

## **Management Discussion and Analysis Report**

The management of Al Kamil Power Company SAOG (AKPC) is pleased to present its report on the Company's performance, its future outlook, business structure and other matters of importance to shareholders.

### **Main Objects and Business**

Al Kamil Power Company SAOG (AKPC) is contracted under a Power Purchase Agreement (PPA) to supply electricity into the North Oman Transmission Grid. AKPC owns a 285 MW electricity generating plant near Al Kamil in the Sharqiya region of Oman and is the first private sector power plant in this region.

The formation of AKPC as an independent power producer is part of the Government's on-going privatisation strategy. The Company operates within agreed project documentation with different Government agencies and the Oman Power and Water Procurement Company SAOC (OPWP), a closed joint stock company held by the Government of Oman.

The Government of Oman stands behind the financial obligations of OPWP. The PPA with OPWP and the Natural Gas Sales Agreement (NGSA) with the Ministry of Oil and Gas (MOG) are valid until 30 April 2017.

The Supplementary Power Purchase Agreement with OPWP in the year 2010 to supply additional 14 MW of power during the Summer Months (May to September) for the years 2010-2012 ended at the end of September 2012. The consequent reduction of revenue has reduced the net income earned by the Company during 2013 as compared to the previous three years. Incidentally, the Company continued to have additional power generation capacity during the year 2013, the offer of which when made to OPWP, was declined.

Under the PPA, OPWP commits to pay AKPC Capacity Charges and Energy Charges in return for AKPC making available the electrical generating capacity and selling the electrical energy produced. The project agreements provide both revenue and cost assurance to the Company and its investors. A major source of revenue for the Company is the Capacity Charge, which is payable for all times the plant is available, based on minimum availability levels as defined under the PPA. AKPC is safeguarded under the PPA against RO/US\$ exchange rate movements and also against inflation. The actual level of power generation has no direct effect on the Company's net income.

Natural gas is received at the plant and burned in the gas turbines to produce power. It is supplied by pipeline from the Saih Rawl gas field, which also supplies gas to major industries in Sur. This energy drives the generator and electricity is produced. The electricity is then transformed up to 132 kV and supplied to the grid.

MOG is responsible for the supply of gas to the plant. In the case of non-availability of gas or gas not conforming to specifications, AKPC has to run the plant on fuel oil as required under the PPA and the NGSA. Under such circumstances, AKPC would be reimbursed by MOG for any additional costs arising as a consequence of running the plant on fuel oil and for any capacity income shortfall that may arise as a consequence.

Al Kamil Construction & Services LLC (AKCS) is contracted to operate and maintain the power station. AKCS, a company whose major shareholder is GDF Suez SA which, through its subsidiary, International Power plc has an Operation and Maintenance Agreement with AKPC for fifteen years. The operations and maintenance standards of the plant are based

on international best practice, in accordance with GDF Suez's policies and principles which in turn are derived from its experience in operating power generation plants worldwide.

The generating plant at the Al Kamil power station comprises three General Electric Frame 9171E gas turbines in open cycle configuration, together with related ancillary equipment required for fully independent operation. These turbines are designed to run on both natural gas and distillate fuel oil.

The maintenance team of AKCS comprises mechanical, electrical, control and instrumentation engineers, including technicians trained to undertake day-to-day activities on the plant. The routine maintenance of the plant and related apparatus is carried out in accordance with recommendations from the Original Equipment Manufacturer and "Maximo" maintenance management software tools have been installed in this regard. Major inspections and overhauls are contracted to specialist organisations, for example General Electric (GE) via a Long Term Service Agreement (LTSA) subsisting until April 2017. The over speed test of the gas turbine is carried out annually as recommended by GDF Suez SA.

Planned unit outages are arranged during the winter periods - according to the schedule agreed between AKPC and OETC - in order to maximise generation during summer months. GE's scheduled combustion inspections (at 12,000 Factored Fire Hours), hot gas path inspections (at 24,000 Factored Fire Hours) and major inspections (at 48,000 Factored Fire Hours) are all conducted during these planned outages.

