



# Sustainability Report

2014 | Enduring Progress



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



**King Salman bin Abdulaziz Al-Saud**  
The Custodian of the Two Holy Mosques



**Prince Mohammed bin Naif bin Abdulaziz Al-Saud**  
Crown Prince, Deputy Prime Minister  
and Minister of Interior



**Prince Mohammed bin Salman bin Abdulaziz Al-Saud**  
Deputy Crown Prince, Second Deputy Prime Minister  
and Minister of Defense

Renewable power portfolio grew to more than **1 GW** as of Jan'15, **6.4%** of total capacity

Desalinated Water exported: **47 million m<sup>3</sup>**  
Commercial availability: **93%**  
Dispatch: **2 million m<sup>3</sup>/day**

HSE performance sustained  
**LTI rate of 0.22**  
supported by no fatalities, fines or environmental pollution incidents

## Leadership Statement 1



## About ACWA Power 3

Sustainability in Our Culture 4



Assets & Operations 5

## What Is Important and Why 9



## Our People 11



## Our Business 13

Financial Performance and Highlights 13

Risk Management 14



Corporate Governance and Social Responsibility 15

Socio-Economic Impact 17

Community Investment 19



Local Engagement and Support 21

Electricity delivered **59,018 GWh**, **+6.4% yoy**, commercial availability: **93%**

**97%** localisation of employees for international operations (excluding KSA & UAE)

Total power asset portfolio (under development, in construction and operation) increased to **15,120 MW**

Geographical span increased to **12 countries** with **7 offices**

Lowest in the world pricing offer of **US\$ 5.84/kWh** for utility scale **Photovoltaic** for Phase 2 of the Mohammed bin Rashid Solar Park, UAE

Founding sponsor of the **Namaa Al Manawara initiative** in Medina, KSA for Entrepreneurs and SMEs

Social Responsibility in Saudi Arabia 23

## Assets Development, Management & Performance 25



## Business & Project Development 27



Business Development Performance 28

Climate Action and Renewable Energy 29

## Asset Management & Assurance 31



Asset Performance 31

Portfolio Assurance 35

HSE Management and Performance 36



GHG Emissions 41

## Where to From Here 43



HSE Data 45

Terms and Abbreviations 47

GRI Index 48

**2,140 hours** of video conferencing in 6 months

**21 community** based projects with investment of **SAR 6.75M**

Carbon intensity of electricity **525 kgCO<sub>2</sub>/MWh**, **-2.4% yoy**



# Leadership Statement

It is our pleasure to welcome you to ACWA Power's first Sustainability Report. This Report is an opportunity to reaffirm our sustainability commitments and demonstrate performance to our employees, partners and shareholders, and the customers and communities we serve.

With operations in 12 countries, sustainability and corporate responsibility are an integral part of our business. Our development strategy is inspired by our mission to respect people, respect the environment, and create reliable and energy-efficient assets that enhance communities by contributing to shared values.

Sustainable development has been a corner stone of our operations since 10 years ago, and over the past decade we have pushed ourselves to improve performance in many areas, as detailed in this Report. As a result, we have now created a solid foundation and company culture on which to build further improvements. While the triple bottom line advances that we aspire to are challenging, we remain confident that they are achievable.

ACWA Power is financially strong; we have demonstrated continued growth with commensurate business success. It is our vision that the ingenuity and entrepreneurship of the private sector can make electricity and desalinated water available in a reliable manner to support the social development and economic growth of nations. This, together with our mission of reliably delivering electricity and desalinated water in bulk, at the lowest possible cost, is driving us to pioneer new ways of doing business.



**Paddy Padmanathan**  
President and CEO



**Thamer Al Sharhan**  
Managing Director

## Ensuring Compliance

ACWA Power's first and central sustainability priority is to ensure compliance with all relevant legal obligations and to ensure the safety of our employees. Ensuring that our people and the entire organization behave in accordance with our Code of Governance and that our facilities demonstrate legal compliance and avoidance of health, safety, social and environmental (HSSE) impacts are the cornerstones of sustainability and good business practices.

ACWA Power's ability to demonstrate performance on HSSE, governance, ethics and corporate responsibility is seen as a de facto requirement for our license to operate and is a necessity to our stakeholders. For example, all our projects, as has been true since our first Independent Power Project (IPP), must

meet World Bank/IFC Environmental and Social standards in order to enable funders to comply with their obligations under the Equator Principles.

ACWA Power's sustainability strategy has three priorities:

- Ensuring we not just meet but surpass legal and regulatory compliance requirements
- Driving socio economic development by creating shared value
- Championing a sustainable future for the power and desalination sectors

## Driving Socio-Economic Development

Our next sustainability priority is to support socio-economic development through our business practices via our value chain in the countries, regions and communities where we operate. We ensure that our corporate social responsibility programs are integrated with our operational investments, and as such are witnessing the benefits and impact of this approach as demonstrated by the 26 projects presented in this Report. We focus on education and health services; training & skills development; in order to meaningfully support local people, communities and entities.

Local contractors and suppliers are integral to our sustained success as they take on a large share of the works we realize the business benefits provided by their cultural insights and knowledge, which mutually supports value retention in the regions around our assets.

The objective is to expand internationally through creating lasting value for all stakeholders, including our direct shareholders, our business

partners and local communities. Our contributions and efforts focus on making a significant positive difference to the lives of people around the world – now and for generations to come.

## Championing a Sustainable Future

The third priority is championing change and focusing our sector's debate on correctly valuing the true cost of generation to serve the different layers of the daily electricity demand curve. This will ensure the most appropriate fuel mix, including the adoption of renewable energy given that renewable energy has become increasingly cost competitive compared to fossil fuel alternatives, for certain components of the daily need.

Carbon is dominating the agenda of the international power industry. Carbon emissions reduction plans must begin with preventing emissions by harnessing renewable energy sources. ACWA Power has fast-tracked our renewables

portfolio, such that between mid 2014 and the start of 2015 we secured an increase in our renewables capacity of 770 MW to take the total to 1,038 MW.

This comprehensively demonstrates our commitment to renewable energy.

In parallel, we are increasing the efficiency of old and new facilities to reduce fuel consumption and gain more value out of the fuel consumed. Whenever we use fossil fuels we strive to deliver maximum efficiency of fuel utilization, thus reducing carbon emissions as per the performance of our Rabigh 2 and Qurayyah IPPs. In 2014, our asset portfolio avoided emitting 857 ktCO<sub>2</sub> of which 257 ktCO<sub>2</sub> was ACWA Power's share (based on net equity shareholding) as a result of technology advances and improved efficiency over the year.

In 10 years from now, we know that the opportunities and challenges of sustainable development will continue to inspire our business. We will still be driving fundamental change in our industry through efficiencies and reduction in the carbon intensity of electricity and desalinated water production. We will also be a larger company, making a broader socio-economic contribution in the countries and communities in which we operate. We see this not only as the best path forward, but also as the only path to future sustained success. ■



Noor 1 IPP, Morocco

# About ACWA Power

ACWA Power's business model is focused on producing and selling electricity and water in bulk to creditworthy Offtakers<sup>1</sup> (State utilities and industrial majors) through long-term contracts. Offtakers are ACWA Power's sole customers and the beneficiaries of our products and services. Through development or acquisition, ACWA Power owns, operates and maintains an international portfolio of electricity-generation and desalinated-water plants.

ACWA Power has matured from a start-up in 2004 to a multi-billion-dollar corporation and has consolidated as a lead developer, investor, co-owner and operator. Our asset portfolio projects in construction and operation as of December 2014, has an investment value in excess of US\$31 billion, with a capacity of 15,120 MW of power and 2.47 million m<sup>3</sup>/day of desalinated water that provides employment to over 2,850 people across 12 countries.

We have attracted, recruited and developed a multinational team of professionals with a diverse range of skills. These individuals and teams have been vital in establishing, operating and sustaining the business and effectively monitoring and managing our risks.

Building on our success within the Kingdom of Saudi Arabia (KSA), where we won the most of the first tranche of Independent Water and Power Projects (IWPP), ACWA Power has expanded its operational reach to selected international markets, covering the Gulf Cooperation

Countries (GCC), Jordan, Turkey, Morocco and Southern Africa, plus Vietnam, our first foothold in our next target market of Southeast Asia. ACWA Power has also extended its client base from government organizations to include private sector customers.

## Shareholders

ACWA Power, incorporated in the Kingdom of Saudi Arabia, is owned by a group of prominent shareholders comprising Sanabil Direct Investment Company (owned by the KSA Public Investment Fund), the Saudi Public Pensions Agency, plus eight Saudi industrial and financial conglomerates). During 2014, the International Finance Corporation (IFC) invested in ACWA Power and became the organization's third major institutional investor. ACWA Power's 10 major shareholders now represent a wide range of organizations that foster continued stabilization and growth.

## Organizational Developments in 2014

The material changes during 2014 were primarily related to ACWA Power's continued growth and maturation, as is expected of an ambitious and successful organization. In addition to the IFC investment, the construction and commission of four facilities progressed in parallel with development, bidding and acquisition on more than 10 projects. We opened

an office in Hanoi, Vietnam, bringing the total to seven and staffing across these offices increased from 165 at the end of 2013 to more than 220 direct employees at year-end 2014. Toward the end of the year, a group-wide CSR Committee and structure was formalized (see page 14 for details). There were no other significant changes in overall management structures.

### ACWA Power today:

- Head quartered in Riyadh supported by offices in Dubai, Istanbul, Rabat, Johannesburg, Beijing, and Hanoi with Cairo planned for early 2015
- A customer base that includes state utilities and industrial majors located on three continents serving several million consumers
- An employee base representing 30 nationalities working in 12 countries
- A broadening fuel mix comprising a range of renewable and non-renewable technologies



## Sustainability in Our Culture

ACWA Power's values of Integrity, Rigor, Fairness, Ingenuity and Diversity are embedded in employees' day-to-day practices to bring to life the spirit of sustainability throughout our organization. Employees have adopted these ideals and incorporated them into their actions and decisions, which results in their organic application and penetration through the value chain. We actively pursue our corporate vision and mission which assure the alignment of our values with those of our shareholders and stakeholders.

