ANNUAL REPORT 2018

Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development





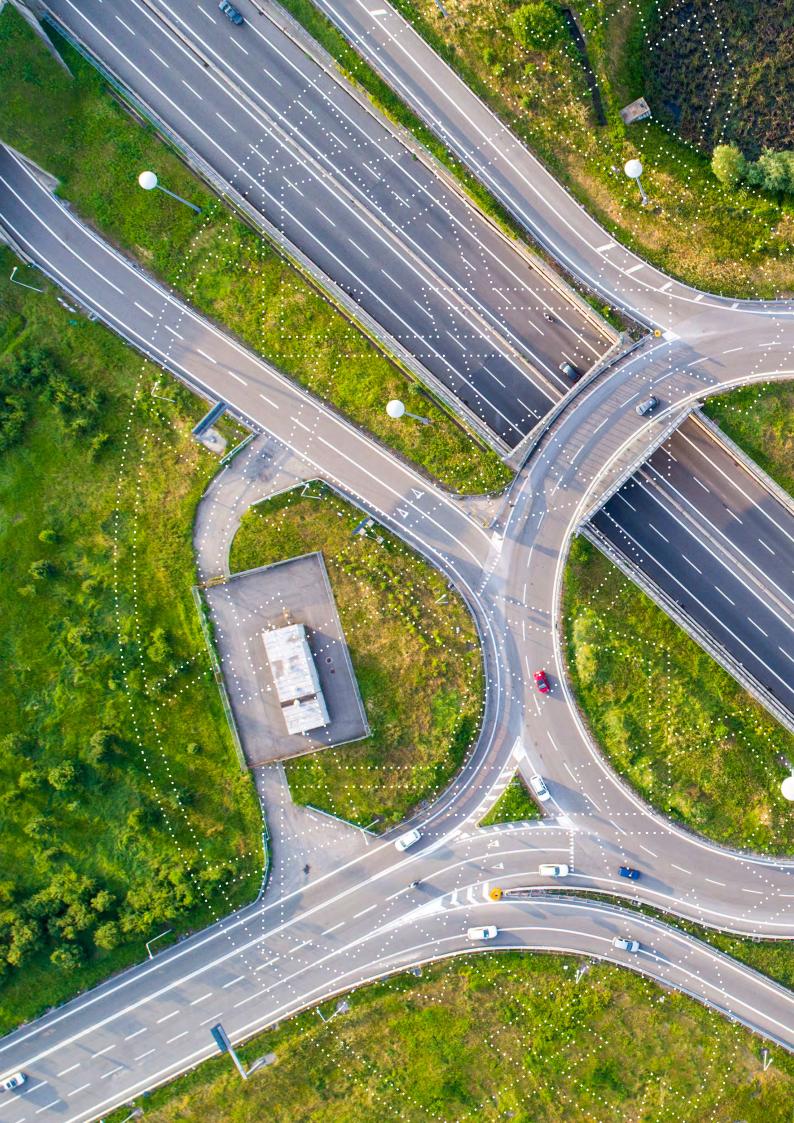




TABLE OF CONTENTS

ABOUT THE FOUNDATION

Our Mission	06
Our Vision	06
Our History	06
Organisational set up of the Foundation	07
Message from the Chairman	08
Managing Director's Statement	11
Foundation Board of Trustees	12
Our Members	14
Our Partners	15
THE YEAR IN REVIEW	
2018 Highlights	22
Regular Publications	24
Digital / Online	48
Projects	50
Events	52
Partnerships and Collaborations	66
LOOKING AHEAD	
Matching Efforts with Outcomes	70
Broad Goals for 2019 Work Programmes	70
Expected Additional Enhancement in 2019	71
FOUNDATION STAFF	71





ABOUT THE FOUNDATION

OUR MISSION

OUR VISION

OUR HISTORY

To provide robust and practical knowledge and insights on global energy and sustainable development topics and communicate these for the benefit of the Foundation's members and the community.

To be an internationally respected independent think tank that is a thought leader focussed on global energy and sustainable development topics.



The Al-Attiyah International Foundation for Energy and Sustainable Development was formally inaugurated on Sunday, 01 November 2015, by HH the Father Emir, Sheikh Hamad bin Khalifa Al-Thani. The Foundation preserves and builds upon H.E. Al-Attiyah's work and service in the energy industry over the past 40 years.

The Al-Attiyah Foundation is the only independent, non-profit Energy and Sustainable Development think tank in Qatar and has, over the last five years, become highly respected by energy leaders both internationally and in Oatar



ORGANISATIONAL SET UP OF THE FOUNDATION

Building upon HE Abdullah bin Hamad Al-Attiyah's work and forty years of service in the energy industry, the Foundation has quickly become a hub for thought

leadership in the fields of Energy and Sustainable Development. In addition to a variety of publications issued throughout the year, the Foundation engages world-renowned speakers to participate in a high-level dialogue series, conferences and panel discussions, a number of which are hosted in Qatar.





MESSAGE FROM THE CHAIRMAN



"My expectation is for the Foundation to become the leading organisation that governments, private companies, and other non-governmental organisations turn to for advice on matters relating to energy, sustainable development and climate change."

The Foundation's 2018 Annual Report is published to demonstrate commitment to transparency and accountability in the way we work. Thank you for taking a moment to read it.

In my long, fulfilling career in the energy industry, spanning over 40 years, I had the privilege to serve my country in a variety of senior leadership positions including: Deputy Prime Minister of the State of Qatar; Minister of Energy; and Managing Director of Qatar Petroleum, I am humbled to have played a major part in seeing Qatar's energy industry blossom from a humble beginning

H.E. Abdullah Bin Hamad Al-Attiyah Chairman

Abdullah Bin Hamad Al-Attivah International Foundation for Energy and Sustainable Development Former Deputy Prime Minister and Minister of Energy & Industry

into a major global player that boasts the largest GTL plant in the world; the largest LNG trains in the world; and a successful and a leading National Oil and Gas Company with several wellmanaged subsidiaries, in partnership with all the major International Oil Companies.

I played an active role in OPEC and was also privileged to serve the international community on issues confronting humankind. In 2006, I was elected as the Chairman of the United Nations Commission on Sustainable Development, the front runner to the High-Level Political Forum (HLPF) for Sustainable Development: and the President of the 18th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 18), in 2012.

At the inauguration of the Foundation in 2015, I emphasised my strong interest and deep commitment to issues relating to sustainable access to energy, security of supply, climate change, socio-economic development, transparency and accountability. Since I am a man who has 'smelled and lived' energy for over 40 years, I decided, after a very fulfilling career in government and the energy industry, to create the Foundation. My vision is for the organisation to become

the leading think tank in the region and one of the leading institutions in the world, in the areas of energy and sustainable development. The Foundation invites and attracts leading global experts to share their thinking, without the burdens and pressures of bureaucracy or politics, and to work in collaboration with like-minded companies. My expectation is for the Foundation to become the leading organisation that governments, private companies, and other non-governmental organisations turn to for advice on matters relating to energy, sustainable development and climate change.

While the external environment for international non-profit organisations remains a very challenging one, I am delighted that the Foundation is rising to the challenge, as typified by the accomplishments presented in this 2018 Annual report. It has been a busy year indeed for the Foundation. As we move forward in 2019 and beyond, I am proud and excited that the Foundation I desired has become a reality. I look forward to working with all our members and partners in 2019, to plot and chart together, the future journey to a sustainable world.