During the year, GT1C combustion inspection was carried out in the month of March 2013. Typical Combustion Inspection activities are detailed below:

- ❖ Inspect and identify combustion chamber components.
- ❖ Inspect and identify each cross fire tube, retainer and combustion liner.
- ❖ Inspect combustion liner for TBC spallation, wear and cracks. Inspect combustion system and discharge casing for debris and foreign objects.
- ❖ Inspect flow sleeve welds for cracking.
- ❖ Inspect transition piece for wear and cracks.
- ❖ Inspect fuel nozzles for plugging at tips, erosion of tip holes and safety
- ❖ Inspect all fluid, air, and gas passages in nozzle assembly for plugging, erosion, burning, etc.
- ❖ Perform visual inspection of first-stage turbine nozzle partitions and boroscope inspect turbine buckets to mark the progress of wear and deterioration of these parts.
- ❖ Perform boroscope inspection of compressor; visually inspect the compressor inlet and turbine exhaust areas, checking condition of IGVs, IGV bushings, last stage buckets and exhaust system components.
- ❖ Verify proper operation of purge and check valves. Confirm proper setting and calibration of the combustion controls.

The following are other major preventive maintenance activities undertaken by AKCS during 2013:

- ❖ Chemical analysis and condition monitoring of the transformer oil, as per the recommendation of Laborelac GDF Suez, was routinely undertaken and values obtained were determined to be satisfactory.
- ❖ Under the transformer monitoring programme, Infra-Red Survey test was carried out.
- ❖ The 132 KV equipment insulators were regularly washed by demineralised water.
- ❖ The safety valves of pressure vessels were periodically tested.

- ❖ The turbine bearing oil analysis was done at suitable intervals and turbine and generator water quality was monitored through lab tests.
- ❖ Major maintenance of gas turbine battery charger system was carried out.
- ❖ The fire equipment was tested for availability and readiness on weekly basis. The emergency diesel generator set was tested on bi-weekly basis. Black Start capability was tested by starting one unit with Auxiliary supply fed from the DG set. All routine operational checks were done at every shift.

AKCS has been certified with ISO 9001 for excellent quality management, ISO 14001 for excellent environmental management, and OHSAS 18001-2007 for outstanding health and safety management. The Company and AKCS are both committed to achieving the best possible health, safety, environmental and quality performance standards. The management focus is to emphasise a health and safety culture in every aspect of its operations. The Company believes that all workplace accidents and injuries are avoidable. As such, it encourages safe behaviour and the right attitude in order to deliver zero accidents and zero incidents. The periodic checking of lifting equipment, safety valves, measuring instruments were undertaken through external authorized agencies.

Major plant maintenance jobs planned for the year 2014 are:

- ❖ Hot Gas Path Inspection of Gas Turbine 1C.
- ❖ Generator testing for Gas Turbines 1A, 1B and 1C.

As at December 2013, the plant completed 3,818 days of operation without a lost time accident.

## **Health Safety and Environment**

The plant has been certified for OHSAS 18001- 2007 - for Health & Safety Management System. The annual safety audit is conducted by external auditors. The health and safety training and awareness programmes conducted by AKCS during 2013 included:

Fresh Eye: A behaviour-based process that stimulates safety awareness in the work place. The programme coaches and mentors the employees at the work place to ensure that each person takes responsibility for his or her actions and assists in fostering this attitude among colleagues at the work place.

Take Five: A programme that involves personal hazard identification at the place where work is to be carried out.

Safety walk and audit: A programme that seeks continual health and safety improvements among the employees.

Toolbox talk: This is a communication and information sharing forum to discuss various aspects of the work with the ultimate aim to improve health and safety at the work place.

Emergency mock drill: A programme that tests the preparedness of employees to respond to all types of plant emergencies.

Peer Review: Peer Review of Safety rules is organized among different power stations of the group to objectively review the safety rules implementation and share best practices.

