

## Oracle Power PLC

6<sup>th</sup> Floor  
Two Kingdom Street  
London  
W2 6BD

T: +44 (0) 203 580 4314  
[www.oraclepower.co.uk](http://www.oraclepower.co.uk)

Oracle Power PLC

# POWER FOR PAKISTAN

ANNUAL REVIEW 2017

# We are Oracle Power

Oracle is establishing its role as a major solution provider for Pakistan’s critical shortage of electricity by bringing significant Chinese partners into the development of its mine and mine-mouth power plant in the Thar desert, Province of Sindh, South-eastern Pakistan.



## WHAT WE DO

Oracle is developing a coal to power project:

- Phase 1: 4 million tonnes mine, feeding a 700MW power plant
- Phase 2: a further 4 million tonne mine, feeding a further 700MW power plant.

## PROJECT RATIONALE

- Pakistan suffers from major electricity shortages
- Coal discovered in Thar can substantially help meet this shortfall
- Government introduced incentives to encourage development, including 30 year IRR of 18% for the power plant and 20% for the mine in US\$ terms, and sovereign guarantee of payment.

## CHINESE STRATEGIC INVESTORS

Memorandum of Understanding signed with two proven Chinese power companies:

- To develop and operate the mine and power plant, and
- To provide financing.

## CHINA-PAKISTAN ECONOMIC CORRIDOR

The project is listed as Priority in China-Pakistan Economic Corridor affirming strong support from both the Chinese and Pakistan governments.

## CORPORATE

Strengthening the Board:

- Two appointments at Board level designed to strengthen the team.

## EMPLOYMENT

The project will employ 4,800 people over the three year construction period.

## 2017 ACHIEVEMENTS AND PLANS FOR 2018

### 2017 achievements

- Elevation from the “Active” list to the “Priority” list of the China-Pakistan Economic Corridor
- Allocated water access of 38 cubic feet per second from the Government’s water pipeline and reservoir currently under construction
- Memorandum of Understanding signed November 2017 with Chinese Partners.

### Plans for 2018

- Letter of No Objection for ESIA for Power Plant
- Letter of Intent for Power Plant
- Generation licence and Upfront Tariff finalisation
- Securing debt financing from Chinese banks along with equity financing.

## CONTENTS

Operational Assets	2
Stakeholder Engagement	3
Key Moments	4
Operational Procedure	6
Growth Strategy	8
Corporate Structure	9
Chairman’s Statement	12
Chief Executive Officer’s Statement	14
Risks and Uncertainties	16
Corporate Social Responsibility	18
Board and Senior Management	22
Company Information	24



1.4bn

Oracle’s total JORC resource amounts to 1.4bn tonnes

4Mtpa

Oracle’s 4mtpa of coal will feed a 700MW power station

175bn

The estimated total coal of the Thar Coalfield in Pakistan is 175bn tonnes

700MW

Power output of Thar mine-mouth power plant in phase 1

# Operational Assets

## Project description



### THAR BLOCK VI MINE

The Thar Coalfield is located 380km east of Karachi. It covers an area of 9,100km<sup>2</sup>, with a total lignite resource in excess of 175bn tonnes, the sixth largest in the world.

Block VI is located in the centre of the coalfield and covers an area of 66.1km<sup>2</sup>. The site has been extensively drilled and coal samples recovered and tested to international standards and a JORC compliant resource of 529Mt has been confirmed over a 20km<sup>2</sup> area.

- Extensive work has been undertaken on the assessment of the commercial viability of the resource by Government and independent international consultants.
- The coal is lignite and commercially viable, with low ash and sulphur content.
- Lignite coal is suitable for power generation and for industry use, in particular, the cement industry. These sectors are anticipated to be the main off-takers.



### MINE-MOUTH POWER PLANT

A mine mouth power plant initially of 700MW capacity will be constructed adjacent to the mine. Supercritical technology will be utilised and the mine will supply 4.0Mt coal per annum to the power plant under a Coal Supply Agreement.

Water for the steam cycle and cooling will be supplied from the mine dewatering with a back up supply of

38 cubic feet per second being made available from the Government who are constructing a pipeline into Thar and a reservoir to the north of Block VI.

An ESIA for the power plant was completed in 2017 and submitted to the Sindh Environmental Protection Agency in March 2017 for approval. A public hearing was held on the site in July 2017 as part of the approval process.

An Environmental Management Plan has been prepared which aligns and updated the original plan produced for the mine along with all the mitigation measures to be adopted throughout the life of the project.

Electricity will be supplied to the Central Power Purchasing Authority, a Government agency, under a 30 year Power Purchase Agreement.

# Stakeholder Engagement

## Delivering value for Pakistan

Oracle Power is focused on responsibly developing its partnerships and assets to create value for all stakeholders.

### PARTNERS AND STAKEHOLDERS

#### Why they are important

Our partners in the Thar project, PowerChina and The Sichuan Provincial Investment Group, have considerable experience in developing power projects as well as the financial strength to facilitate the financing of the projects.

#### How we engage

We are working with our Chinese partners to finalise EPC (Engineering and procurement) contracts and O&M (Operation and maintenance) contracts for both the mine and the power plant.

### HOST GOVERNMENTS AND REGULATORS

The Governments of Pakistan and China have committed US\$57 billion to develop infrastructure and energy projects under the China Pakistan Economic Corridor accord including our Thar Block VI project.

We are represented at regular meetings of the Joint Working Group of the CPEC and meet directly with the coal and electricity price regulators as we work towards finalising pricing mechanisms to bring the project to financial close.

The Private Power and Infrastructure Board approves Independent Power projects in Pakistan.

### EMPLOYEES AND CONTRACTORS

Our project is estimated to employ 4,800 people over the three year construction period.

Through our Health, Safety and Environmental policies we strive to ensure the overall welfare of all employees and contractors.

Contractors engaged for work on site must adopt our policies at all times.

### LOCAL COMMUNITIES

Employees and contractors are the public interface with the authorities and the public and we work to international standards in all that we do.

The local communities in Block VI are supportive of the project and can see the long term benefits that the project can bring in terms of living standards and employment.

The company has employed a full time Community Liason Officer who ensures that the local community is kept informed of developments as they occur. Local people can have their concerns addressed at site level on a regular basis.

## Key Moments

# The story so far



### CPEC UPDATE

The sixth meeting of the Joint Cooperation Committee of the CPEC was held in Beijing on 29th December 2016 between the Government of China led by the vice-chairman of the National Development and Reform Commission and the Pakistan Government led by Federal Minister of Planning & Development. During this meeting it was confirmed that Oracle's Block VI Thar Coal Project had been elevated to the Priority List.

### MEMORANDUM OF UNDERSTANDING AGREEMENT SIGNED

The Company signed a Memorandum of Understanding with Sichuan Provincial Investment Group Ltd. and PowerChina in November 2017.