MANAGING DIRECTOR'S STATEMENT



"One of the major challenges the world faces today, is the development, supply and utilisation of energy in a sustainable manner. When combined with the rapidly changing business environment, characterised by increasing climate change concerns and environmental pollution, the complexity of the challenge to deliver sustainable energy, is magnified."

It has been a year with many rewarding moments, as well as some challenges. We have made solid progress on many fronts, including building the necessary strategic platforms for anchoring ongoing and future work. I am honoured to be managing a foundation which represents a long history of energy and sustainability knowledge. H.E. Abdullah Bin Hamad Al-Attiyah made a remarkable contribution to the development of the energy sector,

Reda Ibrahim Ali Managing Director Abdullah Bin Hamad Al-Attiyah International Foundation for Energy and Sustainable Development

both in Qatar and internationally, Through high-level positions H.E. Al-Attiyah was responsible for taking Qatar's energy industry from very modest beginnings to becoming the major global player it is today. The success of the Foundation is due to the leadership, guidance and stability provided by the Founder and Chairman, H.E. Abdullah Bin Hamad Al-Attiyah. Personally, I am truly humbled to serve under His Excellency's wise leadership, and to lead an incredibly talented and dedicated team of people.

One of the major challenges the world faces today, is the development, supply and utilisation of energy in a sustainable manner. When combined with the rapidly changing business environment, characterised by increasing climate change concerns and environmental pollution, the complexity of the challenge to deliver sustainable energy, is magnified.

The Foundation works at the very centre of this challenge and across the broadest base of issues relating to energy and sustainable development. With a small team of dedicated and highly talented staff, the Foundation has established strong partnerships with member companies, other think

thanks, academic institutions, and like-minded organisations.

In presenting this 2018 Annual Report, I would like to end with a quote from Andrew Carnegie:

"Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organisational objectives."

This is what we constantly strive towards here at the Foundation and this is what has been responsible for the accomplishments of 2018.



FOUNDATION BOARD OF TRUSTEES

The Foundation is led by the Chairman and Founder H.E. Abdullah Bin Hamad Al-Attiyah and the **Board of Trustees.** The Board of Trustees comprises of the following individuals who collectively have demonstrable experience and outstanding achievements in the fields of Energy, Geo-politics, and **Sustainable Business Environments.**

1. H.E. Abdullah Bin Hamad Al-Attiyah

Chairman, Former Deputy Prime Minister and Minister of Energy and Industry;

2. H.E. Dr. Ibrahim Ibrahim

Vice Chairman, Economic Advisor at Amiri Diwan;

3. H.E. Saad Sherida Al-Kaabi

Member, Minister of State for Energy Affairs, Vice Chairman, President and CEO of Oatar Petroleum:

4. H.E. Ali Al-Naimi

Member, Advisor to the Royal Court andformer Minister of Petroleum & Minerals, Saudi Arabia

5. H.E. Abdulaziz Bin Ahmed Al-Malki

Member, Qatar Ambassador to Italy;

6. H.E. Nasser Al Jaidah

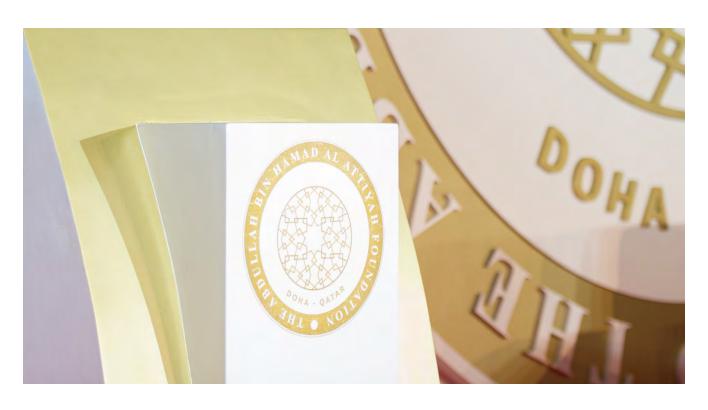
Member, Qatar Petroleum (QP) Board Member and former CEO of QP International;

7. Mr. Hamad Rashid Al-Mohannadi

Member, former CEO of RasGas Company Limited;

8. Mr. Reda Ibrahim Ali

Member, Managing Director of the Foundation.







Chairman

The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development

H.E. Al-Attiyah has more than 40 years of experience in the energy industry and has served in several senior leadership positions within the government of Qatar and internationally, including: Minister of Energy & Industry; Chairman and Managing Director of Qatar Petroleum; Deputy Prime Minister; Chief of the Amiri Diwan; Chairman of Qatar's Planning Commission; Chairman of the United Nations Commission on Sustainable Development in 2006; and the President of 18th Session of UNFCCC Climate Change Conference (COP18/CMP8), Doha in 2012.

During his illustrious career, H.E. Al-Attiyah has been bestowed a number of awards and honours including:

- The Grand Cross in the Order of the Orange Nassau conferred by Her Majesty Queen Beatrix of the Kingdom of Netherlands
- Grand Cordon Order of the Rising Sun awarded by His Imperial Majesty Emperor of Japan in recognition of his contribution in promoting bilateral relations between Qatar and Japan.
- The Necklace of Independence award by HH Sheikh Hamad bin Khalifa Al Thani, the Father Emir of the State of Qatar, for his salutary contribution towards Qatar's commitment to transparency in business and governance and for his efforts towards the progress of the national economy.



H.E. DR. IBRAHIM IBRAHIM

Vice Chairman

The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development Economic Adviser at Amiri Diwan

H.E. Dr. Ibrahim Ibrahim is the Economic Advisor at Amiri Diwan and the Secretary General for the General Secretariat for Development Planning. Dr Ibrahim sits on a number of Boards, including: Vice Chairman at RasGas and Qatar Gas Companies Limited; Qatar Development Bank; Qatar Central Bank; Qatar Foundation Advisory Board; Qatar Petroleum; and Supreme Council for Economic Affairs and Investment.

He served as Associate Professor Business, Economics and Quantitative methods at University of Hawaii, Director of OAPEC and Senior Economist at Oxford Institute for Energy Studies. Dr Ibrahim is recipient of awards from:

- MFFD
- Oil & Gas Magazine
- CWC World Energy Summit
- Qatar International Business Women Forum
- UN National Human Rights Committee



BOARD OF TRUSTEES





Former Minister of Petroleum & Mineral Resources, Kingdom of Saudi Arabia & Board Member, The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development





H.E. Saad Sherida Al-Kaabi

Minister of State for Energy and President & Chief Executive Officer, Qatar Petroleum and Board Member, The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development

H.E. Saad S. Al-Kaabi joined Qatar Petroleum in 1986 as a student studying Petroleum & Natural Gas Engineering at Pennsylvania State University (PENN STATE) in the USA. He served as Manager of Gas Development, responsible for North Field management and development. He was also Director of the Oil & Gas Ventures Directorate where he supervised all of Qatar's Oil and Gas fields developments. H.E. Al-Kaabi was appointed as the President & Chief Executive Officer of Qatar Petroleum, with responsibility for the management of the entire company, as per the Emiri Decree Number (66) of 2014. In 2018, H.E. Al-Kaabi was appointed Minister of State for Energy, in addition to his portfolio as the President & Chief Executive Officer of Qatar Petroleum.