H&S Networking Group: Networking group is set up by the corporate H&S to inform, share and monitor H&S programs.

Station staff and contractors are educated through safety and environment induction, dissemination of corporate information and Safety Communication notes and toolbox talks. Operational incidents occurring in other power stations of GDF Suez and elsewhere in the world are shared promptly. The lessons learned and actions initiated to avoid such incident at the concerned power stations are reviewed. Further, monthly health and safety and environmental meetings, in the presence of Chief Executive Officer of AKPC, are conducted. An incentive scheme has been designed to encourage the operational staff to suggest ways and means to improve safe and hazard free plant operations.

The annual health checkup is undertaken for all O&M staff. The first aid training is conducted for new employees and refresher training is imparted to the existing staff. Specialized H&S certified courses like NEBOSH and IOSH are planned for selected staff.

The highest standards of Health, Safety, Environment and Quality Management are strived in the plant's operations. M/S Parsons Brinckerhoff, auditors appointed by Authority for Electricity Regulation, conducted Health and Safety audit of the plant operations during the year. The auditor's found Al Kamil plant compliant with the health and safety requirements stipulated in the generation license. The auditor's few suggestions for further improvement in health and safety standards are being implemented.

The company submits monthly reports to Ministry of Climate Affairs on air and other emission related parameters. All the reports have confirmed the plant's adherence to the strict emissions norms. The plant has secured renewal of environmental certification for ISO 14001 through an external annual audit conducted by DNV. The company sends monthly report to the Ministry on air emissions and other parameters. There is no environmental issue of concern as on date. The gas turbines are equipped with DLN1 (dry low Nitrogen Oxide) technology and the same functioned satisfactorily during the year.

All operating staffs are trained for emergency preparedness tests. The emergency mock drill is conducted 3 times a year. In addition to this, business continuity mock drill is conducted once a year to check the preparedness to run the business in the event physical access to power station is not possible due to fire or unforeseen event. All shift charge engineers and operations engineers are certified first aiders. The firefighting training is being imparted to operating staff every year. The fire fighting equipments are tested for preparedness on weekly basis. The emergency diesel generator set is tested on bi-weekly basis. All routine operational checks are conducted at every shift. The plant successfully carried out the last mock emergency drill during 2013 in association with Civil Defense and Royal Oman Police.

### **Human Resources – training and career development**

Training values established by the Company are primarily aimed to ensure all the employees perform their tasks in the most efficient and safe manner. The Company is duty bound to empower qualified Omani Nationals acquire better-quality engineering and related skills and take up higher responsibilities in operating and maintaining the Plant. To this end, since inception, the strategy of the Company has been to train and develop qualified Omani staff to take up the responsibilities and replace the expatriate staff, in due course. A skill matrix is prepared for all disciplines in the Plant operation and maintenance for guiding the Omani staff for future assignment. Each employee is encouraged to discuss and put together his career development path. Annual performance review of each employee includes assessment of their career growth.

For the year 2013, the PPA required the Company to have on its roll 65% staff who is Omani Nationals. Presently, the Company has fully adhered to this requirement.

Significant training programs by external trainer conducted during the year were:

- Operation and maintenance of gas-based power station conducted by Laborelec, Dubai
- 'Safety Controller' and 'Designated Person' training
- IOSH Managing Safely training
- NEBOSH - Managing Safely - training
- First Aid basic and refresher training
- Chemical & Manual handling training.

## **Business Income and Cost**

Operating revenues incorporate Capacity Charges and Energy Charges which are recovered on a monthly basis from OPWP. Revenues are indexed to the RO/US\$ exchange rate and inflation.

Capacity Charges are payable for each hour during which the plant is available for generation. The Capacity Charge is the total of:

- ❖ an investment charge covering capital expenditure and all related costs of the project such as tax payments, debt service and return on capital;
- ❖ a fixed operation and maintenance charge covering fixed operation and maintenance and all related costs to the plant; and
- ❖ a new industry charge providing compensation for Sector Law costs.