### DEVELOPING COMMUNITIES

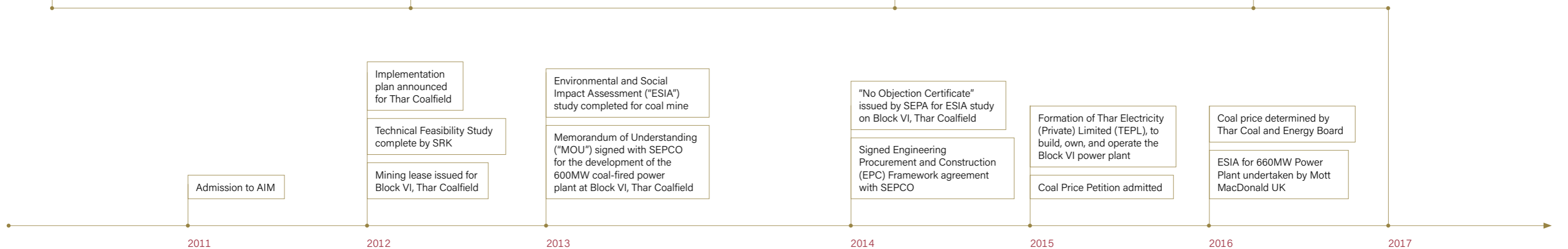
With the developments of coal and power projects in Thar the local communities will have increasing opportunities in:

- Improved education
- Access to clean water
- Significantly improved infrastructure and communication
- Employment opportunities
- Better healthcare and overall living standards.

### THAR BLOCK VI MINE ESIA UPDATE AND POWER PLANT ESIA

The Power Plant ESIA built on the original baseline studies for the mine which were all updated along with new surveys of land use and local population. Local consultations with the local communities and stakeholders were carried out over the assessment period. The Mine ESIA was brought up to international standards and aligned with the Power Plant ESIA which was completed in March 2017.

A public hearing was held on the site in July 2017 to inform the local communities and interested parties of the project proposals and hear the views of the local population.



## Operational Procedure

# The Oracle Power difference

Oracle will play a significant role in meeting Pakistan's energy crisis.

Mark Steed  
Chairman



### THE NEED

#### Energy demand

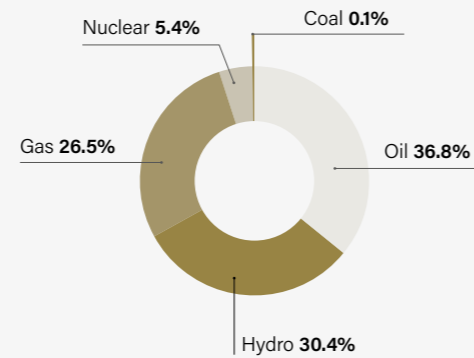
Pakistan will need to address its current energy generation shortfall as well as provide new energy generation capacity to grow its economy and serve the increasing population in the coming years.

**3,710MW**  
Annual shortfall in energy requirements

**5-6%**  
Annual expected rise in demand for electricity

Source: NEPRA State of Industry Report 2016

### POWER SECTOR OF PAKISTAN BY RESOURCE 2014-15



Source: Pakistan Energy Yearbook 2015

### THE SOLUTION

#### Delivering energy to market

Our project has the potential to make a significant contribution in providing electricity for the country.

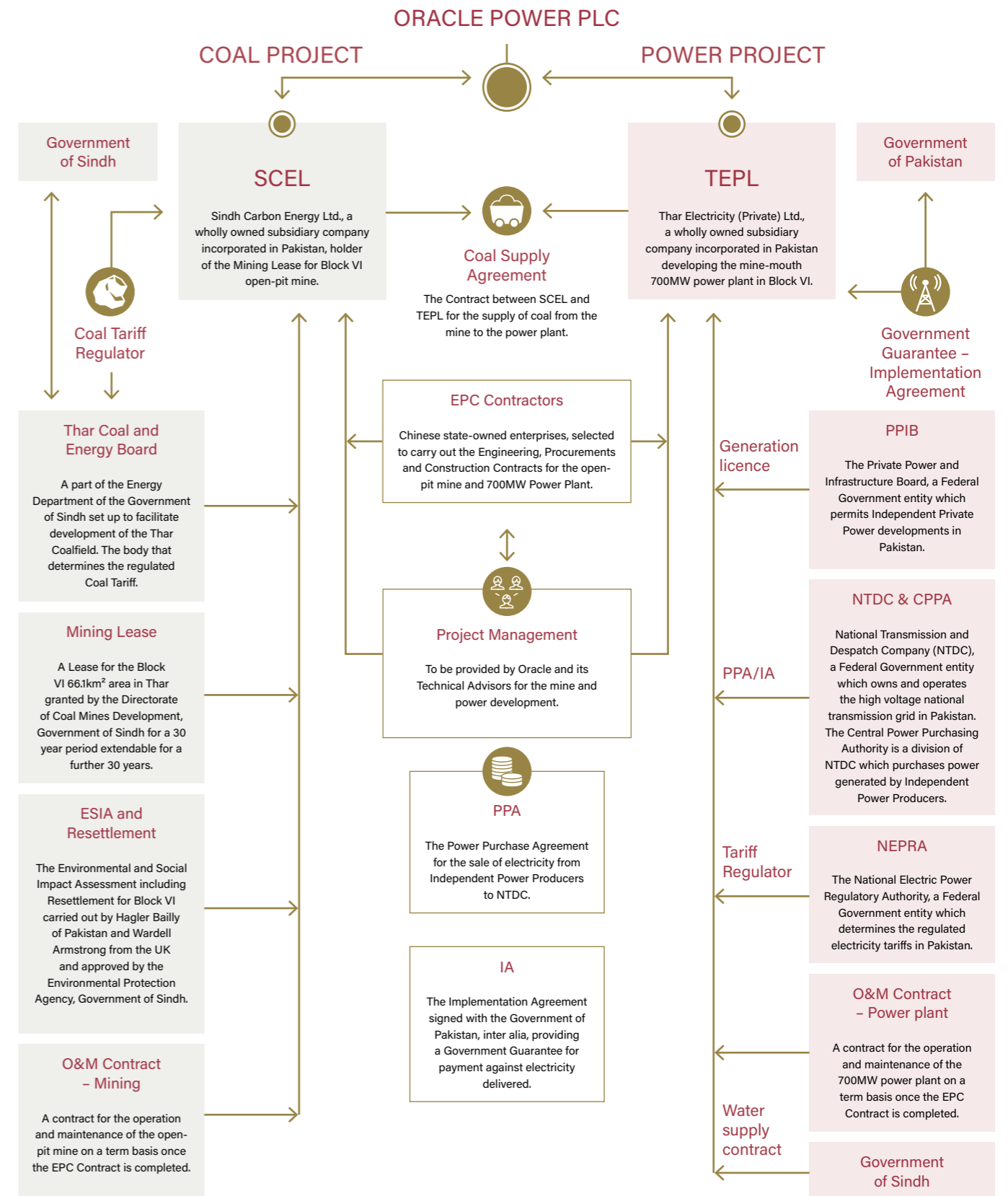
- Phase 1 will be a 700MW supercritical power plant supplied with 4.0 Mt of coal per year from the Thar Block VI mine adjacent to the plant
- The use of indigenous Thar coal will significantly improve Pakistan's security of energy supply and reduce the demand for foreign exchange
- Growth of over 6%pa is predicted if electricity supply can be increased to meet demand.