H.E. Abdulaziz Ahmed Al-Malki

Qatar's Ambassador to Italy and Board Member, The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development

H.E. Abdulaziz Bin Ahmed Al-Malki is Qatar's Ambassador to Italy. He was the Director of the Office of the President of Administrative Control and Transparency Authority, and General Coordinator for COP18/CMP8 and Chairman of its Executive Organizing Committee. H.E. Al-Malki had also held a number of high-level positions, including:

- Deputy Chairman of Katara Hospitality (a progressive luxury hospitality organisation);
- Director of the Office of the Deputy Prime Minister;
- Director of the Office of the Chairman of the Amiri Diwan and Deputy Prime Minister; and
- Chairman of Qatar Fertilizer Company (QAFCO), which was founded in 1969

BOARD OF TRUSTEES



H.E. Nasser Khalil Al-Jaidah

Board Member, Qatar Petroleum and Board Member, The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development



Hamad Rashid Al-Mohannadi

Former Senior Advisor, Qatar Petroleum and Board Member, The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development



Reda Ibrahim Ali

Managing Director, The Abdullah Bin Hamad Al-Attivah International Foundation for Energy & Sustainable Development

H.E. Nasser Al-Jaidah is former Chief Executive and a Board member of Qatar Petroleum International (now part of QP). He is also a Board member of Qatar Petroleum: Industries Qatar; Qatar Gas Board; Vice Chairman of Oatar Gas Executive Committee; Vice Chairman of Qatar Fuel Additives Company; Vice Chairman of Tasweeg. His illustrious career includes several positions at Qatar Petroleum: Petroleum Engineering Manager; Technical Manager; Manager of Exploration and Production: and Director of Oil and Gas ventures.

H.E. Al-Jaidah is a member of Member of Society of Petroleum Engineers (SPE), the American Association of Petroleum Geology (AAPG), member of the Advisory Council (Parliament). State of Qatar and member of the Provisional Arab Parliament.

Mr. Hamad Rashid Al Mohannadi was Managing Director of RasGas Company Limited, and a Board member of Ras Laffan Liquefied Natural Gas Company Limited since 1993. He was also General Manager at Qatar Petrochemical Company (QAPCO) where he was responsible for its growth and expansion for 16 years and General Manager of QATOFIN. Mr Al-Mohannadi serves as member of many Boards, including: Qatar Electricity & Water Company; and Board of Trustees of Qatar University, of which he was recently appointed as Chairman by His Highness Sheikh Tamim bin Hamad Al Thani. In addition, Mr. Al Mohannadi is Deputy Vice Chairman of QP, IQ and QVC; and Chairman of QAPCO, QATOFIN and QAFAC. He also serves on the Advisory Board of the Bilateral US-Arab Chamber of Commerce.

During the last 23 years, Mr. Reda Ali assumed many responsibilities at Qatar Petroleum (QP) including: Programmer Analyst; Senior Information Analyst; and Head of Information Analysis at Corporate Planning Department; Assistant Manager of the Business Environment Division at Corporate Planning Department; Manager of Energy Policy and International Relation Department; and Advisor at the Managing Director's Office. Mr. Ali served as the Projector Director for many projects, including: the implementation of Enterprise Resource Planning (ERP) for Qatar General Electricity and Water Corporation "KAHRAMAA" (from 2000 to 2003); the 20th World Petroleum Congress (from 2010 to 2011); and the 18th UNFCCC Conference of Parties (COP18 Climate Change Conference in 2012).



OUR MEMBERS







































OUR PARTNERS







































THE YEAR IN REVIEW



The Foundation Business
Plan for 2018 was developed incorporating the following activities that have become established as part of the Foundation's core business since its inception.

- Daily News Flash
- Weekly Oil Market Review
- Monthly Research Series
- Monthly Sustainability Newsletter
- The Abdullah Bin Hamad Al-Attiyah International Energy Awards -Lifetime Achievement -
- Quarterly CEOs Roundtable Meetings
- Annual Books on relevant topics
- Quarterly Newsletter
- Participation in high-level events

In addition, the following new activities were implemented for 2018 and the overview quarterly plan shown in the table was endorsed by the Board of Trustees.

- Support for projects that are of interest to our members and partners;
- Support education and training initiatives through training of Interns and collaboration with Universities;
- Be present at key public conferences, forums and seminars, in collaboration with other organisations, on challenges related to energy and sustainable development;
- Conduct or support independent studies;
- Develop energy and sustainability stakeholder databases:

- Strengthen interactions with members through high-level second tier events: Senior Managers Energy Dialogues;
- Launch of Foundation on LinkedIn and Twitter with daily updates;
- Enhanced and consistent visual identity across all collateral – in print and on-line;
- Implementation of email tracking tool:
- Refreshed and updated website;
- Strengthened relationships with members and delivery of joint activities.

During the fourth quarter of 2018, the following two publications were added to our portfolio:

Sustainability Digest

 Bi-Weekly Sustainability News Bulletin



Overview Plan of Themes and Activities in the Four Quarters of 2018

ACTIVITIES AND PROJECTS	QUARTER 1 JAN - MAR	QUARTER 2 APR - JUN	QUARTER 3 JULY - SEP	QUARTER 4 OCT - DEC
THEMES	Energy Efficiency	Energy, Technological Innovation and Sustainable Future	Drivers for Sustained Economic Growth	Optimisation of Resource Utilization
CEO Round Table Series	27th February	17th April	30th October	4th December
Senior Managers Dialogue				31st October
Daily News Flash	Every weekday	Every weekday	Every weekday	Every weekday
Weekly Market Review	Every Sunday	Every Sunday	Every Sunday	Every Sunday
Monthly Newsletters	Last Sunday of each month	Last Sunday of each month	Last Sunday of each month	Last Sunday of each month
In-depth Research Papers	Last Thursday of each month	Last Thursday of each month	Last Thursday of each month	Last Thursday of each month
Al-Attiyah Awards	_	7th May		
CSR Best Practice Booklet				Launched during Sustainability Week
Media and Communication	Strategic Media Interviews	Strategic Media Interviews	Strategic Media Interviews	Strategic Media Interviews
	Conferences and Events	Conferences and Events	Conferences and Events	Conferences and Events
	Social Media	Social Media	Social Media	Social Media
	Articles and Speeches	Articles and Speeches	Articles and Speeches	Articles and Speeches



2018 HIGHLIGHTS

In summary the Foundation delivered:

250

News Flash (DNF)