Sustainable development is an integral part of our business model and is rooted in our culture. Our investments in projects have a 20 to 25-year life cycle, and a significant portion of the return on our investment arises in the second half of the investment tenure. Therefore, sustained performance is a key company priority, as it is in all interests to provide service continuity and to ensure customers' satisfaction over the long term. The business model is solidly prefaced on local prosperity and regional development, with corporate social responsibility principles being a driving force behind corporate strategy and decisions.

ACWA Power shares a vision with the people in whose countries we are investing, which is to create long-term, sustainable socio-economic value that in turn provides mutual benefits. In this regard, we invest in countries with high-growth potential spanning at least the next 25 years. Moreover, we steer our operations and practices with end consumers in mind; therefore, community health, education, prosperity and well-being are incorporated into our targets, which in turn support the development goals of local governments and communities.

This practice not only maximizes economic value for local economies, but also financially supports local community-development activities. These efforts have earned ACWA Power a reputation as a sustainability leader (see page 41) and we are becoming the partner of choice in our current and prospective markets.

Throughout this Report, we illustrate with the aid of case studies how our strategy, processes and performance have embedded our culture and values into our two primary functions of Business & Project Development and Asset Management & Assurance. ■

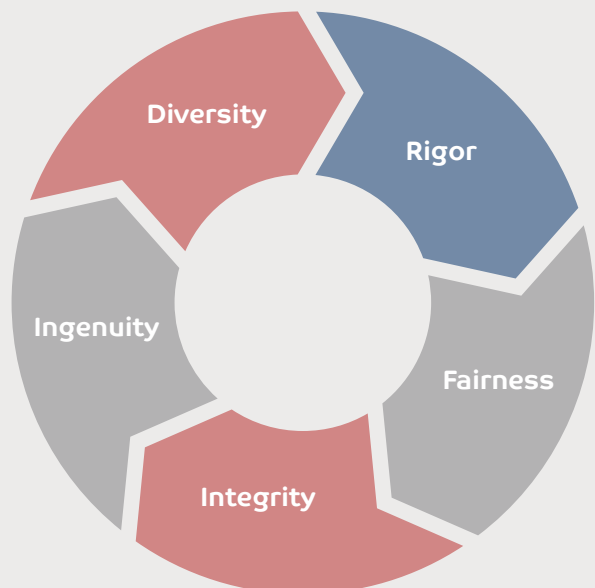


Noor 1 IPP, Morocco

### Strategy and Mission



### Core Values



# ACWA Power's Assets

ACWA Power's asset portfolio comprises 25 assets in 12 countries of which we are the managing shareholder and lead developer in all but two of these facilities.

Our strategy is to only participate in projects in which we are the lead partner with majority or shared control. This structure enables ACWA Power to retain involvement with the facilities' management and operations that are carried out by each asset's Special Purpose Vehicle Project Company (ProjectCo).

ACWA Power closely monitors and supports each of the asset-specific ProjectCos, focusing on their business performance, operations and

maintenance, key persons, and risk management.

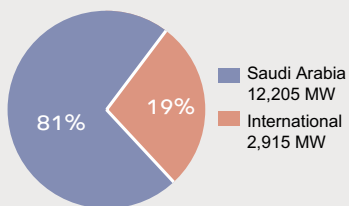
In 2014, ACWA Power's asset portfolio continued to grow to reach 15,120 MW, 2.47 million m<sup>3</sup>/day of desalinated water production and 1,230 tonnes per hour of steam.

Our assets use a range of fuels, including oil, gas and solar energy as illustrated below. Heavy crude oil is used in Shuqaiq, heavy fuel oil in Rabigh 1 Independent Power Project (IPP) & Rabigh IWSP, whereas Shuaibah IWPP uses light crude oil. The Central Electricity Generating Company (CEGCO) uses heavy fuel oil, diesel and gas. Marafiq IWPP, Qurayyah IPP & Barka IWPP use

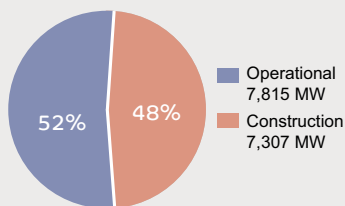
natural gas as their main fuel. Overall, 66% of fuel used for electricity and water production comes from fuel oil.

ACWA Power wholly owns the First National Operation and Maintenance Company (NOMAC) and has transformed it into a leading independent operations and maintenance (O&M) services provider for the power and desalination industry. Established in 2005, NOMAC has over 1,100 employees and is responsible for the operations and maintenance of a portfolio of over 12,000 MW of power generation and 2.2 million m<sup>3</sup>/day of desalinated water. This ownership gives ACWA Power the ability to closely monitor the performance of our assets over their full life cycles. ■

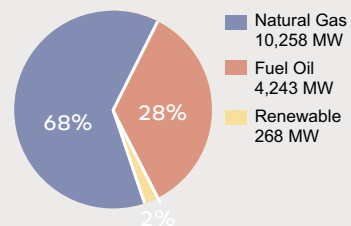
**Power Plant Location**



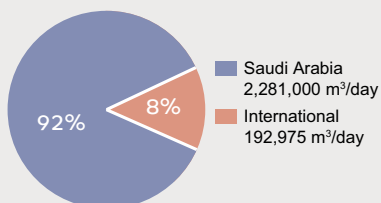
**Power Plant Status**



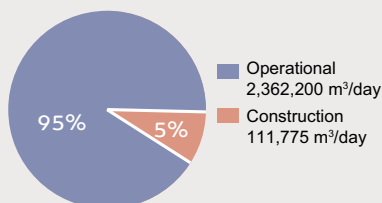
**Fuel for Power**



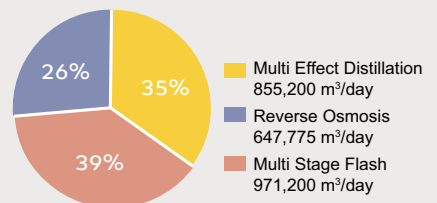
**Desalination Plant Location**



**Desalination Plant Status**



**Desalination Technology**



# Assets & Operations

## Saudi Arabia

<b>1</b>	<b>Bowerage IWP</b> ProjectCo.: International Barges Company for Water Desalination Product: Water Status: Operational PCOD: 2008 Ownership: 65% Fuel: Diesel Capacity: 50,000m <sup>3</sup> /day Operator: NOMAC
<b>2</b>	<b>Petro Rabigh IWSP</b> ProjectCo.: Rabigh Arabian Water & Electricity Company Product: Power Status: Operational PCOD: 2008 Ownership: 37% Fuel: Heavy Fuel Oil Capacity: 360MW 134,000m <sup>3</sup> /day, Steam Operator: Rabigh Power Co.
<b>3</b>	<b>Petro Rabigh 2 IWSP</b> ProjectCo.: Rabigh Arabian Water & Electricity (RAWEC) Product: Power Status: Under Construction PCOD: 2016 Ownership: 37% Fuel: Heavy Fuel Oil Capacity: 160MW 55,000m <sup>3</sup> /day, Steam Operator: Rabigh Power Co.
<b>4</b>	<b>Rabigh 1 IPP</b> ProjectCo.: Rabigh Electricity Company Product: Power Status: Operational PCOD: 2013 Ownership: 40% Fuel: Heavy Fuel Oil Capacity: 1,204MW Operator: ROMCO
<b>5</b>	<b>Rabigh 2 IPP</b> ProjectCo.: Al Mourjan for Electricity Production Company Product: Power Status: Under Construction PCOD: 2017 Ownership: 50% Fuel: Natural Gas Capacity: 2,060MW Operator: NOMAC
<b>6</b>	<b>Shuaibah II IWPP</b> ProjectCo.: Shuaibah Water & Electricity Company Products: Power & Water Status: Operational PCOD: 2010 Ownership: 30% Fuel: Electricity Capacity: 900MW 880,000m <sup>3</sup> /day Operator: ALIMTIAZ   NOMAC
<b>7</b>	<b>Shuaibah Expansion IWP</b> ProjectCo.: Shuaibah Expansion Project Company Product: Water Status: Operational PCOD: 2009 Ownership: 30% Fuel: Electricity Capacity: 150,000m <sup>3</sup> /day Operator: ALIMTIAZ   NOMAC
<b>8</b>	<b>Shuqaiq IWPP</b> ProjectCo.: Shuqaiq Water & Electricity Company Products: Power & Water Status: Operational PCOD: 2011 Ownership: 40% Fuel: Heavy Fuel Oil Capacity: 850MW 212,000m <sup>3</sup> /day Operator: NOMAC
<b>9</b>	<b>Marafiq IWPP</b> ProjectCo.: Jubail Water & Electricity Company Products: Power & Water Status: Operational PCOD: 2010 Ownership: 20% Fuel: Natural Gas Capacity: 2,744MW 800,000m <sup>3</sup> /day Operator: GDF Suez & NOMAC
<b>10</b>	<b>Qurayyah IPP</b> ProjectCo.: Hajr Electricity Production Company Product: Power Status: Under Construction PCOD: 2015 Ownership: 17.5% Fuel: Gas Capacity: 3,927MW Operator: NOMAC
<b>United Arab Emirates</b>	
<b>D1</b>	<b>Mohammed bin Rashid Solar Park - Phase 2 IPP</b> Product: Power Status: Financial Closing PCOD: 2017 Ownership: 41.65% Fuel: Solar - PV Capacity: 260MWp 200MW AC

## Vietnam

<b>D2</b>	<b>Nam Dinh 1 IPP</b> Product: Power Status: Development PCOD: 2018 Fuel: Coal Capacity: 1,200MW Operator: NOMAC
-----------	--