**+5.5%**  
Projected annual growth of the economy

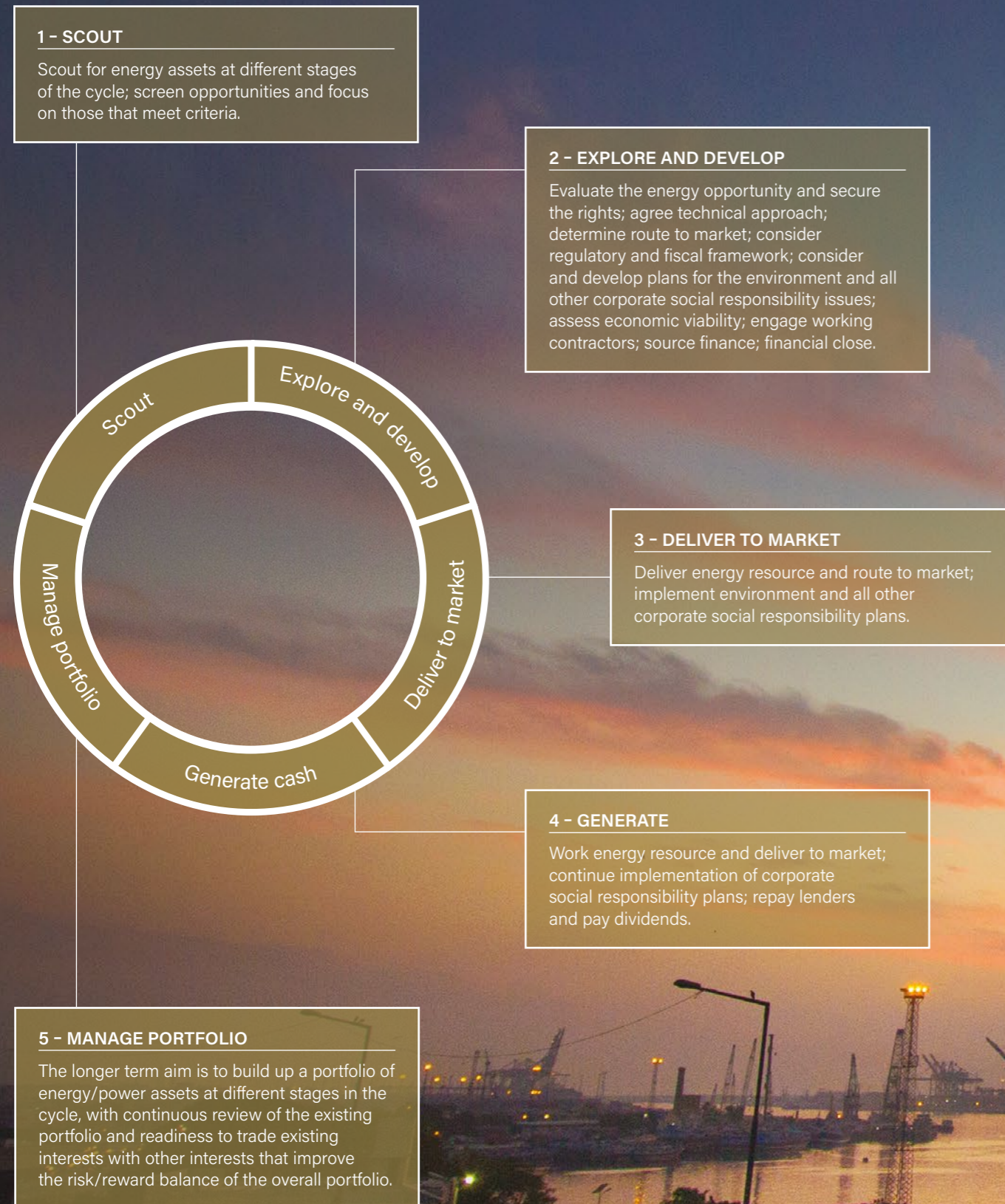
**+25%**  
Projected share of energy fuel mix from coal by 2022



# Project development process



# Growth Strategy Business model



# Governance structure

## CORPORATE GOVERNANCE

During 2017 the Board continued its commitment to maintaining high standards of corporate governance, complying with the requirements of the corporate governance guidelines (Guidelines) for smaller quoted companies issued by the Quoted Companies Alliance. The principles set out in the Guidelines cover four areas: the Board, Directors' remuneration, accountability and audit, and relations with shareholders.

## THE BOARD

The Board of the Company is responsible for the Group's system of corporate governance. The Directors carry out an internal review annually of the effectiveness of the Board and this process was repeated in early 2018. The Board of Directors meets at least every two months and 5 meetings were held in 2017. There is a defined schedule of matters reserved for its decision. The matters so reserved include responsibility for the overall Group strategy, approval of contracts, commitments to capital expenditure budgets over £10,000, appointment of Directors and staff, approval of remuneration of Directors on the recommendation of the Remuneration Committee, issue of shares and warrants, appointment of advisors, approval of announcements to the market, and a final investment decision to proceed with project implementation.

## THE BOARD COMMITTEES

The Board Committees are comprised of Non-Executive Directors, except for the Nomination Committee which is chaired by the Chief Executive Officer, Mr Khan, and the Tender Board which additionally comprises Mr Rostron and Mr Smith.

It is anticipated that, as the subsidiary companies grow in size with development of the project the subsidiaries will eventually form Board Committees of their own to advise their respective Boards. Such committees will include a Health, Safety and Environment Committee for each company based in Pakistan.

## AUDIT COMMITTEE

### Chaired by Anthony Scutt

The role of the Audit Committee is to monitor the integrity of the financial statements and to review any significant financial reporting issues, especially the consistency of and changes to, accounting policy.

## REMUNERATION COMMITTEE

### Chaired by Anthony Scutt

The Remuneration Committee is responsible for reviewing the remuneration, bonus/incentive schemes and pension provision for Board members and senior executives of the Company.

## NOMINATION COMMITTEE

### Chaired by Shahrukh Khan

The Nomination Committee was established post-admission to AIM review the structure, size and composition of the Board, and to make recommendations with regard to any changes.

# China-Pakistan Economic Corridor (CPEC)

Oracle was upgraded to priority project in CPEC, thus attracting interest from more Chinese SOEs to Thar Block VI.

**CPEC Agreement includes:**

- Improvement of economic ties, in particular infrastructure and energy
- Financial support from China
- Total financing expected to be US\$62bn, of which energy projects US\$34bn.

