail the World Energy Outlook 2014 findings and projections regarding the recent developments in the regions of production, energy resources that will provide for main consumption centers, energy efficiency potential, the UN Climate Change Conference which will be held in Paris in 2015, and other significant issues that will set the agenda for global energy markets.

Dr. BİROL stated, "The Intergovernmental Panel on Climate Change estimates that in order to limit the temperature increase to 2°C – the internationally agreed goal to avert the most severe and







widespread implications of climate change – the world cannot emit more than 1000 gigatonnes of CO_2 from 2014 onwards. This entire budget will be used up by 2040 in our central scenario. Since emissions are not going to drop suddenly to zero once this point is reached, it is clear that the 2°C objective requires urgent action to steer the energy system on to a safer path." Dr. BİROL also remarked that unless a binding international agreement is made during the Climate Change Conference in Paris, the global warming will reach beyond the expected 2°C objective. The presentation was followed by an extensive Q & A session.

After the conference, the meeting of IICEC Board of Directors took place with the participation of Mehmet GÖÇMEN, EnerjiSA; Adil TEKİN, ALSTOM Turkey; Ahmet Ümit DANIŞMAN, Akenerji; Ahmet EREN, Eren Holding; Ahmet ERDEM, SHELL Turkey; Canan ÖZSOY, GE Turkey; Ali YILDIZEL, Genel Energy; Sinan BUBİK, Siemens; Hakan YILDIRIM, Siemens; Dr. Fatih BİROL, IEA; Prof. Dr. Nihat BERKER, Sabancı University; Dr. Mehmet Doğan ÜÇOK, IICEC.

About World Energy Outlook

Issued by the International Energy Agency (IEA), the "World Energy Outlook" is the world's most reputable, talked-about, and sold publication in the energy industry that contains reliable energy market analyses, critical foresight into energy supply and demand trends, and comprehensive reviews of economic developments. Report contains the latest forecasts for the next 20 years, policy developments, and recent analyses supported by the inferences from the past year. "World Energy Outlook" is a reference book for ministers of energy, economy, and environment worldwide, enabling them to make the right investment decisions and accurate plans.







U.S. SECRETARY OF ENERGY ERNEST J. MONIZ'S VISIT TO SABANCI UNIVERSITY - IICEC

21 November 2014, The Seed, Sakıp Sabancı Museum, İstanbul

U.S. Secretary of Energy Ernest J. MONIZ met with Sabanci University Energy Technologies and Management (ETM) MSc students at Sakip Sabanci Museum on 21 November, 2014. The meeting began with the opening remarks of Güler SABANCI, Chairman of the Board of Trustees of Sabancı University, and Prof. Dr. Nihat BERKER, President of Sabancı University. IEA Chief Economist and IICEC International Steering Committee Honorary Chairman **Dr. Fatih BİROL** also attended the meeting. Secretary Dr. MONIZ gave a speech on Energy Security and Climate Change, and stated that energy security needs to be addressed collectively in consultation with allies. Secretary Dr. MONIZ also remarked that significant ground was covered regarding alternative energy solutions, and discussed the importance of technological developments on this matter. Energy Counselor to the Secretary, Melanie KENDERDINE also took the floor to expand on energy security and climate change issues in relation to U.S. Energy Policy. The lecture was followed by a Q&A session with the ETM students, and the meeting continued with a special luncheon during which the students had a warm conversation with the Secretary Dr. MONIZ.







WORLD ENERGY OUTLOOK 2014 - AFRICA SPECIAL REPORT TURKEY PRESENTATION

20 October 2014, Sabancı Center, İstanbul



Sabancı University International Center for Energy and Climate (IICEC) in cooperation with APCO Worldwide organized "World Energy Outlook 2014 - Africa Special Report" Turkey Presentation at Sabancı Center. International Energy Agency (IEA) Chief Economist Dr. Fatih BİROL presented the Special Report.

Business representatives, who currently make investments or plan to invest in Africa, academics, and experts interested in the area attended the launch meeting, which discussed in detail the energy sector in Africa and important opportunities regarding energy potential of Africa.











In this first comprehensive analysis of sub-Saharan Africa by IEA, it is reported that the region's energy resources are more than sufficient to meet the needs of its population but are largely under-developed. According to the Report increasing access to modern forms of energy is crucia to unlocking faster economic and social development in sub-Saharan Africa. The region accounted for almost 30 percent of global oil and gas discoveries made over the las five years, and it is already home to several major energy producers, including Nigeria, South Africa, and Angola. It is also endowed with huge renewable energy resources including widespread solar and hydro potential, as well as wind and geothermal. However, more than 620 million people in the region (which counts up to two-thirds of the population) live without electricity, and nearly 730 million people rely on dangerous, inefficient forms of cooking. The use of solid biomass (mainly fuelwood and charcoal outweighs that of all other fuels combined, and average electricity consumption per capita is not enough to power a single 50-watt light bulb continuously.

IEA Chief Economist Dr. Fatih BİROL indicated that economic and social development in sub-Saharan Africa hinges critically on fixing the energy sector, and further stated, "The payoff can be huge; with each additional dollar invested in the power sector the overall economy is boosted by \$15." After the presentation, Dr. BİROL received audience questions. The meeting continued with a luncheon for the special guests of IICEC and APCO Worldwide at Sabancı Center.

IICEC REPORT WORKSHOP WITH IICEC CO-CHAIRS' AND MEMBERS' REPRESENTATIVES:

"ENERGY IMPORT BILLS IN THE CURRENT ACCOUNT DEFICIT OF TURKEY: WHAT CAN BE DONE?"

26 September 2014, Sabancı Univesity, Minerva Palace, Istanbul

Turkey has a dynamic economy and there is every reason to believe that the next ten years will bring a major expansion of both the economy and of energy used to fuel that growth. This is the very reason for the Istanbul International Center for Energy and Climate (IICEC) to produce the report entitled "Energy Import Bills in the Current Account Deficit of Turkey: What Can Be Done?".