晶

EDITIONS of the Daily

EDITIONS



COPIES



COPIES of the Monthly



COPIES



COPIES



Bi-Weekly **News Bulletin**

CEO ROUND **TABLE** White Papers Launched on LinkedIn and Twitter with

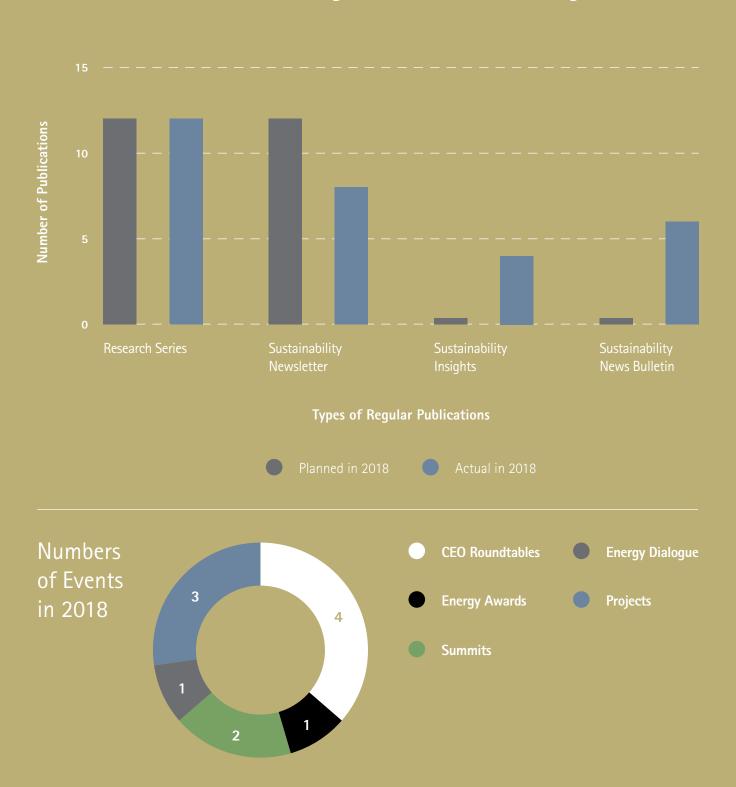
75,000 **MONTHLY IMPRESSIONS**





2018 HIGHLIGHTS

Planned and Actual Number of Regular Publications, Excluding DNF & WMR





PUBLICATIONS - IN DETAIL

1. DAILY NEWS FLASH - OIL AND GAS NEWS AND PRICES



The Foundation publishes on a daily basis, trending news on oil, gas, and renewables, including up-to-date statistics on crude and LNG prices. The Daily News Flash also provides market outlooks and key predictions for the three sectors.

2. WEEKLY ENERGY MARKET REVIEW



The Foundation publishes a weekly energy market newsletter in Arabic & English, covering an analytical overview of the global developments in oil and gas. It is distributed to the members of the Foundation and senior policy makers in Qatar. The weekly bulletin is also circulated through the media channels and the Foundation's social media accounts.





3. MONTHLY RESEARCH SERIES



An in-depth research paper on relevant energy topics that are of interest to members and partners. The 12 technical papers published under this series during the year 2018, covered the Themes listed below:

DATE RESEARCH THEMES

HEADLINE MESSAGES

January

Gear Change: Vehicle Fuel Efficiency in the GCC

- Despite this, the sector has received relatively little public attention on efficient use;

• GCC countries burn almost half of their domestic oil use in road transport;

- This is changing, mostly due to the essential first step of reducing of fuel subsidies;
- GCC governments can save money while reducing congestion and pollution, with a coordinated set of policies on more efficient transport.



February Clearing the decks: Marine fuel specifications



• Although most of the shipping industry is preparing for the introduction and use of new regulations requiring the use of low-sulphur fuels from 2020 onwards, progress has been slow.

Uncertainty over payback times, owner-operator mismatches, and the difficulty of securing funding, mean that there has been relatively little conversion of existing vessels to use LNG or scrubbers;



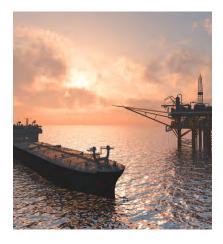
DATE R

RESEARCH THEMES

HEADLINE MESSAGES

March

Peak Oil and Gas Demand



- Global energy demand is likely to rise up to 2050, but at a slowing rate;
- Major forecasts generally show rising but slowing oil demand up to 2050, but there are credible scenarios with a peak in the mid-2030s, driven particularly by electric vehicles (EV);
- EV adoption is very hard to predict currently;
- Gas demand is also set to rise but is vulnerable to competition from renewables;
- Major oil and gas producers need to watch closely for early-warning signs of slowing demand in key geographic and sectoral markets;
- The exact date of peak demand is less important for oil- and gas-producers than the level and the trajectory post-peak.

April

Changing Trends in the Petrochemical Industry and their Impact on the Middle East



- Global petrochemical demand is likely to show strong but slowing growth in emerging economies but outpacing GDP growth;
- Emerging market producers, often state-owned, have a large and growing role, and their entry is making some value chains more competitive and eroding margins;
- Strategies based purely on advantaged low-cost feedstock will become less successful due to US competition and the exhaustion of the available cheapest feedstock;
- Oil-based petrochemicals integrated with refining will make a comeback versus gas-based feedstocks;
- Environmental pressures on petrochemical use, in developed markets in particular, grow as they put more stress on recycling, the 'circular economy' and biodegradability;
- Threat of trade wars is a concern for supply chains and overall demand growth.



RESEARCH THEMES

HEADLINE MESSAGES

May

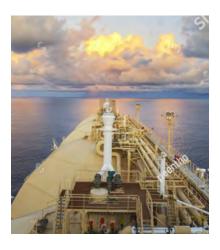
Bright spark: Electric vehicles and energy impact



- Electric vehicle penetration is growing rapidly but from a very small base, making projections range widely;
- Electric vehicle improvements and take-up have tended to be under-estimated by mainstream forecasters;
- Adoption will shift from being driven by subsidies to economics and performance in the mid-2020s;
- Most focus has been on light passenger vehicles, but public transport and freight could growth may cause a surprise;
- Within a decade, electric transport will likely be limiting or capping oil demand growth.

June

Winds of Change: Is the Global Gas Business Experiencing Transformation?



- The global gas market is transforming due to the rise of unconventional gas, demand growth in emerging Asia, and widespread adoption of floating LNG regasification;
- The technological transformation is catalysing the emergence of new markets and new business models;
- To the early 2020s, concerns about an LNG glut have been replaced with growing views of a tight market;
- New LNG markets are emerging, both geographically and in sectors, but supplying them effectively requires more active approaches.



RESEARCH THEMES

HEADLINE MESSAGES

July

Feeding Frenzy: Will there be an LNG Supply Glut?



- More rapid than expected demand growth has reduced concerns of a supply 'glut' lasting to the mid-2020s;
- In response, new final investment decisions (FIDs) are starting to pick up;
- LNG will not be in physical oversupply except in rare cases prices will adjust to match supply and demand;
- In the longer term, possible LNG projects vastly outweigh likely demand the question is which go forward, and at what price?

August

Disruptive Innovation: An Era of Upheaval for the Traditional Energy Industry?



- The past decade has seen important disruption by new technologies both in traditional (oil, gas, coal) and new (renewable) energy;
- More disruptive change is on the way from new technologies for energy storage, trade and use, such as electric vehicles, batteries and blockchain;
- At the same time, other disruptive technologies offer advantages to oil and gas producers who can employ them;
- The threat of new non-hydrocarbon technologies may deter investment in new oil and gas production.;
- A lack of new investment in producing hydrocarbons is a problem for the oil and gas industry, but not for the global economy, as long as new energy sources deliver on their promises – if not, a price spike and economic damage would result;



RESEARCH THEMES

HEADLINE MESSAGES

September

Renewables: How will Falling Costs Affect Growth?