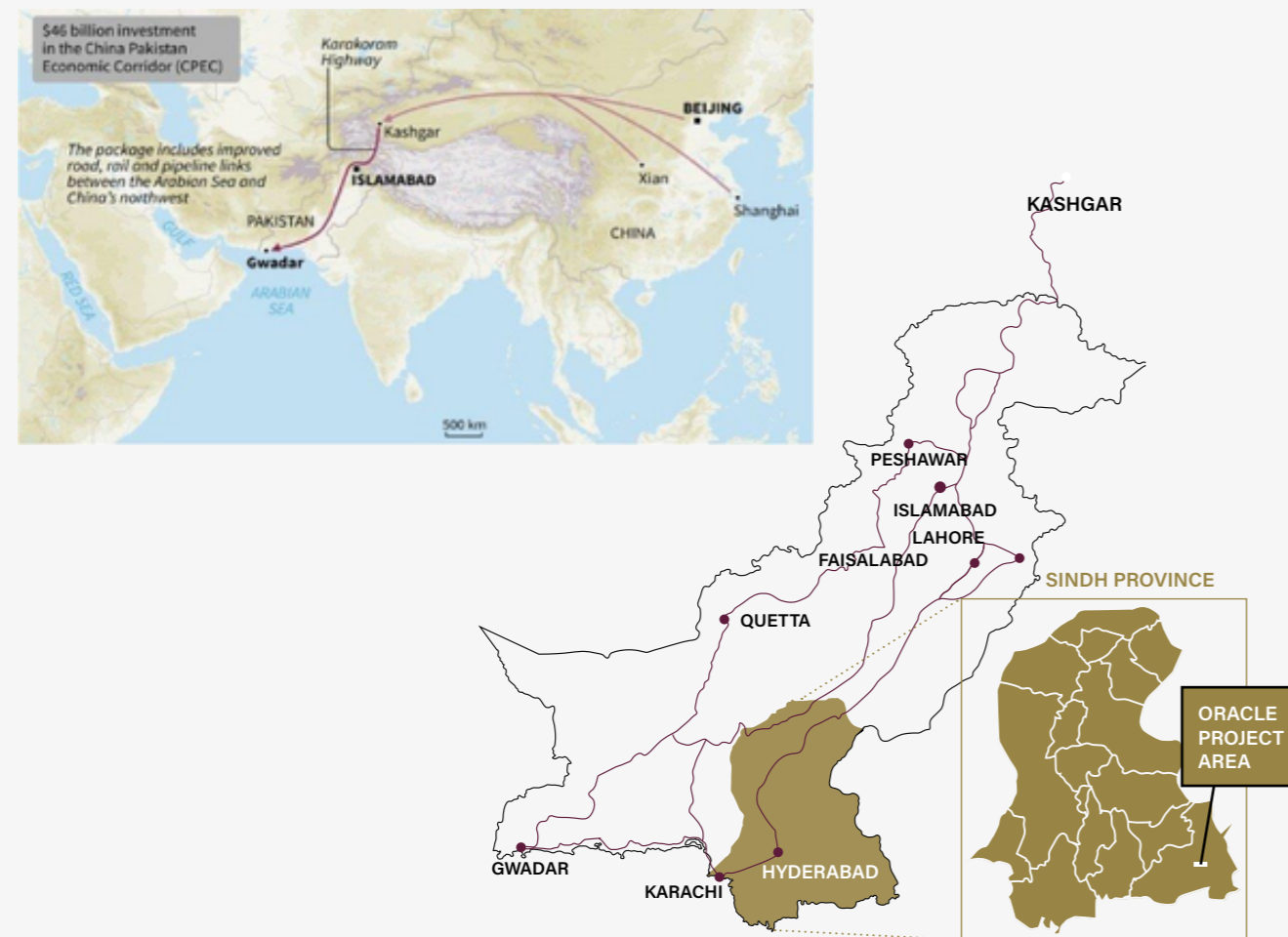
Inclusion of Oracle's project demonstrates enhanced support of both governments.

China-Pakistan Economic Corridor (CPEC) is a collection of infrastructure projects that are currently under construction throughout Pakistan. The value of CPEC projects is now worth \$62 billion. CPEC is intended to modernise Pakistani infrastructure and strengthen its economy by the construction of modern transportation networks and various energy projects.

Major work, estimated to cost \$11 billion, to upgrade and in some cases build the network of road and railways throughout Pakistan. Inefficiencies stemming from Pakistan's aging transportation network are estimated by the government to cause a loss of 3.55% of the country's annual GDP. A road network built under CPEC will link seaports in Gwadar and Karachi with northern Pakistan, as well as points further north in western China and Central Asia. The Karachi-Peshawar main railway line will also be upgraded. The railway network will also be extended to connect to China's Southern Xinjiang Railway in Kashgar.

Over \$33 billion worth of energy infrastructure is to be constructed by private consortia to help alleviate Pakistan's energy shortages, currently estimated at 5,000MW and which are estimated to have caused a loss of 2-2.5% to Pakistan's annual GDP.

CPEC is seen as an important plank of Chinese President Xi Jinping's Belt and Road Initiative.



# Our development partners

Oracle has entered into a MOU with two proven Chinese power companies for the development of the mine and power plant and for the provision of funding.

**SHAREHOLDINGS IN PAKISTANI PROJECT COMPANIES**

SCIG	Oracle Power PLC	PowerChina
78%	12.1%	9.9%

These percentages are subject to final agreement between Parties with Oracle having the ability to increase its equity share.

The salient features of the MOU are as follows:

**Corporate:**

- SCIG shall have a majority of board positions at the Project company level. Certain matters shall be reserved for unanimous agreement, including, inter alia, dividend policy and terms and costs of key contracts, such as Engineering Procurement and Construction ("EPC") and Operations and Maintenance ("O&M")
- PowerChina shall be EPC contractor for the mine and the power plant. The O&M contracts shall be decided by SCIG
- The Chinese Parties shall provide all corporate guarantees that may be required, including Oracle's share
- Oracle shall be responsible for applying for and obtaining, all licences, approvals, permissions as may be required by the Pakistani Government Authorities. The Chinese parties shall be responsible for all liaison and approvals required through the Chinese authorities, including the China Pakistan Economic Corridor (CPEC)
- The Parties shall proceed to draw up and enter into Definitive Agreements as part of Financial Close.

**Financial**

- Oracle's past costs in developing the Project shall be recognised as part of Oracle's equity contribution to the Project
- All funding shall be provided at Pakistani Project company level
- A debt:equity ratio of 75:25 is envisaged and both SCIG and PowerChina shall be exclusively responsible for arranging the debt.

**POWERCHINA INTERNATIONAL GROUP LIMITED ("POWERCHINA")**

- Chinese state-owned enterprise with revenues £36.8bn, net assets £62.2bn & 187,000 staff
- Provides planning, survey, design and engineering, finance, construction, and operation and maintenance for power and infrastructure projects
- Secured financial close on several CPEC projects including power plants in Pakistan.



**SICHUAN PROVINCIAL INVESTMENT GROUP COMPANY LIMITED ("SCIG")**

- State-owned investment company in a range of sectors including energy resources, transportation, communications, raw materials, electro mechanical, agriculture and forestry with revenues of £9mn, net assets £3.3bn & 7,000 staff
- China's fourth largest and Sichuan Province's largest local electrical power investment company total installed capacity 36 GW.



## Chairman's Statement

# Looking to the future



Oracle is now working with its Chinese partners to bring the project to financial close.

I am pleased to present the results for Oracle Power PLC (the "Company" or "Oracle") for the year ended 31 December 2017.

Oracle is developing an integrated lignite coal mine and minemouth power plant located in Block VI of the Thar desert in the south-east of the Sindh Province of Pakistan (the "Project").

In November 2017, we entered into a Memorandum of Understanding with Sichuan Provincial Investment Group Co. Limited ("SCIG") and with PowerChina International Group Limited ("PowerChina") to take this project forward to its conclusion. I take this opportunity to welcome SCIG who are new to this Project and who will bring great expertise and value. PowerChina have made significant investment already in Pakistan and we value their contribution to this partnership.

The involvement of SCIG and PowerChina in the Project is under the general auspices of the China Pakistan Economic Corridor ("CPEC"). The Project was raised to "Priority Listing" in CPEC in January 2017 which underlines the importance of this project to China as well as to Pakistan.