This report is to constitute the first full report by IICEC and will consider the prospective development of the current account deficit to 2023 and the importance of hydrocarbon imports as a contributor to the deficit. Sections of the report will include Turkey's Energy Supply, Demand and Balance of Payment Issues 2013-2023, Natural Gas, Coal & Lignite, Renewables & Nuclear, and Energy Efficiency.

The conclusions are intended to serve as policy recommendations and as pointers towards various options that would enable Turkey to limit the volume, and in some cases the price, of its energy imports and this ameliorate the balance of payments deficit. They will cover the possibilities should policies and/or circumstances change and the consequences if policies do not change. Specific conclusions will be listed in an executive summary.

In this regard, IICEC organized a one-day workshop at Sabanci University Karaköy Minerva Palace to present the report-in progress. The workshop brought together academicians, high-level representatives from IICEC Co-chairs and Members, and started with the welcome address of **Prof. Dr. Nihat BERKER**, President of Sabanci University. The workshop continued with a presentation by **B. Nazim BAYRAKTAR**, EMRA Senior Energy Expert. During the discussion session all the participants took the floor to deliver their opinions on the main themes in the report and their respective predictions on energy future of Turkey. The workshop was followed by luncheon at Lokanta Maya, Karaköy.

The representatives from local energy sector were Özlem PALABIYIK, Akenerji Strategic Planning Manager; Özgür ŞİMŞEK, Eren Enerji Deputy General Manager; Kenan ŞİRİN, Siemens Energy Sector Head of Marketing and Business Development; Çağatay CENGİZ, SHELL Commercial Manager, and Bora GÜRAY, EnerjiSA Manager.

IICEC core research group members in the meeting were **B. Nazım BAYRAKTAR**, EMRA; **Prof. Dr. Ahmet EVİN**, Sabancı University; **Dr. Cenk PALA**, EnerjiSA Regulatory Affairs and Business Development Manager; **Bora GÜRAY**, EnerjiSA Manager; **Simone TAGLIAPIETRA**, Researcher at Fondazione Eni Enrico Mattei, and **Dr. M. Doğan ÜÇOK**, IICEC Coordinator:

On 27 September, 2014, IICEC core research group briefed **Dr. Fatih BİROL**, IEA Chief Economist and IICEC International Steering Committee Honorary Chairman, regarding the developments of the IICEC Report.







IICEC 5TH INTERNATIONAL ENERGY FORUM "GLOBAL ENERGY INVESTMENTS: CHALLENGES AND OPPORTUNITIES"

13 June 2014, Conrad Hotel, Istanbul

Annually organized by Sabancı University Istanbul International Center for Energy and Climate (IICEC), and hosted by Sabancı University Board of Trustees Chairman **Güler SABANCI** and IICEC International Steering Committee Honorary Chairman **Dr. Fatih BİROL**, the 5th IICEC International Energy Forum was held at Conrad Hotel Istanbul on June 13, 2014.

The future of the oil, natural gas, and electricity investments in Europe, Turkey, and Middle East was at the center of discussions at 5th IICEC International Energy Forum, which brought together top level representatives of the global energy industry in Istanbul. The developments in the Middle East and their reflections on the global energy markets were among the prioritized topics. The impacts of the political situation in Iraq, Saudi Arabia, and Iran on the oil and natural gas investments as well as global balances have been discussed. Furthermore, the recent great development of the 'Renewable Energy' investments and the impact of this case on the future energy investments found wide place in the agenda of the forum.

At the 5th International Energy Forum where the stakeholders of the governments and energy industry from many countries attended, Minister of Energy and Natural Resources of the Republic of Turkey, Taner YILDIZ made the opening speech of the conference.



The forum began with the keynote speeches of high level government officials; Minister of Environment of the Republic of Poland, Maciej H. GRABOWSKI, Special Advisor of Prime Minister of Japan, Eiichi HASEGAWA, and Energy Counselor of the US Secretary, Melanie KENDERDINE.



"It is very essential, that we, all the players of the energy sector and especially the regulatory authorities and the policy makers, should be very sensitive as to not to disturb the global confidence by delaying or by not implementing the necessary adjustments in time." (Güler SABANCI)

Other distinguished speakers of the forum included President of Sabancı University, Prof. Dr. Nihat BERKER; Shell Vice Chairman, Brian DAVIS; BP Vice Chairman, Dev SANYAL; International Finance Corporation World Bank Vice President, Dimitris TSITSIGAROS; Ambassador of Australia to Turkey, James LARSEN; Ambassador of Canada to Turkey, John HOLMES; USA former Senator, Phil **GRAMM**; International Energy Agency (IEA) Chief Economist Dr. Fatih BİROL; GDF SUEZ CEO Gérard MESTRALLET, Siemens AG CEO Joe KAESER, E.ON SE CEO Dr. Johannes TEYSSEN, Energy Counselor of the Secretary Melanie KENDERDINE; Director of Swiss Federal Office for Energy Dr. Walter STEINMANN; Sabanci Holding Energy Group President, Selahattin HAKMAN; ALSTOM Turkey President Adil TEKİN; Akenerji General Manager, Ahmet Ümit DANIŞMAN; GE Turkey President and CEO Canan ÖZSOY; Genel Energy President **Mehmet SEPİL**; RWE Turkey CEO **Dr. Ralph** JÄGER, and Zorlu Energy Group General Manager, Sinan AK.

In His Excellency's message to the conference, the President Abdullah GÜL said, "It is expected that the energy demand of Turkey will double by 2023. The multi-dimensional energy strategy of Turkey foresees the diversification of the energy resources and routes, supporting the local, renewable and nuclear energy resources, and the energy efficiency should also be significantly considered."









IICEC 5TH INTERNATIONAL ENERGY FORUM "GLOBAL ENERGY INVESTMENTS: CHALLENGES AND OPPORTUNITIES"

I. Panel: Oil & Gas Investment Outlook

Moderator.