- Renewables, particularly wind and solar, have improved dramatically in costs and performance over the past two decades, and this will continue and incremental gains will be achieved;
- Renewables present more of a threat to coal and gas than to oil; oil is more threatened by electric vehicles;
- On a relatively conservative view, non-hydro renewables will reach 25% of world power generation by 2040, mostly at the expense of coal, nuclear and oil;
- However, to supply more of final energy, renewables will also have to expand into industrial heat, transport (biofuels and electricity), and building heating/cooling;
- High shares of variable renewables require a major expansion of grid interconnections, demand management and energy storage (batteries and others);
- Breakthrough advances in renewables and supporting technologies are possible but not essential for continuing strong gains in market share.

October

How Has the Paris Accord Impacted Long Term Oil & Gas Demand?



- The Paris Agreement of 2015 was signed by all countries and now ratified by most of them, aiming to keep global warming to no more than 2°C and ideally less than 1.5°C compared to about 1°C. experienced already;
- The contributions to reducing emissions are determined by each country individually: many are vague, they are non-binding and overall too weak to reach the 2°C. goal, even if all achieved;
- It is likely that actions will be progressively tightened over time, even if some countries drop out of the accord or fail to deliver;
- A wide range of methods and pathways can achieve the Paris goals.



DATE RESEARCH THEMES

HEADLINE MESSAGES

November

Non-OPEC oil production to 2040: Is there enough?



- Non-OPEC output is forecast by the main agencies to increase 2.3-5.1 Mbpd from 2017 by 2040. But most views are that non-OPEC output will peak in 2025-30 and decline thereafter;
- The IEA in particular has raised concerns of underinvestment, but it and the other forecasters all show strong non-OPEC growth in the early 2020s, mostly from the US;
- Production costs, prices, OPEC strategy, technology, investment conditions and policies are key factors determine long-term non-OPEC output;
- The US is seen as the dominate contributor to non-OPEC production to around 20205, but declines thereafter. Russia grows, but only slowly;
- Mature producing areas, notably the North Sea and China, are likely to decline steadily;
- Tight oil production outside the US will become increasingly important, with 3.5 Mbpd by 2040 coming mostly from Canada, Russia, Argentina and Mexico, Brazil contributed from ultra-deep-water and Canada from oil sands.

December

The Other Contenders: Coal & Nuclear Versus Natural Gas



- There are three main forms of non-renewable power generation: natural gas, coal and nuclear. Each has varying strengths and weaknesses;
- Typical predictions for the global power sector see gas growing strongly, nuclear slowly, and coal flat-lining or shrinking;
- Scenarios of strong climate action do not help nuclear much, are negative for coal, and quite negative for gas;
- A strong nuclear revival is probably dependent on the deployment of new reactor designs; continuing major coal growth would require large-scale, low-cost carbon capture and storages (CCS). Neither of these possibilities can be ruled out, but they do not appear very likely.





4. MONTHLY SUSTAINABILITY NEWSLETTERS



This is a synthesis of news and developments on selected sustainability and/or climate change topics. The first issue was launched in February 2017, and the circulation list included, Foundation members; partners; and individuals in government, private sector, academia, and civil society, who have an interest in sustainable development issues. The Foundation issued 7 copies of the bulletin until the end of July 2018 focused on the following themes:

DATE	TOPIC/THEME	FOCUS OF THE PAPER

January National approaches to energy efficiency



After decades of consecutive increases, GHG emissions from fuel combustion have been steady at around 32 billion tonnes of carbon-dioxide equivalent (GtCO2-eq since 2014. Falling energy intensity offset 77% of the impact on global emissions from GDP growth since 2014 while changing fuel mix offset the remaining 23%. This paper presents snapshots of the approaches to energy efficiency, adopted by some selected developed and developing countries.

February The growing world of solar



Given the concern for climate change and the need for the world to move towards more renewable energy sources such as solar. This paper looked at the growing world of Solar, from its genesis to its advanced technology seen today.



TOPIC/THEME

FOCUS OF THE PAPER

March

The growing world of wind power



As long as the wind has blown, people have been finding ways to harness its energy to power boats, pump water, or grind grain. The growing public demand for cleaner energy continues to push wind and other renewables to exciting new places. The paper looks at the growing world of wind power, from its genesis to the technology used today.

April

Investments in renewables by major oil and gas companies



As governments pursue increasingly ambitious initiatives to reduce greenhouse gas emissions and decrease their reliance on fossil fuels, international oil and gas companies (IOCs) are confronted with the challenge of repositioning their business strategies. In what ways are the major oil and gas companies unleashing their expertise and innovative business approaches into the emerging terrain of renewables?

May

Sustainable Supply chains



Organisations are becoming increasingly aware of the importance of creating an environmentally friendly system in order to gain competitive advantage, reduce costs and to aid environmental sustainability. This new direction is also observed in supply chains where sustainable supply chain management is becoming an integral focus for overall operations. The increasing trend of integration of sustainability into supply chain processes, is examined in this paper.



TOPIC/THEME

FOCUS OF THE PAPER

June

The oil and gas industry and its connections with UN Sustainable Goal 14



Close to half the population relies on oceans for food, livelihood and economic advancement. Nevertheless, human development continues to contribute to increased pollution, acidification and degradation of the marine ecosystem. One of the UN Sustainable Development Goals (SDG14) presents a plan to conserve and sustainably use the oceans. The paper discusses how the oil and gas industry is connected to UN SDG14.

July

How are nations responding to Sustainable Development Goal 6?



By the year 2050, the UN estimates that 1 in 4 people will be affected by recurring water shortages. With an estimated population of 9.7 billion in 2050, there will be close to 2.5 billion people facing acute water shortages and lack of access to hygienic sanitation. Not only is water going to be scarce, there's a high chance that the water that is available will increasingly be unsafe for consumption. This paper presents some of the efforts and policies implemented by different nations towards achieving the goal of ensuring availability and sustainable management of water and sanitation for all.

Denis Beltsky Grain windmill at sunrise in Kinderdijk, Netherlands.



5. MONTHLY SUSTAINABILITY DIGEST



In September 2018, the Foundation decided to discontinue the Monthly Sustainability Newsletter and replace it with a publication that provides more insightful thought pieces on sustainability and climate change topics. The first issue of the Monthly Sustainability Digest was published in September and the topics covered in the remaining four months of the year were:

DATE	TOPIC/THEME	KEY MESSAGES
DATE	TOPIC/THEME	KEY MESSAGE

September What is the True Cost of Water?



- National strategies to ensure availability and sustainable management of water and sanitation are now widespread as more countries prosper.
- To meet SDG6 targets, countries are developing and implementing national financial plans and prudent budgeting.
- Trends in national budget allocations indicate general increases in funding but estimates suggest these still fall short of required investment.
- The sources of financing for drinking-water and sanitation services differ from country to country with the household tariffs and fees being universally prominent.
- Despite the enormity of the challenges faced in the global effort to provide WASH services, the trends of technology innovations, financing and governance indicate that these challenges can be overcome.