Operational highlights of the year include preparation, submission and the public hearing for the Environmental and Social Impact Assessment ("ESIA") for the power plant, the update of the mine ESIA originally carried out in 2012, an updated application to the Private Power Infrastructure Board and a population census. These and other activities are described in detail in the Chief Executive's Report.

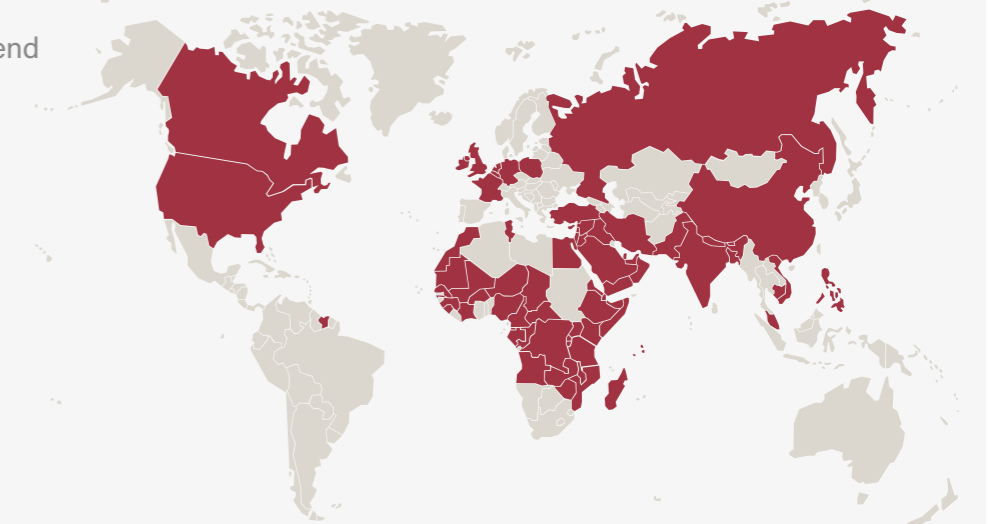
Our work in 2018 will concentrate on formalising detailed agreements with our Chinese partners including securing of the financing for their share of the equity and all project debt. We will also work with relevant Government bodies with regards to permissions, licences and other approvals that need to be obtained.

In 2017, we raised £771,000 and a further £550,000 was raised in March 2018 before costs. The remaining outstanding shares in our Pakistan mining subsidiary, Sindh Carbon Energy Limited, were acquired through a share exchange in January 2018 and, as a consequence, Oracle now owns 100% of both Pakistani subsidiaries.

### INTERNATIONAL EXPERIENCE

Our board has a strong blend of experience in delivering international projects.

SEE PAGE 23



Thar coal is one of the largest resources in the world. The Project will play a vital role in the advancement of the economy of Pakistan by creating much needed additional electricity base load. By exploiting this national resource as a source of fuel for power, it will free up valuable foreign exchange which can then be used elsewhere.

The World Bank reports (November 2017) that Pakistan's growth remained strong in 2017, with agriculture and the services sector driving growth. Inflation remains under control. There are however growing fiscal and external imbalances which will need to be addressed so as not to impede the country's growth prospects. In general, there has been improving political stability over recent years.

The broad parameters of security remain as last year. There have been no major incidents, as the army is providing security to CPEC projects. We are most grateful to the Pakistani authorities at both federal and provincial levels for the constructive way in which they have supported and continue to support our project.

As a newcomer to the Board and to the Chairmanship, I would like especially to thank my predecessor, Anthony Scutt, for his valued contribution to the company as Chairman. I am grateful that we can continue to benefit from Anthony's experience as he has agreed to continue as a Director and for his resumption as Senior Independent Director. I would also like to thank Shahrukh Khan, our CEO, for his patience in introducing me to Oracle as well as Yves Mordacq who had to resign as a Director in October 2017 for personal reasons; his service was also valued. Andreas Migge joined the Board in August. As an investment banker, he brings cross border experience in the resource and energy sector and will be of much value to the company going forward. Our management is unchanged, and I would also like to acknowledge their major contribution to the company.

Above all I wish to thank our shareholders for their continued confidence, patience and support, enabling us to bring the project towards realisation.

**Mark Steed**  
Chairman  
3 May 2018

## Chief Executive Officer's Statement

### Securing our position



Our work in 2018 will concentrate on formalising agreements with our Chinese partners and to secure the finance the project requires.

Economic growth in Pakistan was estimated by the World Bank to be 5.2% in 2017 and is predicted to increase to 5.5% in 2018. Investment in the infrastructure and energy sectors currently underway will improve Pakistan's competitiveness. At the same time electricity shortfalls continue to restrict the country's development and in its 2017 State of Industry Report the National Electric Power Regulatory Authority ("NEPRA") states that 8,800MW of new generation is planned over the coming two years. Indeed in 2017 two major plants based on imported coal have been commissioned at Sahiwal and at Port Qasim, each of 1,320 MW capacity. Other projects under the China Pakistan Economic Corridor ("CPEC") in the Thar Coalfield, including our Thar Block VI project, once developed, will be major contributors to this increased generation capacity. In 2017, our Thar Block VI integrated mine and power plant project was elevated to the Priority List of approved CPEC projects confirming both Chinese and Pakistan Government support for the development.

NEPRA also states "Major power generation projects being developed under CPEC umbrella or otherwise need to achieve target completion dates, so that confidence of the national and international stakeholders, in Government of Pakistan energy policies, is not lost and the present momentum of economic turnaround is maintained." NEPRA also reports that the transmission and distribution networks need considerable upgrading to accommodate the new generation planned.

As reported last year, Oracle's subsidiary Thar Electricity Private Limited ("TEPL") made an application in January 2017 to the Private Power and Infrastructure Board ("PPIB") to secure a Letter of Intent ("LOI") which would enable a Generation Licence and Tariff application to be submitted to NEPRA as the next stage in the approval process. An updated application was submitted to PPIB following the announcement by NEPRA in July 2017 of a new Upfront Tariff for Thar Coal. The new Upfront Tariff regime also specified that all new power plants would have to employ supercritical technology.

Following discussions with our Chinese partners we entered a new Memorandum of Understanding with Sichuan Provincial Investment Group Company Limited ("SCIG") and PowerChina International Group Limited ("PowerChina") to progress the updated application to PPIB for the LOI for initially a 700MW supercritical plant with plans to increase it by an additional 700MW in second phase totalling 1,400MW at our Block VI site. It is to be noted that the increase in power plant size from 660MW to 700MW is based on heightened demand. The Chinese would take a majority shareholding in the project with SCIG having 78%, PowerChina 9.9% and Oracle 12.1% of the project companies with Oracle having its opportunity to increase its shareholding. A Consortium Agreement was submitted to PPIB to reflect this. In February 2018, PPIB confirmed that they would issue the LOI along with a Notice



Oracle with PowerChina

to Proceed so that the applications for a Generation Licence and new Upfront Tariff can be made to NEPRA within 3 months of the issuance of the LOI. Following this PPIB would issue a Letter of Support so that the Power Purchase Agreement ("PPA") can be finalised with the Central Power Purchasing Authority along with the Implementation Agreement with the Government of Pakistan which guarantees payment under the PPA. All of this will enable financial close to be achieved.