Prof. Dr. Nihat BERKER, President, Sabancı University

Participants:

Brian DAVIS, Vice Chairman, Shell **Dev SANYAL**, Vice Chairman, BP

Dimitris TSITSIGAROS, Vice President, International Finance Corporation, World Bank

HE James LARSEN, Ambassador of Australia to Turkey **HE John HOLMES**, Ambassador of Canada to Turkey **Phil GRAMM**, Former Senator, USA



Moderator:

Dr. Fatih BİROL, Chief Economist, International Energy Agency (IEA)

Participants:

Gérard MESTRALLET, CEO, GDF SUEZ **Joe KAESER**, CEO, Siemens AG **Dr. Johannes TEYSSEN**, CEO, E.ON SE

Melanie KENDERDINE, Energy Counselor of the Secretary, USA

Dr. Walter STEINMANN, Director of Swiss Federal Office for Energy





III. Panel: Turkish Energy Investment Outlook

Moderator:

Selahattin HAKMAN, Energy Group President, Sabancı Holding

Participants:

Adil TEKİN, President, ALSTOM Turkey

Ahmet Ümit DANIŞMAN, General Manager, Akenerji

Canan ÖZSOY, President & CEO, GE Turkey Mehmet SEPİL, President, Genel Energy Dr. Ralph JÄGER, CEO, RWE Turkey

Sinan AK, General Manager, Zorlu Energy Group



IICEC ENERGY FORUM LUNCHEON 2014

13 June 2014, Conrad Hotel, Istanbul



IICEC Energy Forum Luncheon is a traditional gathering held by Sabancı University Istanbul International Center for Energy and Climate (IICEC) in honor of the participants of the IICEC's Annual International Energy Forum.

This distinguished platform brings together top-level government leaders, energy industry executives, and high-level representatives from leading universities, policy centers and international think tanks from around the world. The event, welcoming all the attendees of the forum, fosters the exchange and development of ideas and facilitates networking in energy sector for the development of solutions for a sustainable energy future for the region and the world.



MUZEDECHANGA SPECIAL IICEC COCKTAIL & DINNER

13 June 2014, Sakıp Sabancı Museum, İstanbul

On June 13, 2014, the Special IICEC Cocktail and Dinner, hosted by **Güler SABANCI**, Chairman of the Board of Trustees of Sabancı University and **Dr. Fatih BİROL**, IICEC International Steering Committee Honorary Chairman was held at Sakıp Sabancı Museum to celebrate the "IICEC 5th International Energy Forum".

This special IICEC event was held for the honor of invited speakers of IICEC 5th International Energy Forum, IICEC Co-Chairs and Members. During the cocktail, guests also visited the exhibition "Distant Neighbour Close Memories: 600th Anniversary of Turkish - Polish Relations" to commemorate the 600th anniversary of relations between Turkey and Poland at Sakip Sabanci Museum.













The participants of this special event included the invited speakers of the 5th IICEC International Energy Forum; Maciej H. GRABOWSKI, Ministry of Environment of Poland; James LARSEN, Ambassador of Australia to Turkey; John HOLMES, Ambassador of Canada to Turkey; Eiichi HASEGAWA, Special Advisor of Prime Minister of Japan; Melanie KENDERDINE, DOE, USA; Doris PINGEL TEYSSEN and Johannes TEYSSEN. E. ON; Bedia BERKER and Prof. Dr. Nihat BERKER. Sabanci University; Semra HAKMAN and Selahattin HAKMAN, Sabancı Holding; Çiğdem TEKİN and Adil TEKİN, ALSTOM Turkey; Ahmet Ümit DANIŞMAN, Akenerji; Mehmet SEPİL, Genel Energy; Didem AK and Sinan AK, Zorlu Energy Group; Walter STEINMANN, Swiss Federal Office of Energy. Other guests were Denis NICOLE GELİS and Hüseyin GELİS, Siemens Turkey; Nedim ŞENER, Ciner Group; Doğan PENÇE, Ciner Group; Pars KUTAY, Genel Energy; Şule ORAN and Barış ORAN, Sabancı Holding; Bora Şekip GÜRAY, Sabancı Holding; Zeynep KÖSEOĞLU and Seyfettin Ata KÖSEOĞLU, Sabancı Holding; Neriman ÜLSEVER, Sabancı Holding; Prof. Dr. Ayşe KADIOĞLU, Sabancı University; Emeritus Prof. Dr. Ahmet EVİN, Sabancı University; Prof Dr. Füsun ÜLENGİN, Sabancı University; Prof. Dr. Hasan MANDAL, Sabancı University; Prof. Dr. Yusuf MENCELOĞLU. Sabancı University: Cara KEYMAN and Prof. Dr. Fuat KEYMAN, IPC; Hanne KILDAHL and Jørgen KILDAHL, E. ON; Stein DALE, E. ON; Sevinc AL-KHOWAITER and Nabil O. AL-KHOWAITER, KAPSARC; Jan POLACZEK, Ministry of Environment of Poland; Igor J. MITROCZUK, Ministry of Environment of Poland; Grzegorz TOMASIK, PSE S. A., Ministry of Environment of Poland; Yetik Kadri MERT, EnerjiSA; Zafer KURTUL, Sabancı Holding; Dr. Mehmet Doğan ÜÇOK, IICEC. Distinguished members of the press and the media also attended to the event; Ferhat BORATAV, CNN Türk; Meral TAMER, Milliyet; Güngör URAS, Milliyet; Gıla BENMAYOR, Hürriyet; Serpil YILMAZ, Habertürk; Ercan İLHAN, Vatan; Servet YILDIRIM, CNBC-e; Cüneyt TOROS, WSJ; Cem. SEYMEN, CNN Türk.



"WORLD ENERGY OUTLOOK 2013" TURKEY PRESENTATION

20 December 2013, Sabancı Center, İstanbul

"World Energy Outlook 2013" Turkey Presentation was presented by International Energy Agency Chief Economist and IICEC Honorary Chairman Dr. Fatih BİROL, with the cooperation of IICEC and TÜSİAD. The introductory remarks were made by Sabancı University Board of Trustees Chair Güler SABANCI, TÜSİAD Vice President Memduh BOYDAK and Deputy Minister of Energy and Natural Resources Hasan Murat MERCAN.