## Oman

<b>11</b>	<b>Barka 1 IWPP</b> ProjectCo.: ACWA Power Barka SAOG (APB) Products: Power & Water Status: Operational Acquisition: 2010 Ownership: 42% Fuel: Natural Gas Capacity: 427MW 91,000m <sup>3</sup> /day Operator: NOMAC OMAN
<b>12</b>	<b>Barka 1 Phase 1 Expansion IWP</b> ProjectCo.: ACWA Power Barka SAOG (APB) Products: Power & Water Status: Operational PCOD: 2014 Ownership: 42% Capacity: 45,460m <sup>3</sup> /day Operator: NOMAC
<b>13</b>	<b>Barka 1 Phase 2 Expansion IWP</b> ProjectCo.: ACWA Power Barka SAOG (APB) Products: Power & Water Status: Financial Closing PCOD: 2016 Ownership: 42% Capacity: 57,000m <sup>3</sup> /day Operator: NOMAC

## Mozambique

<b>D3</b>	<b>Moatize IPP</b> Product: Power Status: Pre-Construction PCOD: 2017 Fuel: Coal Capacity: 275MW Operator: NOMAC
-----------	--

## South Africa

<b>14</b>	<b>Bokpoort CSP IPP</b> ProjectCo.: ACWA Power Solafrica Bokpoort CSP Power Plant Product: Power Status: Under Construction PCOD: 2015 Ownership: 40% Fuel: Solar - Parabolic Capacity: 50MW Thermal Storage: 9hours Operator: NOMAC
<b>D4</b>	<b>Redstone CSP IPP</b> Product: Power Status: Financial Closing PCOD: 2017 Ownership: 50% Fuel: Solar - Tower Capacity: 100MW Thermal Storage: 12hours Operator: NOMAC

## Jordan

<b>15</b>	<b>Rehab Combined Cycle Power Station</b> ProjectCo.: Central Electricity Generating Co. Product: Power Status: Operational Acquisition: 2011 Ownership: 41% Fuel: Various Fuel Oil+ Natural Gas Capacity: 357 MW Operator: CEGCO
<b>16</b>	<b>Ibrahimiya &amp; Hofa Wind</b> ProjectCo.: Central Electricity Generating Co. Product: Power Status: Operational Acquisition: 2011 Ownership: 41% Fuel: Wind Natural Gas Capacity: 1.5MW Operator: CEGCO
<b>18</b>	<b>Hussein Thermal Power Station</b> ProjectCo.: Central Electricity Generating Co. Product: Power Status: Operational Acquisition: 2011 Ownership: 41% Fuel: Fuel Oil+Diesel Capacity: 198 MW Operator: CEGCO

<b>19</b>	<b>Amman South Power Station</b> ProjectCo.: Central Electricity Generating Co. Product: Power Status: Operational Acquisition: 2011 Ownership: 41% Fuel: Deisel Capacity: 27MW Operator: CEGCO
-----------	---

<b>20</b>	<b>Risha Gas Power Station</b> ProjectCo.: Central Electricity Generating Co. Product: Power Status: Operational Acquisition: 2011 Ownership: 41% Fuel: Natural Gas Capacity: 150MW Operator: CEGCO
-----------	---

<b>21</b>	<b>Aqaba Thermal Power Station</b> ProjectCo.: Central Electricity Generating Co. Product: Power Status: Operational Acquisition: 2011 Ownership: 41% Fuel: Fuel Oil+ Natural Gas Capacity: 656MW Operator: CEGCO
-----------	---

## Morocco

<b>22</b>	<b>Noor 1 CSP IPP</b> ProjectCo.: ACWA Power Ouarzazate Product: Power Status: Under Construction PCOD: 2015 Ownership: 68% Fuel: Parabolic Capacity: 160MW Thermal Storage: 3hours Operator: NOMAC
-----------	--

<b>D5</b>	<b>Noor 2 CSP IPP</b> ProjectCo.: ACWA Power Ouarzazate Product: Power Status: Financial Closing PCOD: 2017 Ownership: 75% Fuel: Parabolic Capacity: 200MW Thermal Storage: 7hours Operator: NOMAC
-----------	---

<b>D6</b>	<b>Noor 3 CSP IPP</b> ProjectCo.: ACWA Power Ouarzazate Product: Power Status: Financial Closing PCOD: 2017 Ownership: 75% Fuel: Solar - Tower Capacity: 150MW Thermal Storage: 7hours Operator: NOMAC
-----------	---

<b>D7</b>	<b>Khalladi Wind IPP</b> Product: Power Status: Financial Closing PCOD: 2017 Fuel: Wind Capacity: 120MW Operator: NOMAC
-----------	---

## Czech Republic

<b>23</b>	<b>Beatona BioEnergie</b> ProjectCo.: AP Beatona BioEnergie Product: Power Status: Operational Acquisition: 2013 Ownership: 60% Fuel: Waste Capacity: 1 MW Operator: AP Beatona BioEnergie
-----------	--

## Bulgaria

<b>24</b>	<b>Karadzhalovo - PV IPP</b> ProjectCo.: ACWA Power CF Karad PV Park Product: Power Status: Operational Acquisition: 2012 Ownership: 42% Fuel: Solar Capacity: 60MWp 50MW AC Operator: NOMAC
-----------	---

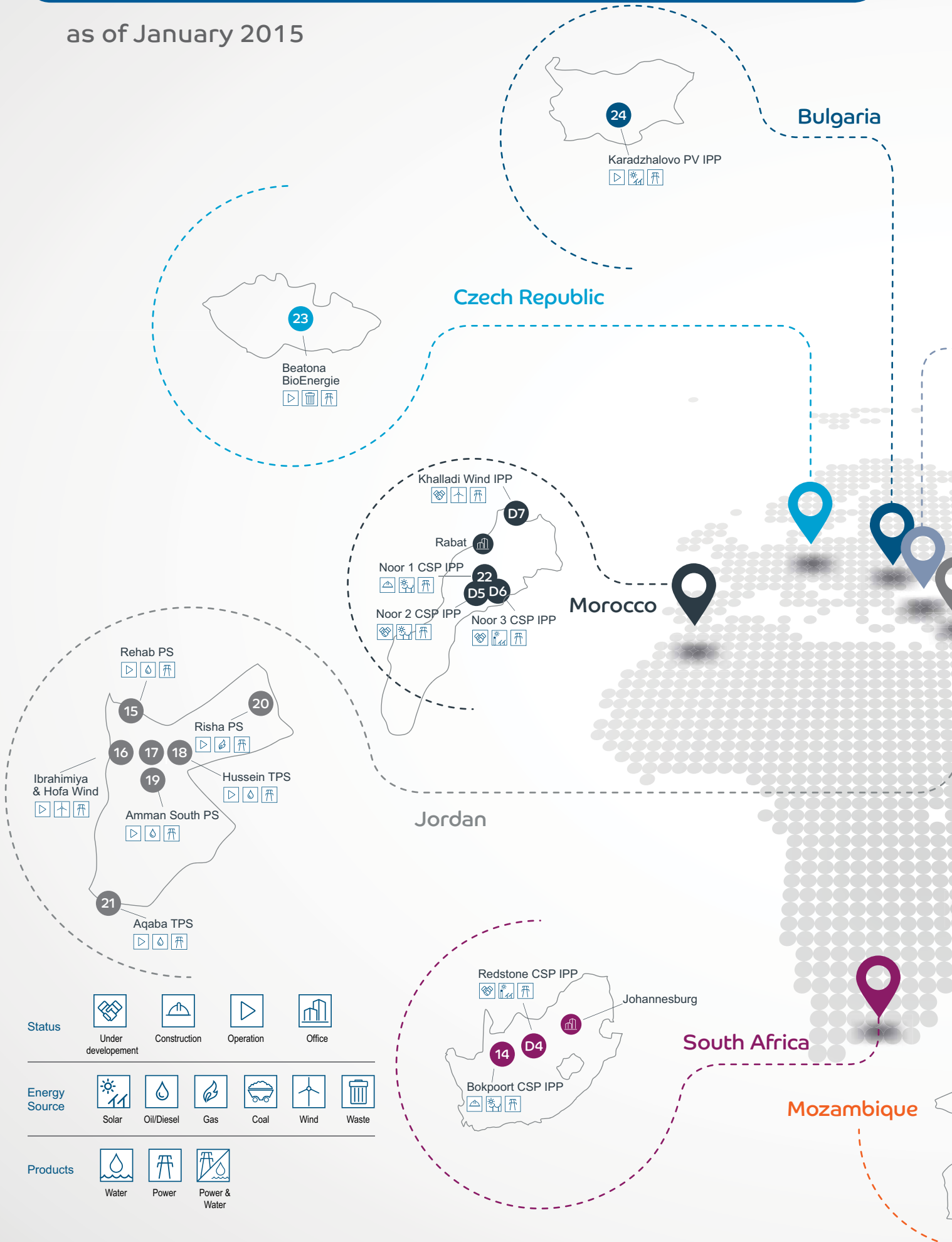
## Turkey

<b>25</b>	<b>Kirikkale IPP</b> ProjectCo.: ACWA Güç Product: Power Status: Under Construction PCOD: 2017 Ownership: 100% Fuel: Gas Capacity: 950MW Operator: NOMAC
-----------	--

as of January 2015

# ACWA Power's Assets and Operations

as of January 2015







# What is Important and Why

## Sustainability and Reporting

ACWA Power has a compelling story to tell about our sustainability journey and business strategy. Developing this Report has uncovered a wealth of stories and opportunities from the whole organization. This Report showcases ACWA Power's sustainability performance, and demonstrates how sustainability is both a part of our business and has a meaningful impact on our operations. In this, our first stand-alone Sustainability Report, we share our achievements thus far and also the challenges and opportunities for our business going forward.

In line with ACWA Power's commitment to meeting international best practices on disclosure and reporting we have aligned this Report with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Framework.