In addition to the regulatory processes in Pakistan, we will be finalising Engineering and Procurement Contracts ("EPC") with our Chinese partners along with Operation and Maintenance contracts for the construction and operation of the mine and power plant.

In March 2017, Mott MacDonald completed the Environmental and Social Impact Assessment ("ESIA") for the power plant and we submitted it to the Sindh Environmental Protection Agency ("SEPA") for approval. A public hearing was held on the site in July 2017 and was attended by the local community and other stakeholders; the proposal was well received. Also, in March 2017 Wardell Armstrong updated the original mine ESIA and brought it up to full international standards.

Work is continuing on site in preparation for development in particular to establish land ownership so that land acquisition and resettlement can be undertaken in accordance with the Resettlement Policy Framework published by the Sindh Coal Authority Energy Department in May 2015 which has been written to conform to international best practice. In March 2017, we conducted a census of the six villages in Block VI to establish population and livestock numbers. In addition, we are working to implement a Corporate Social Responsibility Programme ("CSR") to provide early benefits to the local community in terms of water, basic healthcare, education and veterinary support.

Our work in 2018 will concentrate on formalising agreements and contracts with our Chinese partners to bring the project to full implementation along with securing all the financing arrangements, including our equity funding.

I am most grateful to both the Provincial Government of Sindh and the Federal Government of Pakistan for their continuing support for developments in the Thar Coalfield, and our Block VI project in particular, which should be a major contributor to alleviating the electricity shortfall in the country. The Company again extends its thanks to the shareholders for their continued patience and support.

**Shahrukh Khan**  
Chief Executive Officer  
3 May 2018

# Risks and Uncertainties

## Managing our risks

These risks are detailed below, along with the key measures taken for mitigation.

Following the signing of a Memorandum of Understanding ("MOU") with its intended Chinese partners, Sichuan Provincial Investment Group Company Limited ("SCIG") and PowerChina International Group Limited ("PowerChina"), the immediate challenge for the Company is securing a binding Shareholders Agreement to move to financial close and project completion. There are risks following the signing of the Shareholders Agreement of not reaching financial close, principally in securing the further permission needed from the Pakistani Authorities and securing of finance. Also it will be necessary

to draw up Engineering, Procurement and Construction ("EPC") contracts for the mine and the power plant. Economic risk is protected, including cost increase, through the Government of Pakistan's cost-plus pricing mechanism.

One consequence of the Shareholders Agreement will be that Oracle transfers operatorship of the project. Whilst this should be no issue for project completion and ongoing operations, Oracle will need to assure that its influence is maintained in relations with Government and stakeholders in Pakistan.

There remains political risk, for example a falling out between Pakistan and China in some way leading to the tariff mechanisms, or overseas remittance of dividends and debt servicing not being honoured.

The Company has considered cyber risk and considers that at its present stage of development, cyber threat is containable within its normal control processes. The Company will be alert to the changing nature of this threat as the Company's business develops.

Risk	Mitigation
<p><b>Financial close risk</b></p> <ul style="list-style-type: none"> <li>Following the signing of a MOU with SCIG and PowerChina, the primary risk is bringing this Understanding to a binding Shareholders Agreement. The principal elements in this decision by the Company's Chinese partners are a satisfactory view of technical aspects of the project and of its legal and regulatory aspects.</li> </ul> <p><b>Likelihood:</b> Medium <b>Magnitude:</b> High</p>	<p>The Company has used world leading consultants in feasibility work, to ensure a fully technically sound project. Recognising that major coal development is new for Pakistan, the Company has worked closely with the regulatory bodies and with professional advisers within Pakistan to ensure an effective regulatory regime. Immediately neighbouring Block II achieved financial close in April 2016. Their experience so far supports the soundness of initial technical feasibility studies that have been carried out. Also the regulatory regime, as laid out, has been fully applied by the Authorities. Neither of these aspects should bear negatively on the Chinese decision to enter into a binding Shareholders Agreement.</p>
<p><b>Project completion risk</b></p> <p>The Block VI development comprises both a mine and a power plant. Various factors could give rise to delay in completion. These include:</p> <ul style="list-style-type: none"> <li>Delay in mine development either due to geological issues or project execution (e.g. equipment not available as planned)</li> <li>Power plant not developed as planned or fails performance tests</li> <li>Dewatering of mine does not work as planned or excess water cannot be effectively disposed of</li> <li>Transmission lines are not completed on time.</li> </ul> <p>The risks are increased by the inter-dependence of the mine and the power plant; the mine needs the power plant to be ready to commence full coal production and the power plant relies on coal from the mine being available to commence power generation. Power delivery to the grid relies upon the transmission facilities being in operation.</p> <p><b>Likelihood:</b> Low/Medium <b>Magnitude:</b> High</p>	<ul style="list-style-type: none"> <li>The Parties to the MOU intend to bring leading EPC contractors into the running of the project</li> <li>The transmission lines are at present under construction. The Company is in close contact with the relevant Government authorities regarding water management issues</li> <li>The Company will take out the normal suite of insurance policies</li> <li>As noted above, to the extent that delays lead to increased cost, these would be recoverable through the coal and electricity pricing mechanisms</li> <li>The project is on the Priority List of the China-Pakistan Economic Corridor ("CPEC").</li> </ul>
<p><b>Operating risk</b></p> <p>Technical issues, similar to those described under Completion Risk, may affect the operation of both the mine and the power plant. Interdependence is also a key issue in the operational phase; failure to produce coal as planned would constrain power generation and failure of the power plant to operate to the assumed load factor will constrain coal production.</p> <p>Water is an additional risk during production operations. Further hydrology work is planned before project completion, from which the hydrology dynamics will be come clearer. The mine will require dewatering, and water is required for the power plant process. Whilst the mine water production is expected to meet the power plant needs, the amount of dewatering needed and any imbalance in the water production and utilisation may cause additional cost pressures.</p> <p><b>Likelihood:</b> Low <b>Magnitude:</b> Low/Medium</p>	<ul style="list-style-type: none"> <li>As for Project Completion Risk, both the mine and the power plant will be operated by the same world leading contractors</li> <li>As for Project Completion Risk, the Company will take out the normal suite of insurance policies</li> <li>As for Project Completion Risk, to the extent that operational issues give rise to cost increases, these should also be recoverable through the coal and electricity pricing mechanisms</li> <li>If more water is required, either the Company will ask the Government to meet its obligations, or more water wells will be drilled.</li> </ul>