Speaking first, Sabanci University Board of Trustees Chair Güler SABANCI remarked, "As the demand for energy increases, great investments in all segments of the energy sector are needed on an annual basis. We need 8 to 10 billion dollars in investments every year in order to meet the demand for electricity in a secure and sustainable way. There are two prerequisites to attract investments on this scale: a stable economy, and a liberal, transparent and competitive energy market. Important steps have been taken lately to encourage competition in the electricity sector and expedite



investments. We have had tangible results in the development of a liberal electricity market, where our group company EnerjiSA is one of the leading private actors in electricity production, trade, and sale.

"The New Electricity Market Law adopted this year was another leap forward in liberalization. The privatization of distribution was completed this year. With the reduction in free consumer thresholds, theoretical market openness at the end-consumption level exceeded 80 percent. In a few years, when the free consumer threshold is eliminated, the fully-competitive retail market will have been achieved. However we must not settle for these; we must aim to achieve a more competitive energy market that will give more support to the growth and competitiveness of the Turkish economy, and offer more benefits to the consumer."

Next, TÜSİAD Vice President Memduh BOYDAK stated that the energy sector had been growing and transforming in the last few years. BOYDAK also noted that the energy demand in some countries boomed alongside economic development, adding "As a result, the demand for energy is shifting from the West to the East. Meanwhile, developments such as the economically-viable extraction of shale gas are worth noting, as are the changes in priorities brought by environmental concerns, not the least of which is climate change. These all result in a significant disruption in the energy market equilibrium."

Explaining that the industry was central to growth and competitive strength, BOYDAK referred to the observation in the competition report issued by the European Union in 2013 that growth and employment would not be possible without industry.

BOYDAK mentioned the energy sources in the Eastern Mediterranean, the nuclear power agreement with Iran, and the developments in the supply of Iraqi oil and gas as critical agenda items. Memduh BOYDAK said that the Natural Gas Market Law would complete the recent regulatory acts in the electricity market and the energy exchange, concluding: "Considering that an amendment to the law is currently being worked on, I must note that cost-based pricing, the restructuring of BOTAŞ, and the issue of contract assignment are critical to the liberalization of the sector."

"World Energy Outlook 2013" Turkey Presentation was then presented by International Energy Agency Chief Economist. Dr. Fatih BİROL. Dr. BİROL stated that "In both energy production and energy consumption, the center of energy world is changing very rapidly. Some long-held tenets of the energy sector are being rewritten. Countries are switching roles: importers are becoming exporters and exporters are among the major sources of growing demand. It is of strategic importance that the decision-makers need to correctly and timely assess the global developments in energy and environment and reflect these assessments to the important decisions they are making."

The event included a panel discussion on Shifts in the Global Energy Balance and Competition moderated by Selahattin HAKMAN, President of TÜSİAD Working Group on Energy and Group President of Energy of Sabancı Group. Speakers of the panel, Deputy President of TÜSİAD Working Group on Energy and Shell Turkey CEO, Nusret CÖMERT; Vice-President of TÜSİAD Working Group on Energy and Turcas Petrol CEO, Batu AKSOY; President of TÜSİAD Working Group on Environment and Akkök Group CEO, Ahmet DÖRDÜNCÜ; Genel Energy CEO, Tony HAYWARD, and Paris Institute for Political Science Studies (Science Po) International Energy Division Director, Giacomo LUCIANI expressed their thoughts on energy market developments.

About World Energy Outlook

Issued by the International Energy Agency (IEA), the "World Energy Outlook" is the world's most reputable, talked-about and sold publication in the energy industry that contains reliable energy market analyses, critical foresight into energy supply and demand trends, and comprehensive reviews of economic developments. Report contains the latest forecasts for the next 20 years, policy developments and recent analyses supported by the inferences from the past year. "World-Energy Outlook" is a reference book for ministers of energy, economy, and environment worldwide enabling them to make the right-investment decisions and accurate plans.









"NATURAL GAS IN EASTERN MEDITERRANEAN: OPPORTUNITIES AND CHALLENGES" WORKSHOP

19 November 2013, Sabancı University, Minerva Palace, İstanbul

Istanbul International Center for Energy and Climate (IICEC) together with the Atlantic Council and EUCERS organized a one-day workshop in Sabancı University Karaköy Minerva Palace on November 19, 2013. The workshop brought together members of the academia, representatives of relevant energy businesses as well as officials from the countries involved and started with the welcome address of John LYMANN, Director at the Atlantic Council's energy and environment programme, Prof. Dr. Friedbert PFLUEGER, EUCERS director and Prof. Dr. Nihat BERKER, President of Sabancı University who introduced the topic of the conference – Natural Gas in the Eastern Mediterranean: Opportunities and Challenges – to a 100-strong audience.

The first panel, Eastern Mediterranean Gas – Conflict or Cooperation?, started off with a discussion about the political and geographical realities of the region as well as a review of the natural gas projects that are being developed. The panel was moderated by David KORANYI, Deputy Director, Dinu Patriciu Eurasia Center, Atlantic Council U.S., and the speakers included Gal REITER, Modlin Energy, Israel; George SHAMMAS, Chairman, Cyprus Energy Regulatory Authority; Hasan Selim ÖZERTEM, Head of Center for Energy Security Studies, International Strategic Research Organization (USAK), Ankara, Turkey; Prof. Dr. Friedbert PFLUEGER, Director, EUCERS King's College London, UK; Prof. Dr. Hüseyin BAĞCI, Department Chair of International Relations, Middle East Technical University, Ankara, Turkey; Prof. Dr. Ahmet EVİN, Founding Dean of Faculty of Arts and Social Sciences, Sabancı University, Turkey.

The second panel, Eastern Mediterranean Gas – Market and Export Infrastructure Options: Business Views, was made up of business representatives who have an interest in the regional gas market, and moderated by Harry TZIMITRAS, Director, Prio Cyprus Centre. Speakers included Matthias KEUCHEL, General Manager, EnerjiSA; Bekir Sami ACAR, Managing Director, EWE Turkey; Nusret CÖMERT, Vice Chairman of PETFORM, Turkey; Kanat EMİROĞLU, Chairman of the Board for Global Enerji and Simone BERTOLO, Head of LNG Business Development, Upstream Gas, Enel S.p.A., Italy.