Energy Charges are payable for the energy generated in response to despatch requests issued by OETC. The Energy Charges are the total of:

- ❖ variable operating costs of generation;
- ❖ fuel costs: based on an agreed heat rate of natural gas consumption to produce the electrical energy delivered at a specified efficiency; and
- ❖ start-up charge: payable to AKPC for the costs of fuel for any starts in excess of 100 per year for each gas turbine.

A significant operating cost of the power station is the fuel required to operate the gas turbines. AKPC is required to pay for the gas consumed for the generation of power in accordance with the NGSA. However, the fuel charge element of the PPA allows a full pass-through of the gas price to the extent that electricity is generated with the plant efficiency detailed in the PPA.

AKCS is paid a fixed and variable fee for the operation and maintenance of the station for the duration of the PPA. This fee covers fixed operational expenses including expert services and the maintenance of mandatory spares for the plant. The actual variable energy charge received from OPWP under the PPA based on the actual energy delivered is paid to AKCS as a variable fee.

## **Future Outlook, Investment Opportunities and Obstacles**

- ❖ OPWP has communicated to the Company the possibility of extending the PPA of Al Kamil Power Company up to the end of 2020. The negotiations with OPWP on the terms and conditions in this respect have commenced. AKPC will remain actively and constructively engaged in this process with a view of extending its PPA in a manner which is beneficial to all stakeholders
- ❖ The Company has been informed of the possibility of reduction in the demand for power in the coming years, more particularly, after the commissioning of the power plant at Sur. However, as informed earlier in the report, the actual level of power generation has no direct effect on the net results of the Company.
- ❖ At the request of OPWP the Company has offered to generate additional 10 MW power during the months of May to July 2014. A final decision in this regard from OPWP is awaited. The Company believes that the power plant has additional power generation capacity. If agreed by OPWP, the additional generation capacity income will enhance the net income of the Company for 2014.

- ❖ Efforts are in progress to refinance the Company's project debt. If these prove successful, the Company's cash flow will see significant improvement with a future possibility of higher dividend payments.
- ❖ The management is optimistic about the future of AKPC. Recognising that the long-term future of AKPC depends upon its efficient operational base, management will continue to focus on ensuring high levels of plant availability whilst closely controlling overhead costs.

## Risks and Concerns

### Loss of Availability due to Mechanical Breakdown

The principal risk to AKPC is the plant being unavailable due to mechanical breakdown. In order to mitigate this risk, AKPC ensures that AKCS operates and maintains the plant in line with AKPC policies, principles, directives and best practices in the industry.

### Loss of Availability due to Accidental Damage

In accordance with industry best practice, AKPC ensures that adequate insurance policies are in place to protect the business against any loss of property and loss of income arising from accidental damage.