Risk	Mitigation
<p><b>Economic risk</b></p> <p>The economic performance of the Company could be affected by movements in international markets. These include:</p> <ul style="list-style-type: none"> <li>Exchange rate movements, amongst the four currencies, US Dollar, Remnimbi, Pakistani Rupee, Pound Sterling that affect the company</li> <li>Increased interest rates which, if arising during construction, would add to capital costs</li> <li>Fall in international energy prices encouraging importation either of imported coal, gas or oil</li> <li>US\$ inflation, which could raise capital and operating costs.</li> </ul> <p>The income streams of the mine and the power plant are based on two key agreements: the Coal Sales Agreement for sales of coal to the power plant and the Power Purchase Agreement for sales of electricity to National Transmission and Despatch Company ("NTDC"), under which the Internal Rate of Return is guaranteed by the Pakistani Government in US Dollar terms. Therefore at a project level the project is protected against adverse currency movements, e.g. a strengthening Remnimbi, which would increase the cost of Chinese equipment. At a corporate level, Oracle's flow of dividends is protected in US\$ terms, so there is a risk of loss or gain in £ Sterling terms. The project is also protected against adverse movements in interest rates and in US\$ inflation.</p> <p><b>Likelihood:</b> Low/Medium <b>Magnitude:</b> Low</p>	<ul style="list-style-type: none"> <li>Cost variances resulting from exchange rate movements and US\$ inflation should generally be recoverable through the coal and electricity pricing mechanisms</li> <li>The risk posed by further importation of coal or oil for power generation is not considered to be high given the large price differentials and the present lack of power plants. The savings in foreign exchange to the country of import substitution through local energy production are clear.</li> </ul>
<p><b>Financial risk</b></p> <p>The MOU signed with SCIG and PowerChina, two well financed Chinese companies, envisages equity funding of the project from the Chinese partners of up to 87.9% of the total. They will also leading discussions with Sinosure, the Chinese Export and Credit Agency, for the underwriting and placing of project finance.</p> <p><b>Likelihood:</b> Low <b>Magnitude:</b> High</p>	<p>Over 90% of the project's finance will be firmly available through the Chinese partners (both debt and equity). This should give enough confidence to incoming shareholders to allow the company to raise the balance of Oracle's share of equity. This view is supported by Brokers Brandon Hill Capital Limited and Peterhouse Corporate Finance Limited.</p>
<p><b>Political, Legal and Regulatory</b></p> <p>The Federal and Sindh Governments have demonstrated strong support for the integrated Thar coal mining and power plant development, and for maintaining the supportive regulatory and fiscal regime at present in place. Risks arise from:</p> <ul style="list-style-type: none"> <li>Change in regime</li> <li>Shorter term, the funding and completion of local infrastructure, including the power transmission line from the power plant</li> <li>Longer term, when investment has been made, adversely varying the fiscal regime, the lease terms or the royalty and tax rates, making foreign exchange available to meet debt servicing requirements and dividend payments</li> <li>Bureaucratic interpretation of regulations, including pricing mechanisms, also potentially leading to delay</li> <li>Security and terrorism, particularly as operations in Thar take on a higher profile</li> <li>Transfer of operatorship to Chinese partners and Oracle becoming a minority partner</li> <li>NGO activism.</li> </ul> <p><b>Likelihood:</b> Medium <b>Magnitude:</b> Medium/High</p>	<ul style="list-style-type: none"> <li>The shortage of power and the imperative to develop Thar would be clear to any incoming government</li> <li>Much of the planned major infrastructure is already in place</li> <li>Longer term, there are strong international forces to ensure that foreign investment is properly protected, i.e. CPEC and Investment Treaties with China and the UK. The Company will consider whether political risk insurance could be a cost effective mitigant</li> <li>Oracle has a strong working relationship with all relevant levels of Government, and will use its relationships to address potential bureaucracy and delay</li> <li>The Government has set up a special force with overall responsibility for security in Thar. Oracle is putting in place a comprehensive security plan, to complement Government agencies</li> <li>From the outset, Oracle has understood the need to act as an exemplary corporate citizen. Oracle has long established a Community Liaison Officer and will continue to foster good relationships with local communities. Oracle will work to ensure that it and its Chinese partners work with other developers of Thar Coal, for example Sindh Engro in Block II in joining the Thar Foundation, set up to coordinate welfare initiatives.</li> </ul>

## Corporate Social Responsibility The effects of reliable energy

Oracle Power PLC is a responsible corporate entity, and is continuing to apply international best practice to the Thar project. The company is aware of the key role it has to play in developing this pioneering project, in minimising the impact our operations can have on the natural and social environment and in creating opportunities for the local community.



Improvements and extension of the existing government primary schools in Block VI:

- Training of literate male and female community members for teaching
- Extension of the building to support more students.



Bi-annual hygiene and healthcare awareness campaign in all communities.



Awareness campaign on methods to improve livestock health and productivity in all communities.



Setting up water filter systems in all communities.



A compact link road to connect local villages and communities to the mine site access road proposed under project.

## Corporate Social Responsibility continued



### 1 - ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

The ESIA for the Power Plant was completed in 2017 by Mott MacDonald and submitted to the Sindh Environmental Protection Agency (SEPA) for approval in March 2017. A public hearing was held on the site in July which was well attended by the local communities who are supportive of the project.

Representatives from the local government, press and non-governmental organisations together with SEPA were all present. Mott MacDonald and Company representatives were present to answer questions and address concerns raised.

Also in 2017 the mine ESIA was updated and brought up to international standards by Wardell Armstrong International to align it with the power plant ESIA.



### 2 - COMMUNITY AND CONSULTATION

The company employs a full time Community Liaison Officer who engages on a regular basis with the local communities and keeps them informed of progress and developments on the site.

Prior to the public hearing in July a non-technical summary of the Power Plant ESIA was translated into the local language and distributed to the local communities to better inform them of the project proposals.

The communities main concerns remain:

- Access to water
- Primary healthcare
- Education for local children
- Employment opportunities
- Improvements to agriculture and veterinary services.

The company is confident that by continuing engagement and consultation the concerns of the local communities will continue to be addressed.



### 3 - RESETTLEMENT

A population census including livestock holdings was carried out by Mott MacDonald Pakistan in early 2017 as part of the Land Acquisition process. A land ownership survey will follow in accordance with the Government of Sindh's Resettlement Policy Framework in 2013 which sets out the formal process for land acquisition in Thar.

This work will be ongoing in 2018 to enable the land to be acquired prior to work starting on the site for the mine and the power plant. In the initial phase some 2000 people will be relocated within Block VI to facilitate development of the mine. New housing and improved water supply will be provided to all the affected persons.



### 4 - ORACLE SOCIAL DEVELOPMENT INITIATIVES

The aim of our social development initiatives is to improve the health, welfare and overall quality of life for the local communities in Block VI.

- The availability of improved drinking water along with a better supply for livestock is targeted
- A healthcare programme with emphasis on women's health is being instigated
- Education for all at local level will compliment new schools already under construction in the area
- An initiative to provide improved veterinary services has been undertaken
- New and improved roads into Block VI will facilitate communication and access to services in the area for all.



### 5 - BENEFITS AND OPPORTUNITIES

The development of Block VI will provide a long term sustainable future for local residents with the opportunity to improve overall health, welfare and living standards in one of the poorest areas of Pakistan.

Through long term local employment and education the community will have long term benefits as the Thar coalfield is developed. Development with care and consultation with those affected will ensure that the project benefits the local community as well as improving the overall economy of Pakistan with a secure and affordable electricity supply for years to come.

## Board and Senior Management

### Strengthening of the board



**Mark Steed**  
**Chairman**  
Year appointed - 2017

#### Relevant skills and experience

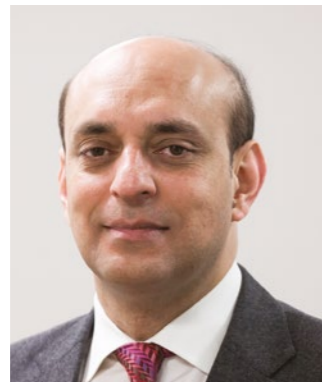
- Career in the field of international stock and commodity markets, the management of offshore hedge funds, corporate finance and trading in securities in emerging economies
- Set up various portfolio and fund management companies, in the roles of Chief Executive Officer, Chief Financial Officer and Compliance Officer
- Involved in the set up of Amstel Securities LLP, City Capital Securities Limited, Shard Capital Partners LLP and the Sion Hall Family Office.