The third panel, **Eastern Mediterranean Gas and the Southern Gas Corridor,** focused on the contribution of seeks to help European Union member states to wean themselves off their



dependence on Russian gas. The panel was moderated by John ROBERTS, Non-Resident Senior Fellow, Atlantic Council U.S., and the speakers of the panel included Dr. Frank UMBACH, Associate Director, EUCERS King's College London, UK; Androulla KAMINARA, Director/Special Adviser European Commission; Janusz LUKS, CEO, Central Europe Energy Partners, Brussels, Belgium; Ibrahim PALAZ, Expert, Energy and Economic Research Center, Caspian Strategy Institute (HASEN), Turkey; Yvonne RUF, Energy Infrastructure Expert, Roland Berger Strategy Consultants GmbH, Germany; and Aura SABADUS, Research Associate, EUCERS King's College London, UK.



IICEC 4TH INTERNATIONAL ENERGY FORUM "TOWARDS A NEW GLOBAL ENERGY LANDSCAPE: WHAT ROLE FOR TURKEY?"

10 May 2013, Conrad Hotel, Istanbul

We held IICEC 4th International Energy Forum on May 10, 2013, with the participation of the President of the Republic of Turkey, **Abdullah GÜL;** Minister of Energy and Natural Resources of the Republic of Turkey, **Taner YILDIZ** and Minister of Petroleum and Mineral Resources of the Kingdom of Saudi Arabia, **Ali AL NAIMI**, and a number of distinguished speakers from the energy industry and international organizations, who direct their respective regional and global strategies with their ideas.

Distinguished speakers from the energy industry and international organizations included Deputy State Secretary of Denmark, Hans Jorgen KOCH; Ambassador of Australia to Turkey, Ian BIGGS; International Energy Agency (IEA) Chief Economist, Dr. Fatih **BİROL;** Director General of International Renewable Energy Agency (IRENA), Adnan AMIN; Vice President of International Finance Corporation (IFC) World Bank, Dimitris TSITSIRAGOS; Sabancı Holding Energy Group President, Selahattin HAKMAN; EDISON S.p.A. CEO, Bruno LESCOEUR; TAQA CEO, Carl SHELDON: OMV CEO. Dr. Gerhard ROISS: E.ON SE CEO. Dr. Johannes TEYSSEN; SIEMENS CEO, Dr. Michael SUESS; ALSTOM Thermal Power CEO, Philippe COCHET; President of Sabancı University, Prof. Dr. Nihat BERKER; Executive Vice President of Government Relations Int. Shell International BV., John CROCKER; Managing Director for Corporate Strategy and Energy Efficiency and Climate Change, EBRD, Dr. Josue TANAKA; Senior Policy Fellow, Imperial College, London, Neil HIRST; Energy

Sector Manager Europe and Central Asia, World Bank, Ranjit LAMECH and Director of European Energy Strategy, CITIGROUP, Seth KLEINMAN. The Forum was a tremendous success in the development of policy recommendations on energy and climate, and received brilliant feedback.



IICEC will continue to grow in the future, becoming a "Polar Star" that will lead energy into the future with high-quality, objective research, and policy recommendations.



IICEC 4TH INTERNATIONAL ENERGY FORUM, "TOWARDS A NEW GLOBAL ENERGY LANDSCAPE: WHAT ROLE FOR TURKEY?"

I.Panel: Panel Government Perspectives

Moderator:

Dr. Fatih BİROL, Chief Economist, International Energy Agency (IEA)

Participants:

 $\label{eq:heaviside} \textbf{HE Hans Jorgen KOCH}, \textbf{Deputy State Secretary, Denmark}$

HE Ian BIGGS, Ambassador of Australia to Turkey

HE Adnan AMIN, Director General, International Renewable Energy Agency (IRENA)

Dimitris TSITSIRAGOS, International Finance Corporation (IFC) Vice President, World Bank Group

II. Panel: International CEO Perspectives

Moderator:

Selahattin HAKMAN, Energy Group President, Sabancı Holding

Participants:

Bruno LESCOEUR, CEO, EDISON Carl SHELDON, CEO, TAQA Dr. Gerhard ROISS, CEO, OMV

Dr. Johannes TEYSSES, CEO, E.ON SE

Dr. Michael SUESS, CEO, SIEMENS

Philippe COCHET, President, ALSTOM Thermal Power





III. Panel: Thought Leaders' Perspectives

Moderator:

Prof. Dr. Nihat BERKER, President, Sabancı University

Participants:

John CROCKER, Executive Vice President, Government Relations Int., Shell International BV.

Dr. Josue TANAKA, Managing Director for Corporate Strategy and Energy Efficiency and Climate Change, EBRD

Neil HIRST, Senior Policy Fellow, Imperial College London

Ranjit LAMECH, Energy Sector Manager Europe and Central Asia, World Bank

Seth KLEINMAN, Director of European Energy Strategy, CITIGROUP



IICEC ENERGY FORUM LUNCHEON 2013

10 May 2013, Conrad Hotel, Istanbul

IICEC Energy Forum Luncheon is a traditional gathering held by Sabancı University Istanbul International Center for Energy and Climate (IICEC) in honor of the participants of the IICEC's Annual International Energy Forum.

This distinguished platform brings together top-level government leaders, energy industry executives, and high-level representatives

from leading universities, policy centers and international think tanks from around the world. The event, welcoming all the attendees of the forum, fosters the exchange and development of ideas and facilitates networking in energy sector for the development of solutions for a sustainable energy future for the region and the world.



MUZEDECHANGA SPECIAL IICEC COCKTAIL & DINNER

10 May 2013, Sakıp Sabancı Museum, İstanbul







The Special IICEC Cocktail and Dinner, hosted by **Güler SABANCI**, Chairman of the Board of Trustees of Sabanci University and **Dr. Fatih BİROL**, IICEC International Steering Committee Honorary Chairman was held at Sakip Sabanci Museum to celebrate the "IICEC 4th International Energy Forum".

This special IICEC event was held for the honor of invited speakers of IICEC 4^{th} International Energy Forum, IICEC Co-Chairs and Members. During the cocktail, guests also visited the exhibition "The 1001 Faces of Orientalism" at Sakıp Sabancı Museum.