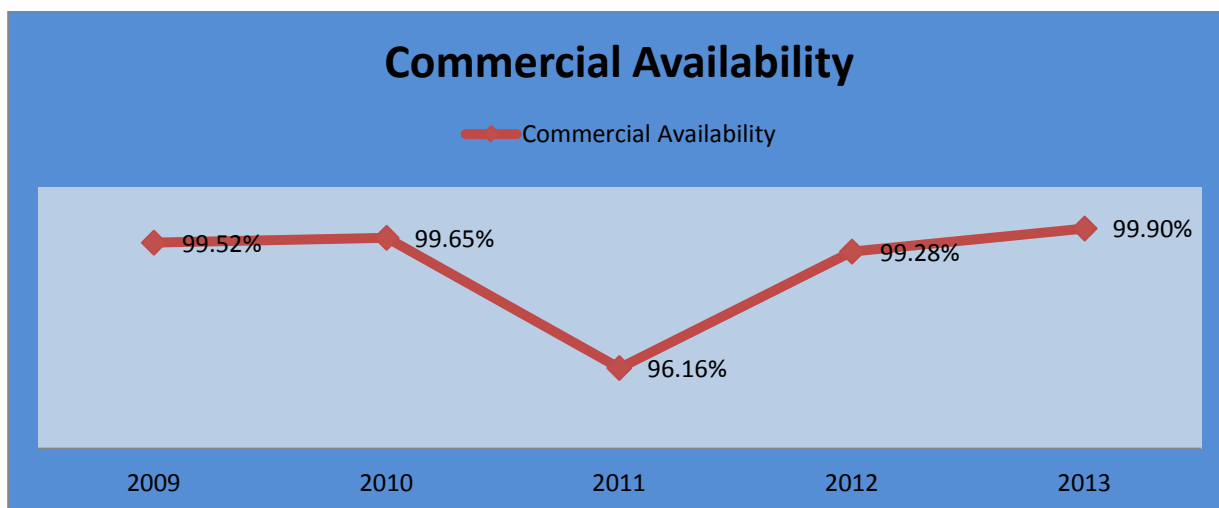
### OPWP Payments

OPWP has settled in full all invoices within the agreed credit period.

## Financial and Operational Performance

### Plant Performance

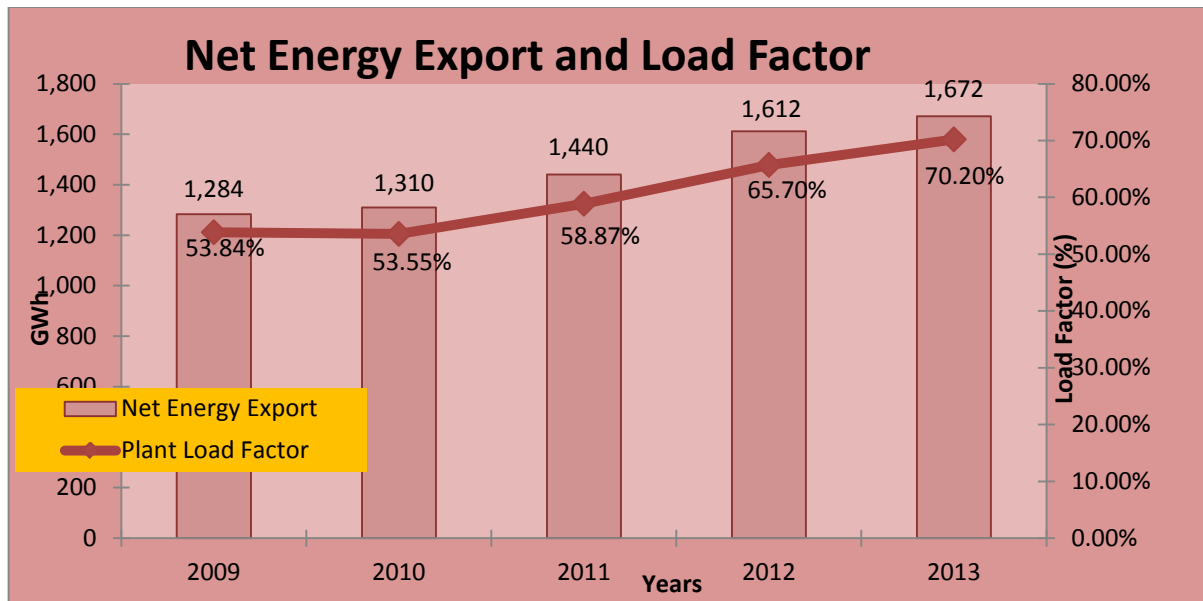
The plant operated extremely well throughout the year in compliance with OETC instructions with a commercial availability of 99.90%. The following chart displays the performance of the Company over the last five years:



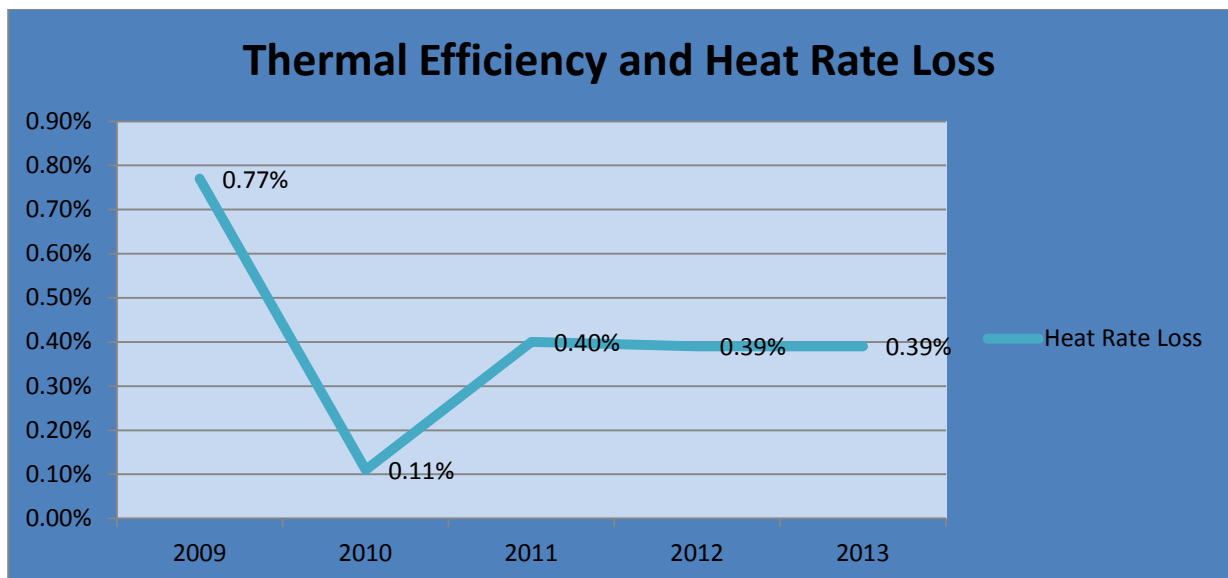
With an average plant load factor for 2013 of 70.20%, the plant achieved the highest power generation and plant load factor since the inception. Nonetheless, the plant continues to operate at a sizeable unutilised capacity. During the year, the plant generated 4% more

electricity compared to 2012. The following graph explains the trend witnessed in the plant's power generation over the last 5 years:

**Plant Performance 2009-2013**



Thermal efficiency describes the amount of fuel required to generate a unit of electricity. An efficiency increase translates into less fuel, which is used to produce the same unit of electricity. In short, improvement in thermal efficiency translates into lower heat rate loss which financially benefits the company. The Company strives to enhance thermal efficiency and minimise heat rate loss. The following graph illustrates the results of the efforts to reduce the heat rate loss over the last 5 years:



During the year, the annual performance tests carried out in the presence of OPWP, the guaranteed capacity of the power station was successfully demonstrated.