#### Qualifications

- Member of the Institute of Chartered Accountants in England and Wales
- Member of the Chartered Institute for Securities and Investment
- Member of the Chartered Institute of Marketing.

#### Within the Company

- In addition to his role as Chairman, oversees corporate, financial and audit matters.



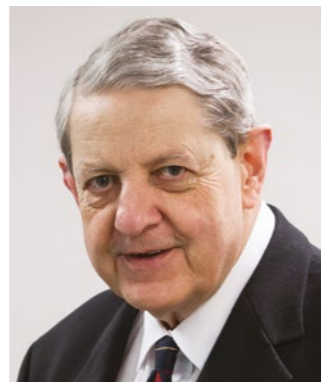
**Shahrukh Khan**  
**Chief Executive Officer**  
Year appointed - 2006

#### Previous appointments

- Project finance experience in the natural resource and infrastructure related sector, predominantly in the Middle East, South Asia and China
- Specialist expertise in large and complex projects, including project valuation and investment appraisal, feasibility studies and other project finance related services.

#### Qualifications

- BA in Business administration and Economics at Richmond, the American International University in London.



**Anthony Scutt**  
**Senior Independent Non-Executive Director**  
Year appointed - 2007

#### Relevant skills and experience

- Over 30 years financial management experience with Shell International Petroleum; worked in many parts of the world, including the Malagasy Republic, East and Central Africa, South Vietnam, Cambodia, the Philippines and Gabon
- Latterly Chief Internal Auditor of Shell UK
- Investment analyst, writer and investor.

#### Qualifications

- Qualified Chartered Secretary; Certified Internal Auditor with the US Institute of Internal Auditors.

#### Within the Company

- In addition to his role as Senior Independent Director, oversees corporate, financial, HR and audit matters.



**Andreas Migge**  
**Non-Executive Director**  
Year appointed - 2017

#### Relevant skills and experience

- Career in investment banking and private equity with a focus on energy and natural resources
- International background, having worked in the US, Europe, Asia and the Middle East
- International transaction experience, notably leading the acquisition of the power plants Lalpir and Pakgen in Pakistan, which was voted "Deal of the Year Asia"
- Founding investor and member of the sponsor team for the Reata Prospect, an on-going shale oil exploration project in the Permian Basin in the US
- Led investments in power projects in Iraq and coal mining restructuring projects in the US;
- Served in the Special Forces of the German Air Force.

#### Qualifications

- MBA from Yale University.

#### Within the Company :

- Oversees technical and business development matters.



**Simon Smith**  
**Finance Manager**  
Year appointed - 2013

#### Relevant skills and experience

- 25 years finance career in Shell
- Finance Director in Sierra Leone and in Egypt where he also deputised for the Chief Executive
- Worked in Shell's M&A unit, particularly on the sale of Billiton, Shell's Metals division, the sale of Shell's agrochemical interests and Shell's early expansion into eastern Europe
- Latterly headed up Group Finance HR.

#### Qualifications

- MA in Economics from the University of Cambridge
- Fellow of the Institute of Chartered Accountants in England and Wales.



**Brian Rostron**  
**Mining and Contracts Manager**  
Year appointed - 2011

#### Relevant skills and experience

- Mining Engineer with over 30 years' international experience and an expert on coal
- Chartered Engineer who has been responsible for the operational management of various coal mining companies with overall responsibility for production, financial performance, acquisitions and restructuring
- Director of Miller Argent South Wales Ltd, H.J. Banks Mining, Scottish Coal Company, Coal Contractors Ltd; Director General of the Confederation of UK Coal Producers.

#### Qualifications

- BSc in Combined Science (Geology and Economics) from Sunderland Polytechnic
- MSc in Mining Engineering from the University of Newcastle-upon-Tyne
- Member of the Institution of Materials, Minerals and Mining
- Fellow of the Geological Society
- Fellow of the Institute of Quarrying
- Member of the Institute of Explosive Engineers.



**Tony Everitt**  
**Company Secretary**  
Year appointed - 2013

#### Relevant skills and experience

- Chartered Accountant
- 10 years' experience gaining a wide range of accounting, taxation and auditing experience in an accountancy practice
- Owns his own accountancy practice where he continues to operate as a sole practitioner.

#### Qualifications

- BSc in Mathematics with Computer Science from Sussex University
- Fellow of the Institute of Chartered Accountants in England and Wales.



**Zaineb Ridha**  
**PA/Office Manager**  
Year appointed - 2011

#### Relevant skills and experience

- First UK eAdviser specialist
- Siebel 6/7 customer certified and was responsible for major projects from initiation to delivery, within the UK and globally. Some of these clients were, the Bank of England, Reuters, BP, Saudi Aramco, GlaxoSmithKline, J.P. Morgan and Goldman Sachs
- Involved in all aspects of the business.

#### Qualifications

- First class degree in BSc Software Engineering from University of Westminster.

## Company Information

Oracle Power PLC (formerly Oracle Coalfields PLC) is registered as a public company under English Law. Its shares are listed on the AIM market of the London Stock Exchange. Oracle Power PLC is incorporated and domiciled in England and Wales and its registered number is 05867160.

<b>DIRECTORS</b>	Mr S Khan Mr A C R Scutt Mr M W Steed (appointed 12.07.2017) Mr A Migge (appointed 02.08.2017) Mr Y Mordacq (resigned 30.10.2017)	<b>SOLICITORS</b>	Trowers & Hamblins LLP 40 Tower Hill London EC3N 4DX
<b>SECRETARY</b>	Mr T Everitt		HaiderMota BNR D-79, Block No.5 Karachi-75600 Pakistan
<b>REGISTERED OFFICE</b>	Tennyson House Cambridge Business Park Cambridge CB4 0WZ	<b>BANKERS</b>	Royal Bank of Scotland plc 1 <sup>st</sup> floor, Conqueror House Vision Park, Histon Cambridge CB24 9NL
<b>REGISTERED NUMBER</b>	05867160 (England and Wales)		
<b>AUDITORS</b>	Price Bailey LLP Chartered Accountants & Statutory Auditors Tennyson House, Cambridge Business Park Cambridge CB4 0WZ		Habib Bank AG Zurich Moorgate Branch Habib House 42 Moorgate London EC2R 6JJ
<b>NOMINATED ADVISORS</b>	Grant Thornton UK LLP 30 Finsbury Square London EC2P 2YU		Habib Metropolitan Bank Habib Bank Plaza I.I.Chundrigar Road Karachi-75650 Pakistan
<b>REGISTRAR</b>	Neville Registrars Limited 18 Laurel Lane Halesowen West Midlands B63 3DA	<b>PUBLIC RELATIONS</b>	Blytheweigh 4-5 Castle Court London EC3V 9DL
<b>BROKERS</b>	Brandon Hill Capital Limited 1 Tudor Street London EC4Y 0AH  Peterhouse Corporate Finance Limited 15 Eldon Street London EC2M 7LD		Fortbridge Consultancy 61 Monkton Street London SE11 4TX