The participants of this special event included the invited speakers of the 4th IICEC International Energy Forum; Hans Jorgen KOCH, Deputy State Secretary of Denmark; Ian BIGGS, Ambassador of Australia to Turkey; Adnan AMIN, International Renewable Energy Agency (IRENA); **Dimitris TSITSIRAGOS**. International Finance Corporation (IFC) World Bank: Selahattin HAKMAN and SEMRA HAKMAN. Sabanci Holding: Bruno LESCOEUR, EDISON S.D.A.; Carl SHELDON, TAOA; Frank PEREZ, TAQA; Dr. Johannes TEYSSEN and Doris PINGEL TEYSSEN, E.ON SE; Dr. Michael SUESS, SIEMENS; Prof. Dr. Nihat BERKER and Bedia BERKER, Sabancı University; John CROCKER, Executive Vice President of Government Relations Int. Shell International BV.; Neil HIRST, Senior Policy Fellow, Imperial College, London; Ranjit LAMECH, Energy Sector Manager Europe and Central Asia, World Bank, and Seth KLEINMAN, Director of European Energy Strategy, CITIGROUP. Other guests were Mehmet SEPİL, Genel Energy; Hüseyin GELİS and Denis NICOLE GELİS, Siemens Turkey; Ahmet Ümit DANIŞMAN, Akenerji; Adil TEKİN and Çiğdem TEKİN, ALSTOM Turkey; Gülsüm AZERİ, OMV Turkey; Akın ÖZKAN, EDISON S.p.A Turkey; Cara KEYMAN and Prof. Dr. Fuat KEYMAN, Sabancı University; Prof. Dr. Hasan MENCELOĞLU; Sabancı University; Cem CESMiG and Bettina JOY CESMiG, Newtonmore Advisors Limited and Sabancı University; Yetik Kadri MERT, EnerjiSA; Bora Şekip GÜRAY, Sabancı Holding; Dr. Mehmet Doğan ÜÇOK, IICEC.



ENERGY BUSINESS LEADERS LUNCHEON

1 April 2013, Feriye Restaurant, Istanbul



On April 1, 2013, Sabanci University Istanbul International Center for Energy and Climate (IICEC) held the Energy Business Leaders' Luncheon with the participation of top energy industry executives. During the event, various topics regarding global energy markets, energy investment decisions, economical and environmentally friendly strategies were discussed.

The participants of this by-invitation-only Luncheon included Güler SABANCI, Sabancı Holding; Dr. Fatih BİROL, IEA; Prof. Dr. Nihat BERKER, Sabanci University; Adil TEKİN, ALSTOM Türkey; Mehmet SEPİL, Genel Energy; Ahmet Nazif ZORLU, Zorlu Group; Ahmet EREN, Eren Holding; Ahmet ERDEM, Shell Turkey; Canan ÖZSOY, General Electric; Turgay CİNER, Park Holding; Hüseyin GELİS, Siemens Turkey; Selim GÜVEN, Akenerji; Begümhan Doğan FARALYALI, Doğan Holding; Yahya ÜZDİYEN, Doğan Holding; Mehmet BETİL, Borusan Holding; Selahattin HAKMAN; Sabancı Holding; Mehmet ACARLA, Borusan ENBW; Ahmet ÇALIK, Çalık Holding; Ahmet DÖRDÜNCÜ, Akkök Holding; Michael PEISSER, OMV POAŞ; Zeki ERİŞ, Polat Holding; Erdal AKSOY, Turcas Petrol; Sibel ÇETİNKAYA, Deloitte Turkey; Kürşat ÖZKAN, Sabancı Holding; Dr. Mehmet Doğan ÜÇOK, IICEC; Bekir Sami ACAR; EWE Turkey; Bakatjan SANDALKHAN, RWE Turkey; Murat ÇOLAKOĞLU, PWC; Mehmet HATTAT, Hattat Holding; Gürhan KARTAL, Hattat

Holding; Gültekin ERANIL, Boydak Energy; Ceyhan SALDANLI, Bereket Energy; Kenan YAVUZ, Socar Turkey; Mustafa BAĞRIAÇIK, Deutsche Bank; Uğur BAYAR, Credit Suisse Istanbul; Ayşe ZADİL, JPMorgan Chase Bank NA; Bora Şekip GÜRAY, Sabancı Holding; Akın ÖZKAN, Edison S.p.A; Demet D. DERBİL, Statoil; Varol CİVİL, TEB; Prof. Dr. Yusuf MENCELOĞLU, Sabancı University and Ayşenur HIÇKIRAN, CITIBANK.











The Potential Role of Turkey in a Globalising Gas Market

Sabancı University Istanbul International Center for Energy and Climate (IICEC) was represented by Mehmet Doğan Üçok* in the "Global Turkey in Europe" Conference held at the European Council on Foreign Relations with experts from many countries.

Held with the partnership of Sabanci University Istanbul Policy Center (IPC), Stiftung Mercator, Istituto Affari Internazionali and European Council on Foreign Relations (ECFR) at ECFR's London office, the conference on Global Turkey in Europe: Turkish-European Energy Relations sought answers to how the cooperation between EU and Turkey on energy may be enhanced. Speakers in the conference from international energy institutions and universities mostly discussed the natural gas potential in Turkey and the region, the sources in the Eastern Mediterranean, Iraq, Iran, Caucasia and Central Asia, and Turkey's potential for becoming an energy comidor or a possible international energy hub.

Mehmet Doğan Üçok attended the conference on behalf of Sabancı University Istanbul International Center for Energy and Climate (IICEC), presenting his paper titled The Potential Role of Turkey in a Globalising Gas Market. The paper argued that expanding the liberalization that began with the electricity market to the entire energy sector and particularly the natural gas segment would encourage future investments in Turkey, which would be extremely important for Turkey's aspiration to become a hub for energy.