## Scope and Materiality

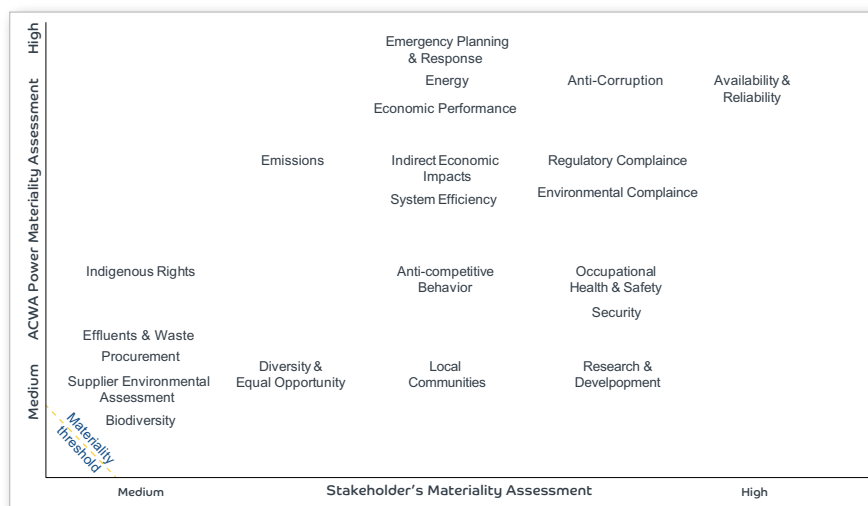
This Report covers our operations and performance in the calendar year 2014, and includes our assets, joint ventures and operations over which we have majority management control, as per GRI guidance. The two exceptions are the Marafiq IWPP and Qurayyah IPP in which we have a minority stake but which we include for completeness.

The structure of this Report is guided by our sustainability strategy and our activities along our value chain. ACWA Power collaborated with AccountAbility, an international, professional sustainability consultancy, in undertaking a formal materiality assessment of our economic, environmental and social issues using the GRI G4 reporting framework plus the Electricity Utilities (EU) sector Supplement. The process involved an internal analysis of the importance

of a broad list of sustainability issues related to ACWA Power's business, a review of their importance to six primary stakeholder groups; and an external, third-party assessment of the importance of the same list of sustainability topics. We also used our stakeholder dialogues and company-wide feedback to inform the selection of these material issues. 21 material issues were identified from the 54 generic and EU specific issues covered in the GRI G4 framework. These 21 issues form the basis for the management discussions and performance data presented throughout this Report.

**We self-declare that this Report is in accordance with the GRI G4 Sustainability Reporting Framework at the Core level.**

## Materiality Assessment Matrix



The Materiality Assessment Matrix alongside plots our 21 material sustainability issues in two dimensions: (1) the importance of an issue to Stakeholders, and; (2) the relevance of an issue to ACWA Power. Importance and relevance are determined with regard to, for example, the likely influence of the issue on business success. The issues in the top right corner of the matrix are those that currently have the highest importance and relevance for both groups.

## ACWA Power's Material Issues

Economic	Environmental	Social
<ul style="list-style-type: none"> <li>Economic Performance</li> <li>Indirect Economic Impacts</li> <li>Procurement Practices</li> <li>Availability and Reliability</li> <li>Research &amp; Development</li> <li>System Efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Energy</li> <li>Effluents &amp; Waste</li> <li>Biodiversity</li> <li>Environmental Compliance</li> <li>Supplier Environmental Assessment</li> <li>Emissions</li> </ul>	<ul style="list-style-type: none"> <li>Occupational Health &amp; Safety</li> <li>Diversity &amp; Equal Opportunity</li> <li>Security Practices</li> <li>Indigenous Rights</li> <li>Anti-Corruption</li> <li>Anti-Competitive Behavior</li> <li>Regulatory Compliance</li> <li>Emergency Planning &amp; Response</li> <li>Local Communities</li> </ul>

## Stakeholder Engagement

ACWA Power's business model is inclusive and respectful of all material stakeholders. The expectations and requirements of our stakeholders are taken into consideration in strategic decision-making, goal-setting, and then throughout project delivery and operation.

Stakeholder groups that we work and engage with on an ongoing basis include employees, Offtakers, company and project shareholders, primary suppliers and contractors, financial institutions, government regulators, public agencies, and local communities where our assets are located.

Our stakeholder engagement and dialogue processes (see below) are multilayered and primarily visible and public at the asset level. Engagement is an important shared task and one of the key business processes of our operations through:

- Project development and bidding processes,
- Undertaking Environmental and Social Impact Assessments (ESIAs) which incorporate stakeholder engagement,
- Budgeting for supporting and promoting local socio-economic development, and
- Local networks and structures focusing on community development, economic impact, capacity building and recruitment.

The general public, the ultimate end users of our water and electricity, are important to us even though we do not, as a business to government organisation, have frequent direct contact. ACWA Power has sponsored projects that directly engage with these end users, in particular initiatives that address and promote efficient and responsible consumption of water and electricity, and that address local power and water needs.

Reviewing our stakeholder engagement processes and the multitude of engagement activities is an ongoing and evolving task for all of ACWA Power. We continue to share good practices internally and to learn from achievements and challenges. ■

### Primary Stakeholders Engagement Framework

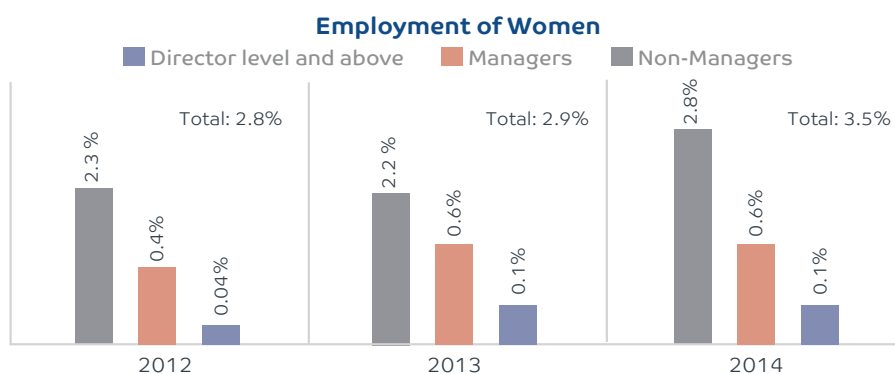
Locus	Stakeholders	Focus	Responsibility
Assets & Facilities	Employees, Government agencies, Project shareholders, Primary suppliers, Finance institutions, Labor Groups, Contractors	Local communities, surrounding areas, regional initiatives, operations, compliance, environmental, health and safety management	Project Development Team, Project Company, Asset CSR Team, and O&M Service Provider
Regions	Employees Offtakers Regulators	National initiatives, office staff initiatives, diversity and inclusion	Regional Office Leadership and CSR team
Corporate	Employees, Company Shareholders, Suppliers, International organizations, Competitors	Strategic, international, group-wide initiatives, partnerships & memberships, innovation & technology	Corporate Leadership Team and CSR Committee

We address our employees as a community of individuals who share the organization's values and long-term vision. People at ACWA Power are considered part of an extended family, allowing us to build a solid employer-employee relationship that creates value for both the organization and the individual. ACWA Power promotes a harmonious workplace by creating a vibrant, pleasant and efficient working environment that strengthens our "family approach". The Infrastructure & People team organizes healthy living activities on a regular basis, including walks, swimming events and cycling classes. ACWA Power has recently introduced employee volunteering initiatives, aiming to both increase employee satisfaction as well as strengthen ACWA Power's engagement with local communities.

ACWA Power provides employment to a total of 2,850 of which 61% are local nationals and 100 are women. The largest concentration of personnel is within NOMAC. We monitor the workdays of our contractors who worked a total of 300,950 man-days across our asset portfolio to support construction, operations and maintenance.

## Diversity and Equal Opportunity

Diversity and equal opportunity currently falls within standard business practice and are implemented through our CSR Policy (see page 16). Diversity and equal opportunity practices include employment of women throughout our organization as per local customs. The organization has demonstrated significant progress from 2011, when there were no



female employees in KSA to currently providing employment to 100 women of whom 20 are in managerial and/or executive roles. We apply an equal remuneration policy for men and women performing the same job.

CEGCO, Jordan, has four employees with physical disabilities. Further we have not denied employment to persons with disabilities in any of our other entities.

We have no recorded incidents of discrimination on the basis of race, religion, gender or nationality from either the whistle blower hotline or our internal reporting processes.

## Local Employment

Localization, employment and development of national personnel represent key sustainability risks and opportunities. ACWA Power appointed a Saudi national as Managing Director in 2013 and has two more nationals on the Leadership Team so that Saudi nationals comprise 36% of our senior management team in the Kingdom. 47% of ACWA Power's Saudi Arabian employees are local nationals. We have been recognized for our efforts in

employing local professionals through the awarding of a "Green Rating" in the Ministry of Labor's Nitaqat Program and our training Institute (see page 42) contributes to supporting local employment.

Across the group (as presented on the next page), 61% of our employees are local nationals while our international (excluding KSA and UAE) ProjectCos and Assets are 97% staffed by local nationals. This demonstrates our strong commitment to employing and training locals in addition to creating valuable long-term employment opportunities wherever we operate.

## Compliance with Global Workplace Requirements

ACWA Power has committed to respecting global commitments and local requirement. As part of this commitment, we have made a public declaration in our CSR Policy against child labor. Recently, we updated our policies, procedures and standard contracts to ensure compliance with the IFC's Environmental and Social Performance Standards.



ACWA Power works within all relevant local laws regarding freedom of association and collective bargaining. To date, no violations of such rights have been reported, as employees are free to participate in relevant initiatives where available. ACWA Power also promotes freedom of association through its industrial management systems in Jordan and South Africa. In Turkey, ACWA Power is currently undergoing an organizational change process in order to ensure that we are fully compliant with the recently revised local legislation.

## Employee Performance and Satisfaction

ACWA Power measures employee productivity and performance through formal appraisal processes. Employees are assessed annually, and their performance is graded on a four-point scale: Star Achiever, Superior Achiever, On-Track Achiever and Unsatisfactory. In 2014, all ACWA Power employees received a performance and career development review with just one regional office falling below 90% that was subsequently remedied. The performance appraisals are

used to establish individual training and development plans plus bonus remuneration. Employee satisfaction is monitored through surveys and the performance appraisal process. ACWA Power's turnover of corporate employees was 14.9% in 2013 which reduced to 13.7% in 2014.