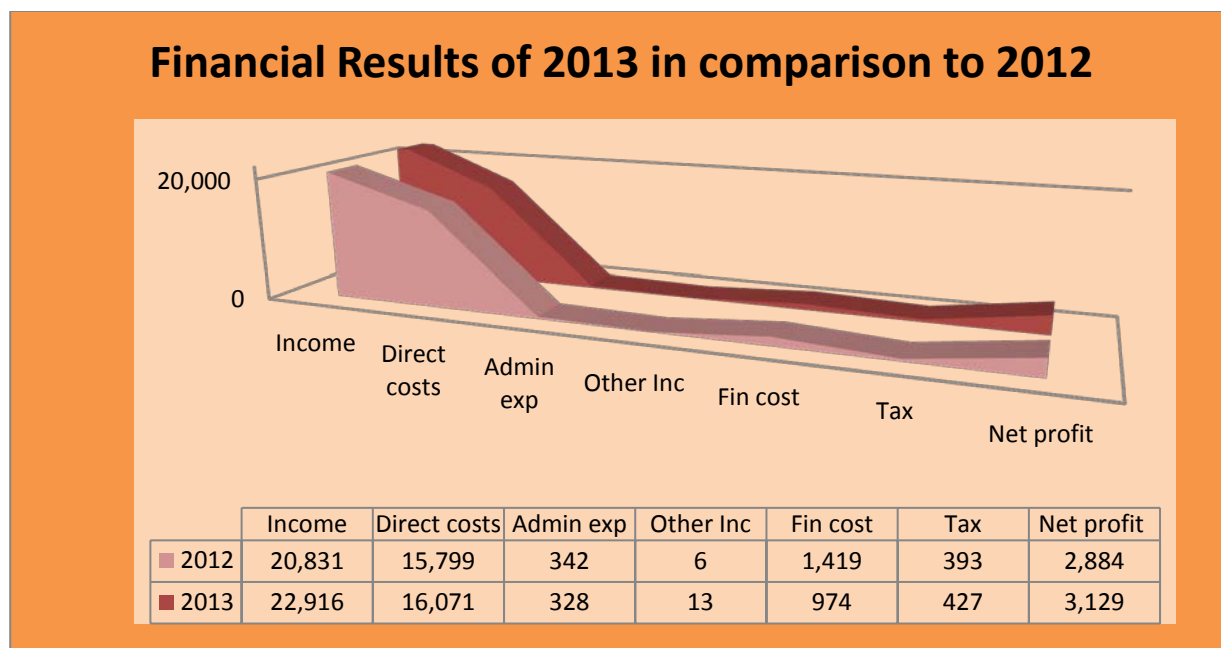
### Financial Performance

The financial performance indicators used by the Company address two key aspects of the business - its profitability and its cash generation. Power generation is a capital intensive

business which necessitates the close monitoring of costs in order to achieve our targeted profits. The ultimate goal is to provide a fair return for our shareholders.

Revenue and cost analysis for 2013 (as compared to 2012) are displayed in the following chart:

(Amounts in RO'000)



The major operational matters having a bearing on the financial results of 2013 when compared with 2012 are highlighted below:

1. As the Agreement with OPWP to avail of the additional 14MW power generation capacity of the Company ended in 2012, there was a reduction of about 0.190 million (US\$ 0.495 million) in the capacity income earned by the Company.
2. A 4% increase in power generation during 2013, as compared to 2012, boosted energy income. However, as energy income is a pass-through income for the Company, any increase in the energy income has no impact on the net profit for the year.
3. The plant suffered a total forced outage of 27 hours, clocking a 99.9% commercial availability during the year 2013 as compared to 190 hours of forced outage and 99.28% availability during 2012.
4. Close monitoring and control of general and administrative costs ensured that these were lower than previous year.
5. The Company successfully refinanced the unsecured debt facility availed from BankMuscat with a secured medium term loan facility from National Bank of Oman at a lower rate of interest and thereby achieving savings in interest cost.
6. The finance costs were lower by 31% during 2013 as compared to 2012 on the back of scheduled loan repayments during the year, refinancing BankMuscat loan, lower LIBOR rates and further, more importantly, as the company's lenders failed to invoke Market Disruption Event clause of the Loan Agreement which had since 2009 forced the Company to pay extraordinarily high interest cost.
7. Finally, the Company earned 8.5% higher profit during 2013 as compared to 2012 resulting in handsome earnings per share of 325 baizas.