DATE

TOPIC/THEME

KEY MESSAGES

October

Corporate Social Responsibility: Best Practice Guidelines



The paper was devoted to the Foundation book on *Best Practice Guidelines for Corporate Social Responsibility*. The book is based on the premise that the United Nations Sustainable Development Goals (SDGs) serve as a good blueprint for framing corporate social responsibility (CSR) of companies and organisations. It looks at how the sustainable development paradigm shift is helping to shape CSR practices.

November

Spotlight on Energy, Natural Gas, and Climate Change: Views and Insights from Leading World Experts The Foundation hosted world leading experts from the Center on Global Energy Policy, Columbia University, New York and Shell, at series of events during QGBC Conference. The views, opinions, and scenarios shared by the experts on "The Geopolitics of Climate Change" and the "Role of Natural Gas" in meeting the goals of the Paris Climate Change Agreement; are compiled in this paper.



December

Kyoto vs Paris

– A Tale of Two
Paradigms



The paper examines the following questions concerning the Paris Agreement:

- In what ways does the Paris Agreement represent a shift from the Kyoto Protocol?
- How is the Paris Agreement helping to galvanize climate action?
- Has the recent adoption of the rulebook for the Paris Agreement at COP24 in Katowice, restored faith in the multilateral system?
- Is the euphoria and optimism generated by the Paris Agreement still justified?



6. BI-WEEKLY SUSTAINABILITY NEWS BULLETIN



This is a compilation of current news and developments on sustainability and climate change, in both English and Arabic. This bi-weekly publication was introduced late in 2018 and has been well received by Foundation members, partners and other stakeholders.

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7. ANNUAL PUBLICATION



Following the publication of the Foundation first booklet on *Sustainable Development Goals and Energy Nexus*, in 2017, the Foundation produced a handbook on *Corporate Social Responsibility Best Practice Guidelines*. The handbook, launched at the 4th Qatar Green Building Council Annual Conference in October 2018, looked at how the sustainable development paradigm shift is helping to shape CSR practices. It presented a concise overview of key international standards and guidelines that are commonly used for framing CSR; the key elements that are considered essential for best practice; and some case studies illustrating cutting-edge CSR initiatives of companies, based in Qatar.

CSR best practice case-studies included in book:

CASE STUDY

BRIEF DESCRIPTION



Qatar University ExxonMobil Teachers Academy QUEMTA.

This is modelled after a similar successful initiative in the United States, and has been running every year since 2012. The Teachers Academy (QUEMTA) is a week-long intensive professional development program led by a team of education experts from Qatar and the United States.





NXplorers – Shaping leaders of the future.

This initiative by Shell introduces future leaders to the complex thinking needed to bring about positive change. The program runs in Qatar and Egypt. It aims to improve the interest and capability of students in Science, Technology, Engineering and Mathematics (STEM)





CASE STUDY

BRIEF DESCRIPTION



Fostering Innovation – Reusing and Recycling Water.

This innovative program by Shell aims to generate new ideas to improve the use of water in Qatar. While public perceptions may suggest reluctance to reuse treated wastewater, there are examples that show the acceptability of reuse for certain purposes.





Supporting Qatar's Vision for a Sustainable Future.

This case study illustrates how, ConocoPhillips, one of the largest independent exploration and production companies in the world, with a business unit situated in Qatar, is committed to delivering its corporate social responsibility (CSR) objectives. ConocoPhillips Qatar's intrinsic dedication to water sustainability and knowledge-sharing is the cornerstone of the company's CSR efforts in the country.





Accessible Qatar, a Sasol initiative.

The website platforms allow the disabled people to use smart phones to view the country's public and touristic locations and outlets to see whether they are accessible, in relation to their disability.



CASE STUDY





Qatar e-Nature, a Sasol initiative.

This bi-lingual mobile App is aimed at promoting sustainable development by contributing towards an environmentally aware population. It contains detailed information and pictures of hundreds of plants, birds and bird's sounds, insects, mammals, reptiles, marine life, as well as, reserves in Qatar.







The Health Park Board Game with Salem and Sarah, a Sasol initiative.

This is a Sasol initiative in collaboration with the Qatar Diabetes Association, involving the launch of diabetes plush toys (Salem and Sarah) and an edutainment board game.





Qatar Airways – Competency and training to deliver sustainability ambitions.

This case study demonstrates how Qatar Airways is addressing sustainability issues and building resilience through the provision of competency, training and skills for all its staff.





Qatargas Jetty Boil-Off Gas (JBOG) Recovery Facility – 100% Environmentally Driven and One of the Largest of its kind in the World.

The \$1 billion facility, built and operated by Qatargas, was commissioned in October 2014, collects the boiloff gas, compresses it and sends it back to the Qatargas facilities to be either utilized as fuel gas or converted back into LNG.





DIGITAL / ONLINE

Re-development of the Foundation's online presence to improve ease of use for each platform and to ensure that relevant daily, weekly and monthly content is shared with members and general public through channels such as social media. The Foundation's ongoing events and activities are available through an online calendar and new section.



Website

- Redevelopment of whole site
- Hosting of rich content for news, events, publications and more.
- Inclusion of interactive report hosting with flip books and update to the Foundation's publication archive in the members section.
- Inclusion of SEO protocols through the Foundation's website.

Social Media

- in Launched LinkedIn
- Targetted 990 Followers
- Average monthly engagement of 10,000 + impressions
- Launched Twitter
- Targetted 825 Followers
- Average monthly engagement of 65,000 + impressions
- Daily content on both platforms
- Members news on both platforms

Smart Distribution

- Implemented smart paperless distribution and member database through mail software
- Monitoring of distribution, readership, engagement, sharing and unsubscribes.







PROJECTS

The Foundation is continually engaged in ongoing projects sometimes with members and partners. The projects completed during the year under review or ongoing into next year include:

1. Project researching the

"Public and end user perception of the reuse of by-products of oil and gas industry (Bio-sludge and treated industrial water)",

is ongoing as a partnership initiative with HBKU, under the guidance and supervision of the Foundation.

2. Research Project focusing on

"Measures to Improve Energy Efficiency in Qatar."





EVENTS

The Foundation holds bi-annual Board of Trustee Meetings to keep the board up-to-date on progress and for approvals on key initiatives, as well as regular Technical Sub-Committee Meetings, led by a Member of the Board of Trustees, Mr. Hamad Rashid Al Mohannadi. These were in addition to the following events held during the period covered by this Annual Report.

1. ABDULLAH BIN HAMAD AL-ATTIYAH INTERNATIONAL ENERGY AWARDS 2018 - LIFETIME ACHIEVEMENT

The Al-Attiyah Awards night was held in May 2018 – the award ceremony, which entered its sixth year, has become a permanent prize for the recognition of lifetime achievements in the global Energy Industry. This annual flagship event proved again to be a big successful highlight for the year under review.