## Benefits and Remuneration

ACWA Power rewards employees with compensation packages that comply with all regional legislation and legal requirements.

In 2014, we engaged in a salary and compensation benchmarking exercise

in order to assess our competitiveness in the markets where we operate. The overall outcome was that we offer above-average market-related remuneration and, where necessary, made individual adjustments. On top of attractive salaries and bonuses, ACWA Power offers comprehensive employee benefits packages, including private international healthcare, gym/health club allowances, and annual leave packages.

## Training

Our approach to training is decentralized and managed on a local level, with training opportunities tailored to the needs of each employee.

The primary focus areas for our training are:

- Core Skills Training: improving skills related to employees' job functions and fields of expertise;
- Technology & Innovation Training: improving understanding of key technology concepts that the company is built upon or uses in its operations; and
- HSSE & Ethics Training: teaching key safety measures in the workplace and behavioral norms and expectations. ■

## Employment Demographics

Entity or Region	Employees & Full Time Contractors			Local Nationals				Local Directors/Managers			Female Managers & Directors
	Men	Women	Entity Total	Men	Women	Entity Total	Local % of Entity	Men	Women	Entity Total	
ACWA Power	152	29	181	38	6	44	24%	24	2	26	12
NOMAC (Saudi & International)	1,122	4	1,126	403	4	407	36%	29	0	29	0
Saudi Project Companies-Amalgamated	378	1	379	169	1	170	45%	34	0	34	0
Jordan	965	43	1,008	965	43	1,008	100%	42	5	47	5
Oman	77	1	78	54	1	55	71%	10	1	11	1
Morocco	13	7	20	11	7	18	90%	2	1	3	1
Southern Africa	28	7	35	21	7	28	80%	9	0	9	0
Vietnam	1	1	2	1	1	2	100%	0	0	0	0
Turkey	11	5	16	9	5	14	88%	7	1	8	1
China	3	2	5	2	2	4	80%	1	0	1	0
<b>ACWA Power Group Totals</b>	<b>2,750</b>	<b>100</b>	<b>2,850</b>	<b>1,673</b>	<b>77</b>	<b>1,750</b>	<b>61.4%</b>	<b>158</b>	<b>10</b>	<b>168</b>	<b>20</b>

# Our Business

ACWA Power firmly believes that a business has the right to make a profit by taking and managing risks while simultaneously behaving responsibly.

ACWA Power's core business is the delivery of electricity and desalinated water through the operation of assets in which the company has enough investment to be able to exercise operational control. As we are a developer, investor and operator of plants, our value chain starts with Business Development and extends to Asset Management & Assurance which become our two primary line functions.

## Financial Performance

The economic and financial contributions made by ACWA Power and its projects include the direct impact of salaries paid to employees, contractors and their respective supply chains, plus the revenue generated from equipment and services procured from local and international suppliers over the course of a project's typical life span of more than 20 years. However, the socio-economic shared value created and distributed by ACWA Power significantly exceeds by several multiples the direct financial contributions and initial capital outlay of our projects. This added value provides the main impetus to our business'

vision and mission, which is intergenerational in nature.

ACWA Power continued its steady financial performance and achieved Income from Main Operations of SAR 687M and a Net Income of SAR 532M for the financial year ended 31 December 2014. This is an increase of 15.9% in the Net Income year on year when compared to SAR 459M for the year ended 31 December 2013. Earnings per share (EPS) attributable to net income for the year is SAR 1.01 against SAR 0.94 for the corresponding previous year, an increase of 7.45%. The EPS is based on weighted average numbers of shares, and includes the effect of equity injection from the International Finance Corporation.

## Economic Value

ACWA Power was instrumental in accounting for SAR 777M of Economic Value Retained (i.e. Direct Economic Value Generated less Economic Value Distributed) in 2014, a 39% increase from 2013.

The table alongside presents our 2014 economic contributions as per the GRS disclosure standards.

### Economic Value Retained (SAR in Thousands)

Particulars	2014	2013
<b>Economic Value Generated</b>		
Revenue	6,696,339	6,595,250
Share in net income of associates and joint ventures	367,114	190,960
Other income	172,691	82,857
<b>Economic Value Generated</b>	<b>7,236,144</b>	<b>6,869,067</b>
<b>Economic Value Distributed</b>		
<b>Operating costs</b>		
Cost of material and services bought from outside	5,622,662	5,466,800
<b>To employees</b>		
as remuneration	374,047	301,786
<b>To government</b>		
as taxation	50,180	50,039
<b>To providers of capital</b>		
as dividend to Minority Interest Stakeholders	125,891	129,125
as non-controlling interest	68,818	175,514
as finance charges	217,948	186,580
<b>Economic Value Distributed</b>	<b>6,459,546</b>	<b>6,309,844</b>
<b>Economic Value Retained</b>	<b>776,598</b>	<b>559,223</b>

## Risk Management

We face a multitude of typical business risks and so have implemented best practice measures to ensure they are managed and mitigated.

ACWA Power has introduced a strong risk management process whereby tasks are standardized and controlled through relevant frameworks. The organization's risk department has centralized internal controls and procedures, supported by local risk champions who oversee performance in each of our business functions and groups.

Sustainability and business risks differ from region to region and so are managed at project and operational levels. Furthermore, project- and country-based risks are assessed

prior to bidding for each new project. Sustainability factors are integrated into the project-specific due diligence process. Senior management decides on the appropriate bidding strategy only after the results of the due diligence are formally sounded and discussed internally with all relevant departments. At an operational level, ACWA Power's ownership of NOMAC is a further risk control mechanism.

Our primary sustainability risks (which are a subset of, but also distinct from, our material issues) are presented below. These nine high-level risks guide our business efforts, and will be a recurring theme throughout this Report as we demonstrate how we acknowledge and tackle these complex issues. ■



Bokpoort IPP, South Africa

## Sustainability Risks



## Corporate Governance

Corporate governance is ACWA Power's main strategic tool for assuring fiduciary and risk management. We have established a robust governance framework that is founded on the principle of transparency, which in turn enables improved accountability through recognition and management of risks. The company has adopted a multi-level corporate governance approach that spans the whole organization and is based on layers of checks and balances in addition to a detailed Code of Conduct.

The ACWA Power Board of Directors has nine members, includes independent non-shareholder directors and meets quarterly. Decision-making processes are monitored through four Board Committees, namely the Board Investment Committee, the Board Audit and Risk Management Oversight Committee, the Related-Party Transactions and Conflicts Management Committee, and the Nomination and Remuneration Committee.

More detailed information on the Board of Directors, Board Committees and their roles and responsibilities are included in our annual report that is available online.

ACWA Power uses Ernst and Young, an independent and accredited international auditor, to audit the annual financial accounts, in addition to disclosing our results publicly. We have been disclosing information on our HSE

and social performance through each of the publically available annual corporate reports since our first in 2009.

ACWA Power's performance was recognized with a special commendation for corporate governance by the 2014 King Khalid Foundation's business awards in Saudi Arabia.

## Ethics and Code of Conduct

ACWA Power's continued growth and achievements is premised on and delivered by the personal commitment and total alignment of all our people with our ethical business practices and methodologies. We have articulated our approach to business ethics through a Code of Conduct, which is accompanied by Anti-Corruption and Anti-Bribery Policy commitments. Signed by all personnel upon joining ACWA Power, the Code of Conduct includes standards for responsible and appropriate behavior and highlights that unethical activity is a disciplinary offense that could lead to dismissal.

The Code of Conduct and ancillary documents are available and applicable to all participants across ACWA Power's assets and operations including principle EPC contractors. Ethics-awareness initiatives such as training sessions for new employees are conducted as part of the orientation process. ACWA Power monitors ethical practices and closely engages with project managers on a regular basis to ensure effective internal application of our standards.

ACWA Power has a grievance procedure which is supplemented with an independent whistle blower hotline (see below). All grievances and complaints are evaluated and categorized as financial or non-financial and to assess whether external legal support or internal investigation is required.

During 2014, we received four complaints that were reported through the whistleblower process (see below). These included one case of disclosure of confidential information, one case of conflict of interest and two cases of misconduct and inappropriate behavior. These cases were referred to and duly reviewed by our assigned internal professionals. All of the cases were effectively resolved using internal processes in a timely manner with none leading to litigation. During 2014, no other material issues concerning ethics, corruption, bribery or anti-competitive behavior were addressed at a Senior Management level within ACWA Power.

### Acwa Power Board of Directors

Mr. Mohammad Abunayyan,  
*Chairman*

Mr. Suliman A.K. Al Muhaidib

Mr. Ahmed Suleiman Al-Rajhi

Mr. Ibrahim Alromaih

Mr. Majid Alshathry (Independent)

Mr. Tariq Al-Mutlaq (Independent)

Mr. Rasheed Al-Rasheed

Mr. Dato Mohammed Izzadin Idris

Mr. Al-Salah Brahimi



#### Need to raise red flag?

Please connect

[www.complianceline.ethicspoint.com](http://www.complianceline.ethicspoint.com)  
or call +1-503-597-4327 (at prompt dial 855-575-4202) to seek help or report a violation.



## Whistleblowing Policy

ACWA Power has established an effective and accessible whistleblowing process. The arrangements include a 24/7 grievance hotline and email available to all internal and external stakeholders, including contractors, subcontractors, suppliers, clients and advisors. ACWA Power has contracted an international independent external provider with recognized expertise and experience to operate the hotline.



## Corporate Social Responsibility

ACWA Power has a dedicated CSR Policy called "Our Commitments," which was first published in 2009 and updated in December 2014 (see below). Since September 2009, ACWA Power has had a dedicated Director with oversight of CSR and Sustainability, reporting to the VP of Asset Management and liaising closely with the CEO and Managing Director (MD), who are ultimately responsible for establishing and delivering the organization's CSR strategy and goals. ACWA Power has also assigned a significant annual budget for CSR activities and projects and allocated additional funding for exceptional initiatives.