Executive Summary

In a changing global energy landscape, Turkey and the EU could have more opportunities to enhance their energy security, benefiting from the developments in the global LNG scenario and of the energy fields in Shah Deniz, the Eastern Mediterranean, and Iraq. Especially the recent TANAP agreements show that Turkey is starting to play a significant role in the transportation of the region's resources to the west, and become a "geographically natural" gas bridge, or a possible energy hub. To facilitate this further, Turkey's main policy objective in the governance of natural gas should be the formation of a transparent, liberal and competitive gas market. Turkey's energy market is entering a new, liberal era, and if the liberalisation of the Turkish natural gas market is also successfully accomplished in the following years, Turkey would attract more investors to her energy stock market and to the surrounding gas rich regions, paving the way for gas-to-gas competition. Turkey would then have a stronger potential to develop into a regional energy trade hub, providing a bridge to the European energy exchange markets.

Please visit http://www.iai.it/pdf/GTE/GTE_PB_09.pdf for the full version of the paper.

* Mehmet Doğan UÇOK, IICEC Coordinator, has a doctorate degree in National and International Security Strategies in the department of Strategy and Strategic Studies, and his main field of interest is Energy Security and Government Policies.

A TRIBUTE TO IICEC HONORARY CHAIRMAN DR. FATIH BIROL

International Energy Agency (IEA) Chief Economist and Sabanci University International Center for Energy and Climate (IICEC) International Steering Committee Honorary Chairman **Dr. Fatih BİROL** was awarded a Doctorate of Science honoris causa by **Imperial College London** at the Royal Albert Hall on 23 October 2013.

Director of the Grantham Institute for Climate Change at Imperial College London, **Sir Brian HOSKINS** said, "We award this year's **honorary doctorate** to a most influential person in the global energy scene". The title, in recognition of Dr. BİROL's "contribution towards the economic analysis of global energy issues and the championing the cause of universal energy access over the last decade", was conferred by the College's President and Rector, **Sir Keith O'NIONS.**

Speaking at the ceremony, Dr. BİROL said that Imperial College was a leading institution in a wide range of subjects from medicine to energy, economics and natural sciences. Dr. BİROL continued, "Imperial College recognizes one person every year with an honorary doctorate, and I was chosen this year. This is a great pride and happiness for me, my family and my country."





GOVERNANCE

IICEC International Steering Committee Honorary Chairman



Fatih BİROL

Executive Director,
International Energy Agency

IICEC International Steering Committee Members



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University Board of
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Energy Authority



Mehmet GÖÇMEN Energy Group President, Sabancı Holding



Kemal DERVİŞ Vice President, Brookings Institute



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Trustees



Mehmet GÖÇMEN IICEC Co-Chair Energy Group President, Sabancı Holding



Fatih BİROL Executive Director, International Energy Agency



Canan ÖZSOY IICEC Co-Chair President and CEO, GE Turkey



Ayşe KADIOĞLU Acting President, Sabancı University



Ahmet ERDEM President, Shell Turkey



Ahmet EREN
Chairman, Board of Directors,
Eren Holding



Ahmet Nazif ZORLU Chairman, Board of Directors, Zorlu Group



Hüseyin GELİSPresident and CEO,
Siemens Turkey



Murat ÖZGÜL CEO, Genel Energy



Serhan GENÇER General Manager, Akenerji



Turgay CİNER President, Ciner Group

IICEC TOPLULUĞU'NUN BİR ORTAĞI OLMAK

- Şirketinizin profilini yükseltmek
- Mesajınızı karar mercilerine ulaştırmak
- En önemli karar vericiler ve paydaşlar ile ilişkileri geliştirmek
- Piyasadaki gelişmeler hakkında birinci elden bilgi sahibi olmak
- İşinize ilişkin en önemli hususlardaki çözümlere katkı sağlamak
- Enerji ve iklim alanlarında gündemi ve geleceği şekillendirmek

Tanıtımınız, çeşitli iletişim kanalları kullanılarak ön plana çıkarılır:

- Konferans merkezlerindeki afişler ve görsel panolar
- Delegelere dağıtılan reklam broşürleri
- IICEC internet sitesi
- Konferans öncesi posta ve e-posta yoluyla bilgilendirme
- Dış mekan reklamları
- Multimedya sunumları

IICEC Topluluğu'nun özel panel organizasyonları ve rapor sunumları, şirketinizin profilini yükseltmek için değerli bir fırsat sunar. Böylelikle mesajlarınızı etkili bir şekilde aktarabilir ve sizin için önemli olan hususlarda gündemi en etkili biçimde şekillendirebilirsiniz.

IICEC TOPLULUĞU

IICEC, enerji ve iklim alanlarında araştırmalar yaparak politika önerileri geliştirmekte ve bu önerileri ulusal ve uluslararası karar vericiler nezdinde tartışarak Türkiye'nin ve bölgemizin enerji ihtiyacının güvenli, ekonomik ve sürdürülebilir bir şekilde karşılanmasına katkıda bulunmaktadır.

IICEC, IICEC Topluluğu'nun hedefleri doğrultusunda, enerji sektörünün çeşitli alanlarında ve enerji ve iklim ile ilgili güncel konularda, konferanslar, seminerler, çalıştaylar, özel yuvarlak masa toplantıları ve benzeri etkinlikler düzenlemektedir.

IICEC Topluluğu, Eş Başkanlar, Üyeler, Dostlar ve Akademik Çevre'den oluşmaktadır.

IICEC TOPLULUĞUNA KATILMAK İÇİN*

I) IICEC DOSTLARI

(3 yıllık taahhüt gereklidir)

- IICEC Topluluğu'na kabul edilirler.
- Düzenlenecek olan açık çalıştaylar, konferanslar ve diğer etkinliklere davet edilirler.
- Yemekli toplantılara davet edilirler.
- Tüm etkinliklerde destekleri belirtilir ve şirket tanıtımları yapılır.
- Basılı malzemeler ve flamalarda isimleri belirtilir.

II) IICEC ÜYELERİ

(3 yıllık taahhüt gereklidir)

- IICEC Dostları'nın sahip olduğu tüm avantajlara sahiptirler.
- + IICEC'nin tüm veri havuzuna özel erişim hakkına sahiptirler.
- + Akademik çevre ve karar vericiler ile ortaklaşa düzenlenen çalıştay ve yuvarlak masa toplantılarına davet edilirler.
- + Üyeler arasında Özel İlgi Grupları oluşturulur ve ilgili özel faaliyetlere davet edilirler.
- + Özel Yuvarlak Masa toplantılarına katılabilirler.
- + Tüm IICEC etkinliklerinde VIP koltuk sahibidirler
- + Afişler ve sahne tasarımlarında isimleri belirtilir.