PLATINUM PARTNER

SILVER PARTNERS











BRONZE PARTNER







TABLE PARTNERS















The following outstanding individuals were given the 2018 prestigious Al-Attiyah Award in the various categories:

I. Sheikh Khalid Bin Khalifa Al Thani

CEO of Qatargas - Lifetime Achievement for the Advancement of Qatar Energy Industry;

II. H.E. Mohammad Sanusi Barkindo

Secretary General of OPEC -Lifetime Achievement Award for the Advancement of the Organisation of Petroleum Exporting Countries (OPEC);

III. Maria van der Hoeven

Former Executive Director of IEA - Lifetime Achievement Award for the Advancement of Producer-Consumer Dialogue;

IV. Professor Paul Stevens

Distinguished Fellow at Chatham House - Lifetime Achievement Award for the Advancement of Education for Future Energy Leaders;

V. Kate Dourian

Directorate of Global
Energy Relations, International
Energy Agency (IEA) – Former
Reuters, Platts & MEES Journalist
– Lifetime Achievement Award for
the Advancement of International
Energy Journalism;

VI. Mustapha Bakkoury

President of Masen (Moroccan Agency for Solar Energy) – Lifetime Achievement Award for the Advancement of Renewable Energy; and

VII. Lee Raymond

Former Chairman & CEO of ExxonMobil Corporation – Honorary Award for International Energy Policy and Diplomacy.







2. CEO ROUNDTABLES

HE ABDULLAH BIN HAMAD AL-ATTIYAH ESTABLISHED THE CEO ROUNDTABLE SERIES TO PROVIDE A PLATFORM FOR KNOWLEDGE EXCHANGE.

The Foundation continued to host its CEO Roundtables every quarter throughout 2018. For each event, at least three world-renowned		guest speakers were invited to talk on the chosen theme for that session. CEOs from the Foundation member companies as well as senior	government officials attended each event. The themes covered and list of guest speakers in 2018 included:
THEME	DATE	GUEST SPEAKERS	
Energy efficiency in the oil and gas industry.	27 February	 Alexandre Amato, Head of Sustainability, QGBC David Worrall, Independent Energy Consultant John Kilani, Director of Sustainable Development, Al-Attiyah Foundation 	
Water security	17 April	 Dr. Samer Adham, Manager, Global Water Sustainability Centre, ConocoPhillips Nick Carter, Senior Advisor, PwC Fady Juez, Managing Director, Metito 	
The Geo-politics of climate change	30 October	Experts from the Center on Global Energy Policy, Columbia University: 1. Jonathan Elkind, Fellow and Senior Research Scholar 2. Marianne Kah, Adjunct Senior Research Scholar and Advisory Board member 3. Dr. Tim Boersma, Senior Research Scholar	
The Gulf's Energy Outlook to the Year Ahead: What's Next?	04 December	 Mike Muller, Director, Oil Business Development, Vitol Robin Mills, Chief Executive Officer, Qamar Energy Lukasz Abramowicz. Partner, McKinsey & Company 	





The Year in Review | Events 59

3. STRATEGIC PARTNER: 'A WORLD OF GAS' PANEL SESSION

BOSPHORUS SUMMIT 9, ISTANBUL, 26TH - 28TH OF NOVEMBER 2018

In line with the vision of the Foundation's Chairman,
His Excellency Abdullah bin Hamad
Al-Attiyah, the Foundation's ongoing strategic partnership with the
Uluslararasi Işbirlği Platforumu,
International Cooperation
Platform (UIP-ICP), who manage the Bosphorus Summit annually, provides an opportunity to enhance proactive multilateral and inter-disciplinary cooperation for sustainable development.

This year, the summit welcomed over 2000 delegates from around the world presenting, discussing and voting on political, economic and cultural topics to provide global insight and direction for national interest and the promotion of common ideals. The Foundation hosted global experts for a panel session on the 'World of Gas" which was integrated into the programme.







4. STRATEGIC PARTNER: QATAR GREEN BUILDINGS CONFERENCE

SUSTAINABILITY WEEK, 28TH - 31ST OF OCTOBER 2018



The partnership between the Foundation and Qatar Green Building Council (QGBC) was formally strengthened with the signing of an MOU between the two organisations at the 3rd QGBC Annual Conference in 2017. The Foundation's booklet titled Sustainable Development Goals and Energy Nexus was

launched by His Excellency at the Conference. In 2018, in line with its commitment to the MOU, the Foundation actively supported the 4th QGBC Annual Conference, as a strategic knowledge partner. In collaboration with the Centre on Global Energy Policy, Columbia University hosted a focused half day

session on the second day of the conference (29 October), focussed on the 'Role of Energy Sector in Responding to Climate Change.' The Foundation also launched a new booklet titled: *Corporate Social Responsibility Best Practice Guidelines*, during the opening of the Conference.





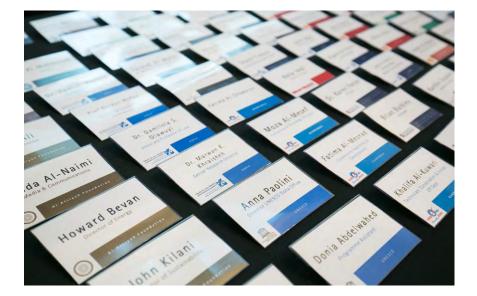


5. SENIOR MANAGERS ENERGY DIALOGUE

31ST OF OCTOBER 2018

In addition to the event held at the Green Buildings Conference, the Foundation hosted again the three expert speakers from the Centre on Global Energy Policy, Columbia University, and the Chief Climate Change Advisor from Shell, to share their insights on "The Geopolitics of Energy and Climate Change" The audience comprised of senior industry managers and policy makers from Qatar's energy industry, academia and government.





The discussion was enriched by looking at natural gas demand and the recent Shell scenario ("Sky") on meeting the goals of the Paris Agreement. The primary objective of the dialogue was to address the geopolitics of energy and climate change in a holistic manner while drawing insightful lessons for the energy industry, the State of Qatar, and the Region. The dialogue appropriately focused on ways that the private sector, particularly the energy industry, could be proactive in responding to the challenge of climate change.









6. OTHER EVENTS

THE CHAIRMAN AND FOUNDATION EXPERTS ARE REGULARLY INVITED TO SPEAK AT MAJOR INTERNATIONAL AND LOCAL EVENTS. IN 2018, THE FOUNDATION PARTICIPATED IN THE FOLLOWING EVENTS:

VENUE & DATE	EVENT
Doha - 31 st of January	Presentation on "Building Common Rules for International Carbon Market" at the IEMA Networking Seminar on Climate Change.
Muscat - 6 th of February	Lecture titled "OPEC and its role in achieving balance in the world oil markets" – National Defence College in the Sultanate of Oman.
Doha - 21 st of February	Energy Outlook ExxonMobil
Doha - 21 st of February	Georgetown Panel Discussion
Doha - 26 th of February	Gas Exporters Market Forum
Doha - 7 th of October	Panel discussion at the "Symposium on Climate Change and Conflicts in the Arab Region" organized by UNESCO and Doha Institute for Graduate Studies.
Doha - 23 rd to 24 th of October	Presentation on "Sustainable Capacity Building" at the GORD Sustainability Summit.
Doha - 4 th to 5 th of November	Presentation on "Kyoto versus Paris: A tale of two paradigms" at a HBKU Middle East Environmental Law Teachers Conference.
Istanbul – 27 th of November	Panel discussion on "The international landscape of accelerating changes within the industry and markets of LNG" - Al Attiyah International Foundation.