ACWA Power has recently taken a further step toward more formal sustainability and CSR governance. During the fourth quarter of

2014, a group CSR Committee was established under the direct sponsorship of the Chairman of the Board and chaired by the MD. The Committee consists of 10 executives, including ACWA Power's Director of CSR, representatives of the corporate business development and legal teams, and representatives from each of our main business regions: Morocco, South Africa, Jordan, Turkey and Oman. The Committee includes an independent external advisor to specifically provide a fresh, independent and critical external perspective.

The Committee's mandate is to provide overall structure, guidance and coherence to ACWA Power's evolving CSR Program as it extends and grows in parallel with ACWA Power's global reach. The Committee is in the process of reviewing ACWA Power's CSR vision and mission, establishing CSR objectives and targets that align with the overall business mission, and implementing formal processes

for evaluating and deciding on CSR initiatives. The Committee is required to report to the Senior Management team and the Board on a quarterly basis.

A primary aim of the CSR Committee is to ensure that best practices are shared across ACWA Power's asset portfolio and regional CSR personnel, so that the true value of each project far exceeds its direct investment and resource input.

At the local and project levels, ACWA Power has implemented a framework of socio-economic development standards and guidelines to be adopted at the commencement of operation in a new country. Each framework is based on local context around education, programs, partnerships and foundations. As a result, South Africa operations has its own Sustainability Committee that reports directly to the Board of Directors, and Morocco's operations has its own strong CSR governance structures. ■

## Our Commitments

**ACWA Power is a leading and innovative developer, asset owner and operator of independent power and desalinated water production facilities.**

**Our commitment to social responsibility, governance and sustainability is inherently interwoven into the fabric of our business model and guided by our vision to reliably provide water and electricity.**

**Our stakeholders, people and the environment are primary considerations in all we do, throughout the development, construction and operation phases of our facilities.**

**Our core values of Integrity, Rigor, Fairness, Ingenuity and Diversity are ingrained in decision making at all levels.**

**We champion the socio-economic development of our host communities and nations by:**

- **Setting new benchmarks and achieving world class performance standards that go beyond local compliance;**
- **Proactively engaging with our stakeholders to identify long term shared-value creation and prosperity opportunities;**
- **Auditing and managing our own organization and supply chain to international ethical benchmarks that includes the prohibition of corrupt and fraudulent practices, child and forced labour, intimidation and discrimination;**
- **Making certain of human rights, the safety and welfare of workers, fair employment and equal opportunity practices across our operations;**
- **Cultivating an entrepreneurial culture that breeds professional insight to govern our risks and opportunities;**
- **Building life-long partnerships that ensure the stewardship of our valued relationships and assets; and**
- **Clearly, transparently and regularly communicating our strategies, targets and business performance.**

## Sustained Socio-Economic Impact

ACWA Power delivers considerable indirect economic value to our customers and consumers, national governments and Offtakers, by providing affordable and reliable power and desalinated water and focusing our investments on people, infrastructure, technology and local supply. ACWA Power contributes to the economic prosperity of the communities in which we operate at both national and regional levels.

ACWA Power's focus is to support local and regional communities by improving their members' technical skills and employability; enhancing local infrastructure; engaging in charitable donations; and nurturing financial sustainability. This creates shared value by aligning our stake holders socio-economic improvements with ACWA Power's core business objectives. We also enable the adoption and transfer of our good sustainability practices across our chain of global operations.

The following sections present areas in which we make a tangible and demonstrable difference for our stakeholders, local regions and communities. These areas are further developed and illustrated through case studies in the following pages.

### Mandating Local Hiring and Skills Improvement

ACWA Power works toward the reduction of poverty and the promotion of sustained prosperity through local hiring and skills-development policies that go further than typical practices by developing both semi-skilled and unskilled employees. In this way, ACWA Power responds to regional needs plus enjoys tangible long-term business benefits of loyalty from skilled employees.

### Investing in Local Infrastructure

ACWA Power's indirect impacts are visible through the development of local and regional infrastructure that is not directly related to the organization's core operations such as improved transport and educational services.

ACWA Power is committed to creating a decent living environment for plant workers, especially as many of our operations are built in remote areas. We invest heavily, in the initial three to four years of the construction of a plant facility, in balancing the quality of infrastructure within our fences with that of the local area, thus supporting local authorities with robust roads, availability of power and access to healthcare.

### Enforcing Local Procurement Practices

As offtakers agreements typically last for 20 to 25 years ACWA Power engages with suppliers to form long-term relationships. Our strategy is to lead by example and to persuade supply chain partners to apply our values of local procurement, employment and training of the local workforce, and technology transfer. We are pleased that we have been able to develop trusting and effective long-term partnerships that result in repeat contracts between ACWA Power and our primary Engineering, Procurement, Construction (EPC) Contractors and Original Equipment Manufacturers (OEM) suppliers, demonstrating supplier satisfaction in doing business with us.

We aim, during project development, to ensure that between 30% and 40% of the value of the project is sourced through local suppliers – taking into consideration the local availability of both technologically simple and advanced equipment. We thus provide significant value to local supply networks, given that for every direct investment in the local supply chain there is a multiplier effect for a larger network of regional providers.

### Impacting Local Communities

Local empowerment has been actively supported by ACWA Power not only as a form of giving to the community, but also as a solid commitment toward the development of local communities. ACWA Power has incorporated a number of local empowerment programs into our agenda, as part of both the organization's community investment activity as well as our long-term regional business plans.

### Championing Continuous Improvement

ACWA Power drives the adoption of sustainability practices in the regions where we work by engaging closely with governments to encourage them to improve sustainability performance at the local level. We transfer good practices in sustainability management across our chain of global operations, thus positively affecting contractors, suppliers and local industry. We advocate the diversification of national fuel mixes and the introduction of renewables to help achieve sustainability in energy supply over the long term. We also advocate and support the improvement of health, safety, social and environment practices in and around our operations.

ACWA Power implements a local community strategy and action plan, based on company guidelines, for each of our locations. The strategy comprises activities focused on the short, medium and long term. In the short term, we look for the creation of quick income activity, such as employment or training opportunities for local populations.

In the medium term, we look at the improvement of living standards through building partnerships with local associations, healthcare centers or direct sponsoring. In the long term, we aim to impact development in the local area in terms of education, livelihoods and agricultural practices.

Our plants are typically located in remote areas inhabited by scattered small communities. This provides the opportunity to incubate micro and small enterprises that can supply ancillary products and services, such as livestock, agriculture, laundry and cleaning services, personal care, carpentry and

plumbing. ACWA Power's projects facilitate such efforts and indirectly support government initiatives toward avoiding continued urbanization.

We actively monitor progress and outcomes of our local community investments and activities, and continuously update our guidelines and processes from our learning experiences on each project, thus leveraging successful partnership models and initiatives to new locations.

### Engaging in Charitable Donations

As part of our CSR Program, we participate in and offer financial support to regional NGOs and academic institutions. ACWA Power donates to needy causes through local project companies, which identify and support community and regional charities. The total amount of CSR and charitable donations for 2014 was SAR 6.75M which includes the multimillion dollar Namaa Al Manawara SME (see page 23) development program in Medina, KSA.

The international CSR & charitable events and donations cover our operations in Jordan, Oman, Morocco and South Africa, with the latter contributing the most during 2014. All events and programs organized are consistent with our core values and aimed at strengthening the collaboration and creating shared value with the local communities often working alongside the local and national governmental agencies. ■



Rehab Power Station, Jordan



## Community Investment

We understand the need for, and the value created by our investments in the communities where we operate in order to encourage self-reliance at the local level. This approach supports our effective integration with local communities and maintains our license to operate for generations to come.

ACWA Power's community investment activities are aligned with the goals and objectives of local, provincial and national governments. For example in South Africa where a portion of revenue is expected to flow into the local community. The Bokpoort CSP projects first revenue will be realized only in 2016 with the start of power production, but we have been engaging in community projects since 2013, as we recognize the multiple benefits that accrue from early and consistent engagement.

## Ouarzazate, Morocco, Social Programs

ACWA Power Ouarzazate (APO), Morocco has established a stakeholder based program of social and

development projects with distinct short, medium & long term plans.

The program has evolved and matured since its inception in 2013 and now covers simple one-off sponsorships through to complex multi-year projects; including:

- Financed a mobile hospital with Masen and various public institutions. The hospital included 31 doctors, 15 paramedics and 5 technicians. Over two days, the caravan conducted 1,000 consultations which enabled the local population to save 1.5m MAD in services.
- Commissioned a study of the Province of Ouarzazate's healthcare facilities which identified the need for a maternity clinic. The preliminary investment budget for a clinic with 10 beds is now being progressed.
- Undertook visits to remote villages in the Iguernane Mountains. The residents greatly appreciated the effort and explained their needs that are now being assessed.
- Collaborated with the Moroccan National Vocational Training Office (OFPPT) and the Ouarzazate municipality to provide a mobile welding facility by qualified trainers. 50 candidates from the area

attended the 3-month workshop which was followed by an on-site internship. They have all received certificates and are being considered for employment on-site.

- Facilitated and provided the equipment for the training of 30 women in weaving, knitting and embroidery. This was undertaken in collaboration with Ministry of Crafts and Social Economy and Solidarity and the Institute of Traditional Arts of Ouarzazate.
- Upgraded school facilities including restoration of classrooms, construction of toilets and enabling connections to electricity and drinking water.
- Site canteens run and staffed by locally owned and staffed companies plus the sale of homemade and home grown food products in the site canteen. This supports the Women's Associations' plans to creating income generating activities.
- Sponsorship of the Association of Marathoners of Ouarzazate's seventh annual marathon that attracted 1,500 runners including women and children.
- Supported the Youth Association of Tiflites' Holiday Camp in Ghassate which benefited 120 children (see picture alongside).
- Provided heavy earth moving equipment required to clean the road linking the villages of Tasselmente and Izerki after the flooding disaster in September 2014. APO's immediate response had a strong and positive impact on the local community.
- Commissioned a study of agricultural production systems to identify improvements to support the income of the farmers in the villages surrounding the Noor complex. Several recommendations have been approved and are being implemented including annual cropping, rehabilitation of palm trees and a sheep breeding program.