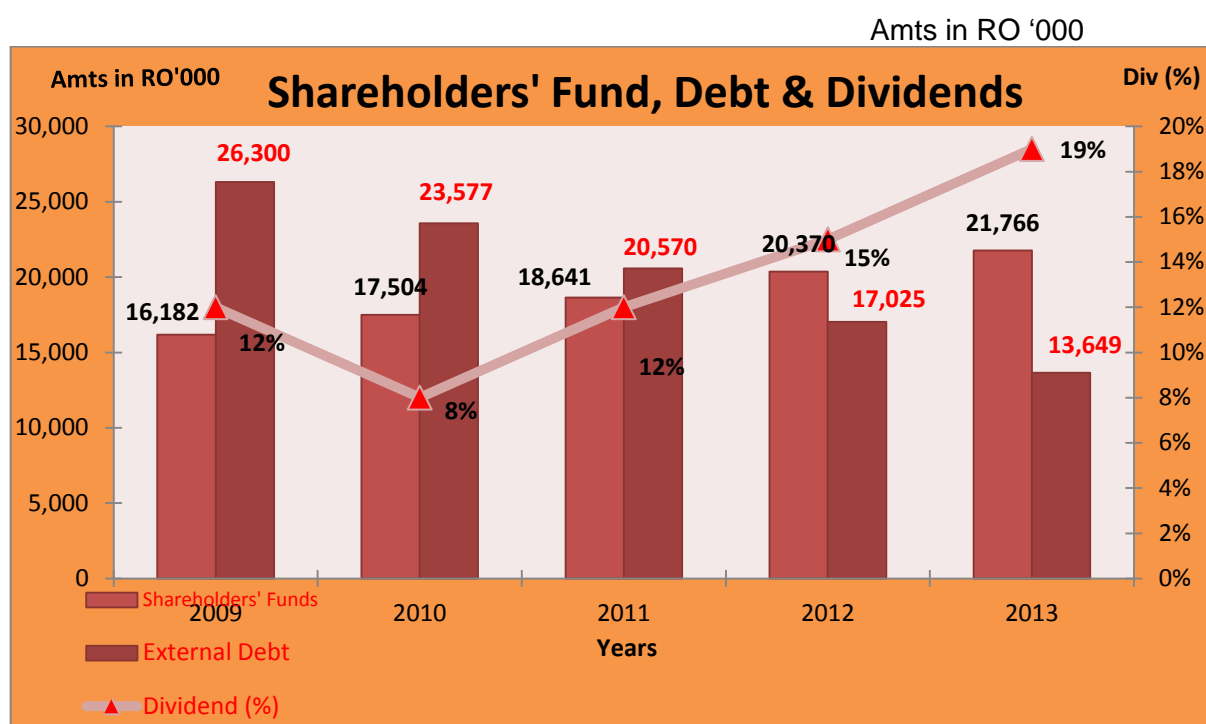
### Summarised Cash Flow:

	(Amt RO '000)	
	2013	2012
Cash from OPWP & others	20906	20831
Cash paid to suppliers and employees	(14,651)	(13,737)
Interest paid	(984)	(1,393)
Net cash from operating activities	5,271	5,701
Net cash used in investing activities	(552)	(988)
Repayment of loan	(3,376)	(3,545)
Dividend payment	(1,733)	(1,155)
Net increase in cash and cash equivalents	(390)	13
Cash and cash equivalents at the beginning of the year	1,419	1,406
Cash and cash equivalents at 31 December	1,029	1,419

The following are the highlights of cash flow for the year 2013:

1. Although during 2013 the overall cash inflow from OPWP remained at previous year's level, due to higher energy income, which is mostly a pass-through income, the cash outgoings during 2013 were substantially higher than 2012. Consequently, in spite of lower interest cost incurred during 2013 as compared to 2012, the net cash from operating activities during 2013 was lower than 2012.
2. However, the improved net income and cash flow position enabled the Company to increase dividend payout during 2013.
3. The Company is pleased to announce that it met all obligations under its bank covenants.

The following graph explains the movement in shareholders' equity and amplifies the ramping up of the loan instalment payments and its impact on dividend payout.



The Board of Directors has proposed a final dividend of 10% in respect of the financial year of 2013.

Finally, earnings per share (EPS) are a measure of the overall profitability of the Company. It is defined as the profit in Baizas attributable to each share in the company, based on the net profit for the year, after tax. The calculation for EPS is shown in Note 26 within the financial statements. The EPS for 2013 was Baizas 325, 8.33% increase over the previous year of Baizas 300.

The Company conducts no other business in the Sultanate of Oman or outside and has no subsidiaries.