PARTNERSHIPS AND COLLABORATIONS

The Al-Attiyah Foundation engages and partners with governments, the private sector, civil society and its members in debates, research and thought leadership. Building on its ability to convene key influencers and experts in their respective fields, the Foundation nurtures mutually beneficial partnerships in the drive towards a sustainable energy future. The Foundation currently

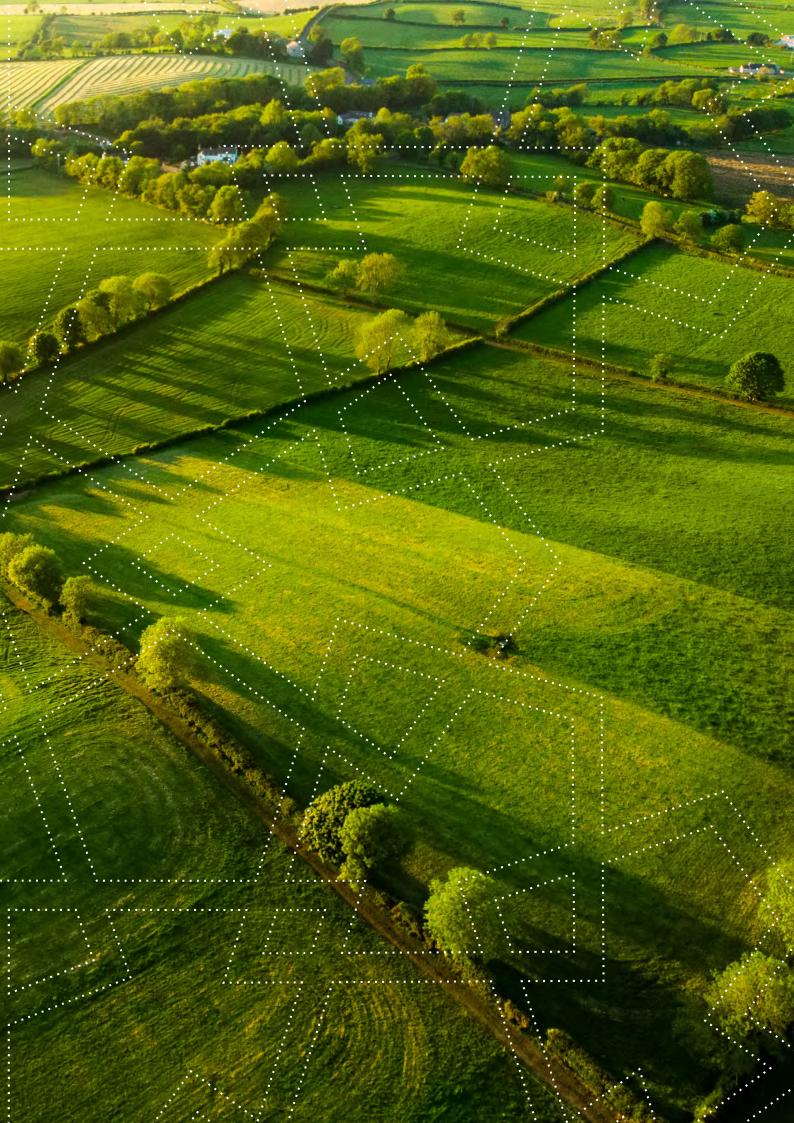
holds MoUs with Mitsui; Shell; World Petroleum Council (WPC) based in London; the International Collaboration Platform (ICP), Turkey; L'Istituto di Alti Studi in Geopolitica e Scienze Ausiliare (an Italian Institute "ISAG"), at the University of Rome; the National Council on US-Arab Relations (NCUSAR) in Washington; Qatar Green Building Council (QGBC); and Hamad Bin Khalifa

University (HBKU) in Qatar. Further agreements are in the pipeline with local, regional and international entities. The Foundation has also established good relationships with media and knowledge partners: Al Jazeera and Reuters, resulting in high quality moderation for some of the Foundation events.









LOOKING AHEAD

Matching Efforts with Outcomes

While it is expected that most of the activities for 2018 will continue, the Foundation business plan for 2019 has been developed to maximise the expected impacts in correspondence to the efforts and resources required to accomplish them.



Broad Goals for 2019 Work Programmes

In furtherance of its vision and mission, the work programmes of the Foundation will continue to focus on the already well-established main pillars – publications, events, and partnerships, in order to:

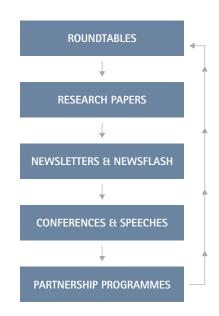
- provide topical and relevant insights on energy and sustainable development themes;
- nurture and develop mutually beneficial partnerships;
- deliver insightful and relevant publications; and
- produce thought leadership events.

Activities under each pillar will be developed to support members, industry, governments, academia and ultimately society as the world strives towards a sustainable energy future.

The activities and projects will be prioritised according to the following key goals:

- To establish the Foundation as a strong Think Tank and trusted thought-leader on the challenges and opportunities impacting the global community in energy and sustainable development;
- To continue to develop and nurture partnerships with members and relevant national and international organisations;
- To ensure topical and relevant insights are shared widely and members are kept up-to-date;
- To expand the Foundation's membership and partnership base; and

 To strengthen the integrated approach adopted in 2018 for developing and covering topics/ themes; linking events, publications and other outputs, as depicted in the Figure below.





Expected Additional Enhancement in 2019

Looking ahead, the Foundation expects to further enhance and/or strengthen the impacts of the outcomes of its activities in 2019, through:

- Enhanced Abdullah bin Hamad Al-Attiyah Awards 2019 offering greater experience to members and partners;
- Taking the CEO Roundtables to the global stage;
- Adding to the existing portfolio of publications – next booklet: Green House Gas Reduction Strategies and Quarterly policy papers;
- Expansion thought-leadership events in Qatar:
- Advancement of more research projects; and
- Leveraging media partnerships.

Foundation Staff

The Foundation is currently staffed as follows:

CHAIRMAN'S OFFICE

1. Mr. Nasser G. Al-Mesalam

Head of Protocol

MANAGING DIRECTOR'S OFFICE

2. Mr. Howard Bevan

Secretary to the Board & Advisor to Chairman and MD

3. Ms. Jana J. Karam

Administration Coordinator

FINANCE & FUND MANAGEMENT

4. Mr. Nazimuddin D. Rajpurkar *Head of Finance*

5. Ms. Heena S. Khatib

Senior Accountant

ADMINISTRATION & BUSINESS SERVICES

6. Mr. Hassan M. Al-Khalaf

Director

7. Mr. Hussien AbuNada

Web Specialist

8. Ms. Oumnia O. Laaroussi

Administration Assistant

ENERGY DIRECTORATE

9. Mr. Howard Bevan

Director

10. Mr. Sofiane Ghezali

Senior Energy Researcher

SUSTAINABILITY DIRECTORATE

11. Dr John Kilani

Director

12. Mr. Hazem Al-Angar

Senior Sustainable Development Expert

13. Mr. Colman Hands

Senior Sustainability Expert

MEDIA & COMMUNICATION DIRECTORATE

14. Ms. Nicola Joseph

Director

15. Mr. Justin Floyd

Media & Communications Manager

16. Ms. Huda Ali Al-Naeimi

Media and Communication Trainee



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