Noor 1 IPP, Morocco



## Groblershoop, South Africa, Community Investment & Engagement

ACWA Power Southern Africa's CSR strategy is consciously aligned with the country's development programs. We aspire to build on the local capacity of the communities in which we invest to encourage Self-reliance and minimize welfare depending. Based on this ACWA Power's approach to socio-economic value creation is twofold:

- Ensuring targets exist for job creation, local content, and ownership, among many other factors
- Mainstreaming CSR initiatives, within the project development process

As a part of our community program in South Africa, the Bokpoort CSP Project team has thus far contributed the following to local communities:

- Establishing a three-month technical training and a short-term entrepreneurial-skills program,
- Sponsoring students from the local communities with bursaries for higher education (university and technical colleges),
- Providing a water-distribution system to a district township,
- Improving local education by sponsoring learners and donating 30 personal computers with internet connectivity to a local high school,
- Building the skills necessary for the solar industry and introducing an apprenticeship welding scheme for five residents.

The team's flagship project is the Duinevelt Solar Lighting Project where ACWA Power significantly improved the living conditions in a local informal residential area while simultaneously creating sustainable local employment. A total of 305 houses were provided with lighting through the installment of solar systems. The systems are being maintained by local residents that



have improved skills and workforce capacity in the area. The project was very well received by the community and has proven to be a life-enhancing initiative for all of the stakeholders such that the project is now being used as a platform to electrify more houses through the Department of Energy's initiative.

Bokpoort's Community related projects have subsequently won The African Community Project of the Year Award at the 15<sup>th</sup> annual African Utility Week in early 2015. The award was for the "Not-for-Profit or Community Involvement Project" with the biggest social impact. The project needed to demonstrate an extended positive and sustainable impact in the community by being a "Role Model" in several aspects including skills development, job creation, improved living conditions, education for children, rural electrification, off-grid power and/or provision of clean water.

The suite of CSR initiatives ticked all the boxes and so the Bokpoort CSP Project was announced as the winner based on its impact on skills development and contribution to community improvement given the socio-economic challenges in the area. The provision of much

needed basic services via PV for homes without electricity and a newly installed potable water reticulation was commended. The commitment of the Bokpoort Project towards becoming a contributor in the community from the onset of construction was recognized as setting a new standard in community involvement. The South African Minister for Energy has indicated that she would showcase the Bokpoort Project IPPs in the South African Parliament in mid-2015 as an example of excellence in implementing Community Projects under the IPP program to demonstrate the benefits of public-private partners.

Based on this success, ACWA Power plans to use the Bokpoort experience and in particular the Duinevelt Solar Lighting Project as a case study of how to work with authorities to provide electricity to more homes in local areas on future projects. ■

## Local Engagement and Support

We align our community investment and engagement strategies with issues that are mutually material to the management of our assets and the surrounding communities. The key areas are promoting local procurement to stimulate regional growth, development and hiring of a local home-grown workforce with the skills to sustain our business and to foster prosperity of the surrounding communities. These practices build a strong, long-term foundation for the creation of shared value for ACWA Power and the local economies.

### Localization of Supply Chain

ACWA Power keenly understands the importance of embracing, supporting and stimulating local supply networks and supplier infrastructure. We monitor our ProjectCo contacts for local procurement and primarily drive conformance during the construction and operational phases by including local procurement as a contractual obligation. Moreover, we monitor and report on our suppliers' performance to the project steering committee.

Local supply chain participants that see the benefits of working with ACWA Power's ProjectCos in turn come to actively support and promote our efforts as part of their growth ambitions. When products and services are sourced and supplied locally, they can be expected to be locally repaired and maintained over a 20-year life span, which is a key

element of the resilience of our facilities. This is one reason we insist on our EPC and O&M contractors using local suppliers.

### Skills Development

ACWA Power is proactively engaging in and supporting partnerships that share our vision of local skills development, especially around the areas of our technical expertise. We include stringent requirements on local recruiting and training of local workers in the development contracts of new assets focusing on the construction, operation and maintenance phases.

We recognize that availability of quality local skills is one of the key challenges that requires immediate action as technical training and skills development quickly leads to salary increases for formerly untrained employees, which provides tangible quality of life improvements.

### Regional Employment

Through local employment and technical expertise, ACWA Power helps eliminate project companies' need for expatriate skills over the long term.

In line with this effort, ProjectCo use local resources such as employment agencies, which improve transparency in hiring processes. We currently have a 97% local employment rate for our international (excluding KSA & UAE) operations.

## Noor 1 IPP, Morocco Local Employment and Sourcing

The Noor 1 IPP project has contributed to the alleviation of regional unemployment by creating nearly 2,000 jobs during the construction phase. All construction workers are being trained to international standards which will enable them to retain and transfer these skills to other opportunities.

As of December 2014, there were 1,824 personnel on site, made up of 1,439 (79%) Moroccans of which 641 (45%) are from the local districts. 64 women were employed with 42 being Moroccan. The majority of Moroccans were qualified 1,211 (84%) with just 228 (16%) being unskilled. During the month of December, 239 jobs were created with 49 of them arising in the Ouarzazate / Ghassate district. At the time of reporting, the site had not experienced any labour unrests, protests or strikes.

The local authorities expressed their satisfaction with the employment trends in Ouarzazate and especially in Ghassate. A delegation from the Employment and Labour units undertook a visit and stated that subcontractors were complying with the law, particularly with regard to respecting the guaranteed minimum wage and that salaries are in line with the market.

The operational phase will require 70 permanent positions with the target being to fill the majority with Moroccan technicians and operators – the first appointment was for the Plant General Manager who is Moroccan.

The Project must ensure that the industrial integration rate is equal to or greater than 30 % of the total construction costs. The team is well on track to meet this target.

Over 100 companies have acted as suppliers for the project, with 70% of them being Moroccan. Examples of local procurement include; Civil works (earth movements, drilling); Electrical and mechanical erection; Solar Collector Elements; Building construction (steel & support structures); insulation and Quality control services.



Noor 1 IPP, Morocco





an awareness session and was completed with the handover of the bins to the house owners.

The second project was the Green Village Project for a village adjacent to Barka City provided 55 trees in order to enhance the city's green space. The project was completed with the mentorship of the Municipality.

The Barka team also implemented a paper recycling project with local government schools. The aim of the project was to raise awareness among students and families and to support the schools in recycling the maximum number of used paper by providing them with fabricated recycling containers. The project involved more than 25 schools in Oman and approximately 20,000 students. As of year-end 2013, the used paper collected by the recycling company amounted to 16.8 tons. This project is ongoing, and the number of schools participating keeps increasing. The Barka team continues to provide collection bins to all new schools as well as during awareness sessions. During 2014, the total used paper collected by the recycling company was 27 tons. ■

## Community & Social Programs

### CEGCO, Jordan

CEGCO is committed to making a lasting impact in local communities around both its operational facilities and from the corporate office in Amman. The well-established CSR program prioritizes issues across Jordan's social agenda such as health care and poverty. CEGCO's CSR team delivered the following projects during 2014:

- Volunteers participated in a free medical day in the Disi district near Aqaba, where doctors from various specialties offered free medical services to approximately 800 patients and donated prescription medicines.
- To support the communities in which it operates, winter coats were distributed to public primary school students near Rehab (see photo page 16).
- Three blood donation campaigns with the National Bloodbank at the head office, and the Aqaba and Hussein power plants. In addition, CEGCO's medical team supports the provision of emergency blood units for its employees.
- During July, and in line with CEGCO's efforts to share the spirit of Ramadan, the company distributed 300 food packages to families near the Hashemiah, Rehab and Aqaba plants.

### Barka IWPP, Oman

During 2014, ACWA Power Barka IPP worked with the NOMAC, Oman team and a Barka city municipality team on two primary projects. The first is the Clean Village Project which provided a local village with a sealed waste-collection bin for every household to reduce windblown litter and uncontrolled waste. The project kicked off with



## Social Responsibility in Saudi Arabia

ACWA Power's CSR program in Saudi Arabia includes a blend of supporting and sponsoring a range of sector conferences, educational institutions, community needs (as detailed alongside) plus two long term projects; namely Namaa Al Manawara and the Higher Institute of Water and Power (HIWPT). The latter two projects are the priorities of the Corporate CSR team and will be the main focus for 2015 and beyond.

One way for ACWA Power to attract local talent in Saudi Arabia is through participation in the King Abdullah University for Science and Technology (KAUST) Industrial Advisory Board and in student career fairs. These have proved to be successful partnerships for ACWA Power.

As recognition of our sustainability leadership in the Kingdom, ACWA Power was invited to the Saudi Aramco CSR Summit, held in Dammam in March 2014, for two speaking engagements to present our good practices and regional experience. ACWA Power was also recognized for its sustainability performance as it came in fourth place in the yearly King Khalid Foundation Responsible Competitiveness Rating and Awards.

The Shuqaiq Water and Electricity Company (SqWEC), an ACWA Power managed Joint-Venture, donated an initial SAR3M to the Disabled Children for a new building in Jazan. Their support of this project is ongoing.

Finally, the ACWA Power and NOMAC teams are aware that our CSR support and engagement with the communities surrounding our Saudi assets has room for improvement. NOMAC has undertaken, with support from the Corporate team, a suite of social initiatives that will be rolled out during 2015. In keeping with ACWA Power's overall CSR strategy, the projects will focus on education, health and lifestyles and economic empowerment.

## Namaa Al Manawara - Helping Saudi Small Medium Enterprises (SMEs)

In September 2014, ACWA Power was one of the first private entities to pledge our support to the SAR1 billion endowment to develop and empower the SME sector in the Madinah region of Saudi Arabia. ACWA Power has committed to providing SAR 15M to the program over a 3 year period starting in 2014. The launch of the non-profit organization Namaa Al Manawara. will support SMEs in the region via a fourfold strategy:

- One Stop Shop - simplification of procedures and assistance to entrepreneurs to establish businesses,
- Female Creativity Labs – aiming at nurturing women's creativity and employment as this is a crucial element in fostering of equitable social and economic development,
- Al Manawara Oases - retail spaces which will give entrepreneurs the chance to market and display their products through effective promotional channels in strategic historical locations in Madinah,
- Al Manawara Industrial City - in partnership with the Saudi Industrial Property Authority, Namaa Al Munawara will allocate 100 medium-sized factories & entrepreneurs and SMEs which will be operational over the course of the next four years.