III) IICEC EŞ BAŞKANLARI

(3 yıllık taahhüt gereklidir)

- IICEC Dostları'nın ve Üyeleri'nin sahip olduğu tüm avantajlara sahiptirler.
- + IICEC Uluslararası Yönlendirme Komitesi'ne üye olurlar.
- + IICEC'nin de katkılarıyla Eş Başkanların isteğine göre ayrıcalıklı etkinlikler düzenlenebilir.

^{*}IICEC topluluğuna katılmak için lütfen IICEC ile iletişime geçiniz.

BECOME A PARTNER OF THE IICEC COMMUNITY

- Raise the profile of your company
- Reach the decision makers with your message
- Foster relationships with your key partners, competitors and regulators
- Get first-hand information on the market developments
- Influence discussions on the issues of primary importance to your business

Your advertisement can be featured using various communication channels:

- Banners and roll-ups in the conference venues
- Advertising Folder distributed among delegates
- Website of the Energy Forum
- Pre-conference mailing
- Outdoor advertisement
- Multimedia presentations

Stage a dedicated panel discussion or report presentation - the most valuable opportunity to raise your company's profile. It offers you the most effective way to get your message across and shape the discussion on the issues most important to you.

IICEC COMMUNITY

IICEC conducts research on various fields of energy and climate, develops policy recommendations and communicates them to national and international desicion-makers in an interactive manner.

IICEC offers a range of conferences, seminars, workshops, exclusive roundtable meetings, dinners, luncheons and other events dealing with various sectors of the energy industry, enhancing the interests of IICEC Community.

IICEC Community consists of the Co-chairs, Members, Associates and Academia.

TO JOIN THE IICEC COMMUNITY*

I) IICEC ASSOCIATES

(3 years of commitment required)

- are admitted into the IICEC Community.
- are invited to upcoming events: Workshops, conferences and other events.
- are welcomed to Lunch Gatherings.
- have recognition of support and company description on all events.
- acknowledgement of support on printed materials and signage.

II) IICEC MEMBERS

(3 years of commitment required)

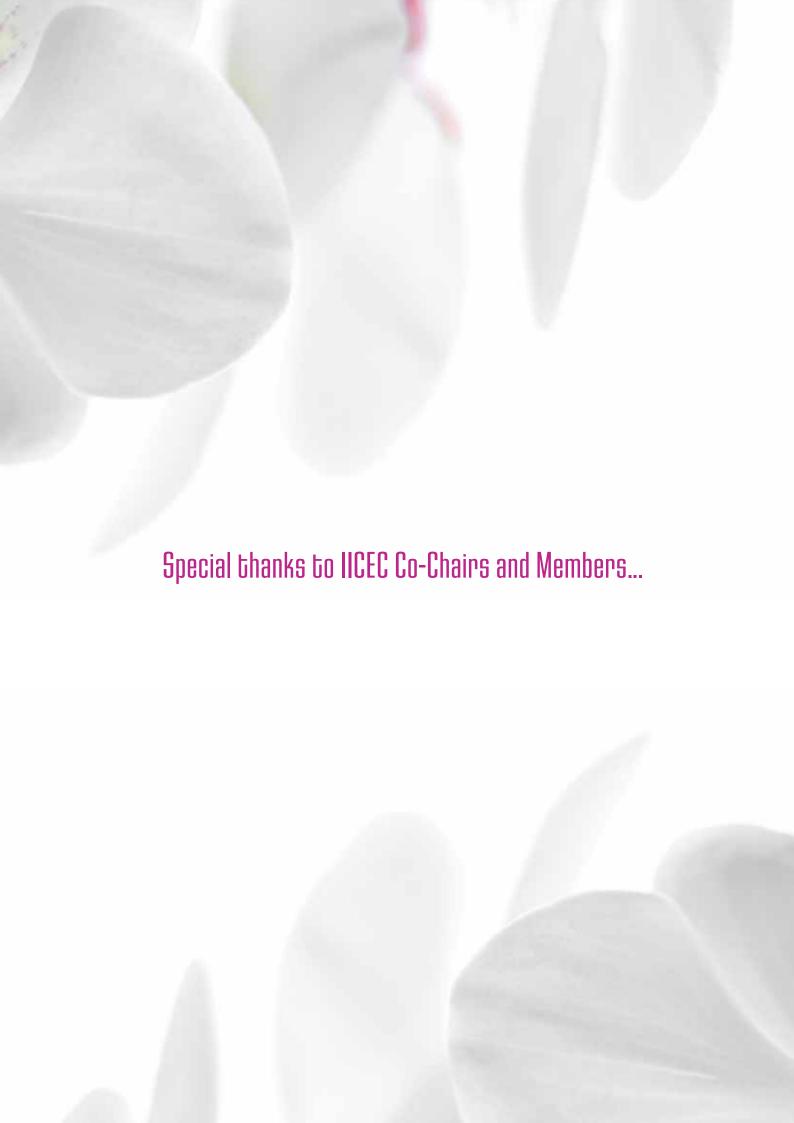
- have all benefits of IICEC Associates.
- + have exclusive access to the full data pool of IICEC.
- + have access to collaborative workshop and roundtables with academia and desicion-makers
- + form Special Interest Groups (SIGs) based on their interests and have exclusive group meetings.
- + have access to Exclusive Roundtables unique to SIGs.
- + have VIP seating in all IICEC events.
- + adknowledgement of support on banners and on stage.

III) IICEC CO-CHAIR

(3 years of commitment required)

- have all benefits of IICEC Associates and Members.
- + have a Chair in the IICEC International Steering Committee.
- + have privileged events to be customized in collaboration with IICEC.

^{*}To join the IICEC community, please contact IICEC.





Where Global Energy Connects...





CO-CHAIRS





MEMBERS













ZORLU ENERJİ GRUBU

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