### Corporate Memberships

- King Abdullah University for Science & Technology (KAUST)
- The KAUST Centre Industry Affiliates Program (KICP)
- The Saudi Water & Power Forum
- The Emirates Environmental Group
- The Arab Forum for Environment and Development (AFED)
- The Middle East Desalination Research Centre (MEDRC).

## Higher Institute for Water and Power Technology, Saudi Arabia

The Higher Institute for Water and Power Technologies (HIWPT) is a vocational training institute founded by ACWA Power and located in Rabigh, KSA. HIWPT is our flagship initiative and has been our priority CSR project since 2010.

The Institute was established as a not-for-profit technical institute aimed at the training and upskilling of young Saudis (see photos alongside) to work as operators and technicians in the field of water desalination and power technologies. As of the end of 2014, more than 200 trainees had graduated with a further 150 in training and just over 100 progressing through the On-Job-Training phase.

The Institute has been successful in securing employment for all trainees as they are matched with sponsors from the start. The continued success of HIWPT is assured by the strong strategic partnerships that have been established between the Institute and government authorities, water and power sector partners, industry leaders, equipment manufacturers, international training providers and plant operators. ■







HIWPT, Saudi Arabia

# Assets Development, Management & Performance

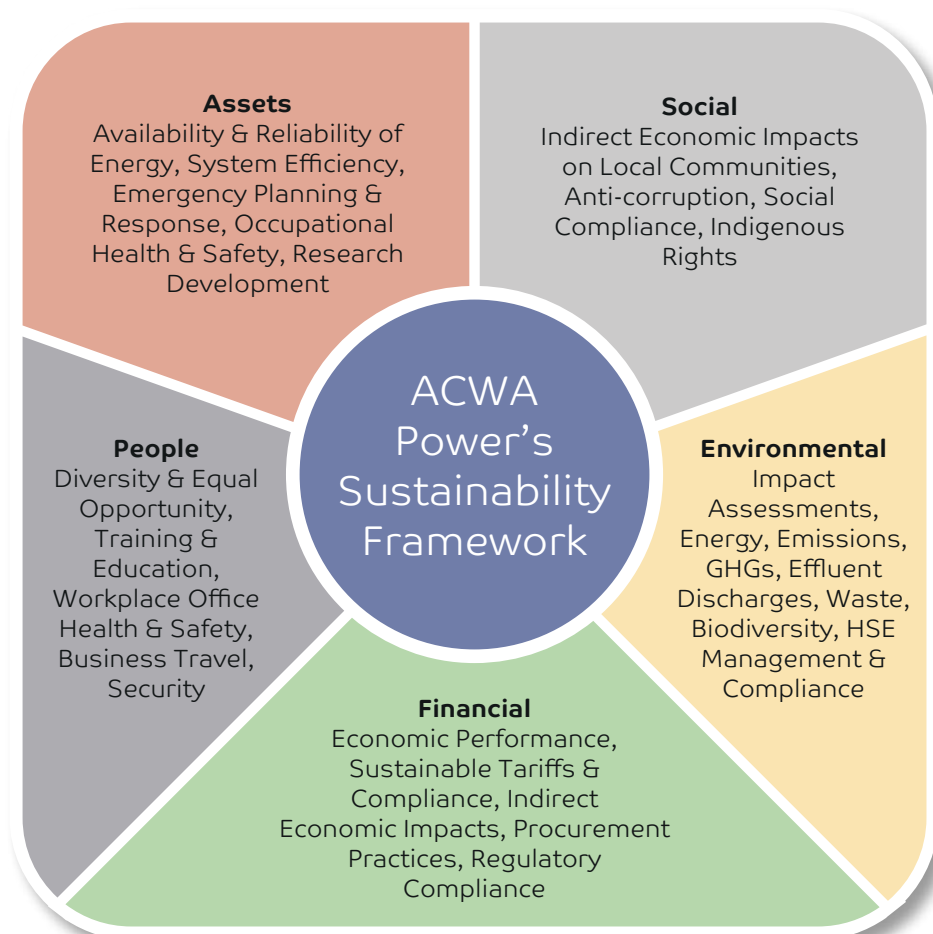
We have mapped our health, safety, social and environmental (HSSE) management and performance onto a typical project's life cycle with the sustainability story spanning our two primary functions of Business & Project Development and Asset Management & Assurance. In this second part of the Report, we present our sustainability management and performance

highlights and challenges from 2014 as they would occur in the chronological development and operational life of a typical power and desalination asset.

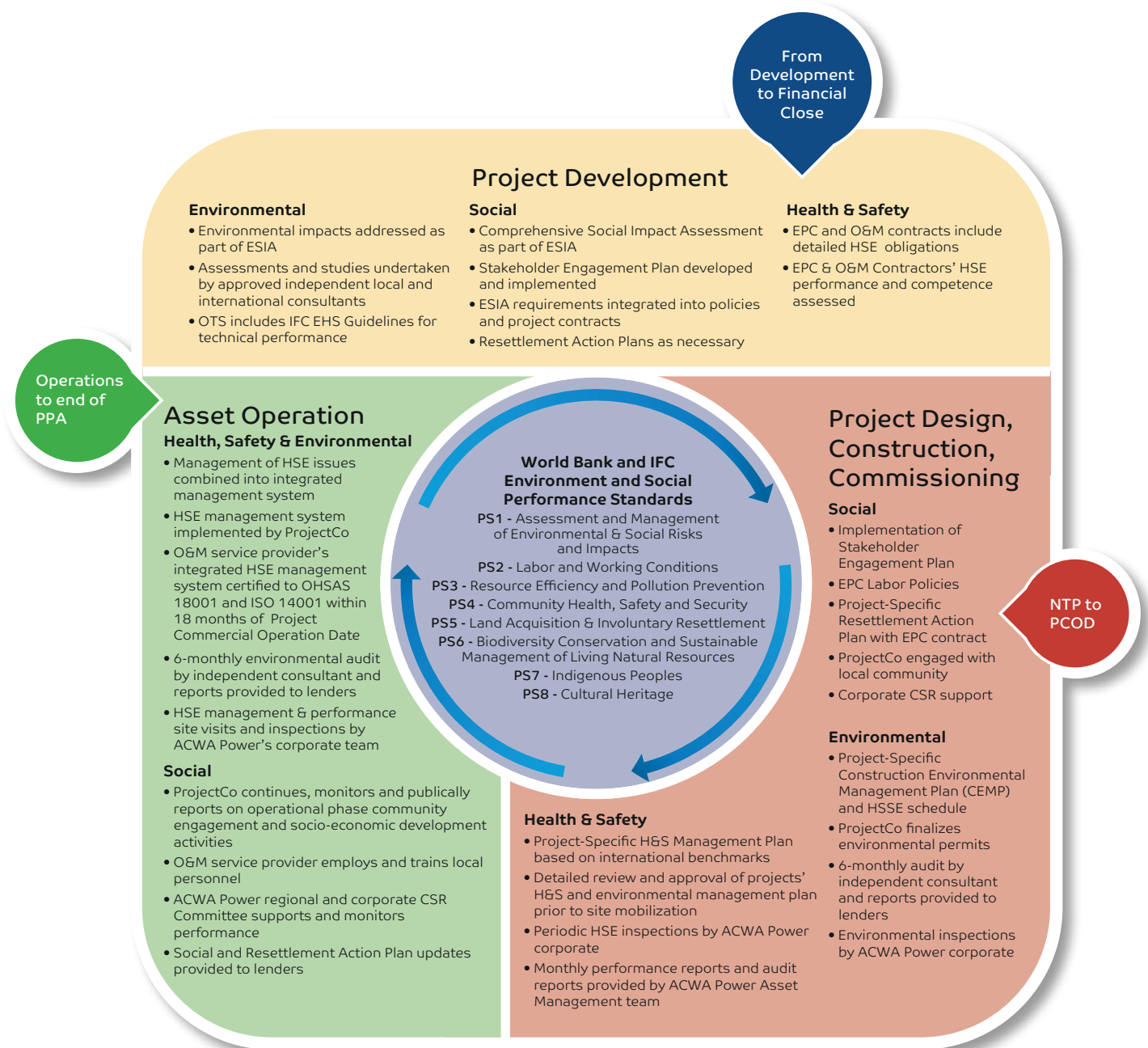
This Report demonstrates that our sustainability agenda is not a stand-alone initiative. ACWA Power's operating model incorporates and links to various aspects of the company's sustainability agenda. Our efforts across

our sustainability framework — Asset, People, Environmental, Financial and Social Sustainability — are woven into the fabric of our operations, guiding how we do business and thus contributing to local communities. These practices are implemented by dedicated and trained individuals with associated roles and responsibilities.

## ACWA Power Sustainability Framework



# Integration of the IFC's Environmental & Social Performance Standards across the Asset Life Cycle.



## Our Commitment to International Benchmarks

ACWA Power monitors and implements current sustainability standards in the power and desalinated water sectors to ensure our license to operate meets and, whenever possible, exceeds legal obligations. In this way, ACWA

Power's benchmarks often exceed regional and local standards as we proactively comply with the latest and most demanding project requirements at the global level. From our very first IPP project in 2007, we have committed to and followed the current IFC/World Bank requirements to ensure that our financial partners and lenders can readily comply with their Equator Principles commitments.

For example in Saudi Arabia, we comply with the IFC air emissions standards which are more stringent than the local standards. Recently, as part of an internal assessment, we also updated our policies, procedures and standard contracts to ensure compliance with the IFC's eight Environmental and Social Performance Standards as detailed in the illustration above. ■



## Establishing Our Sustainability Values

Sustainability begins with a strategic appraisal and Environmental and Social Due Diligence (ESDD) as part of our investment-screening process to identify potential markets and project specific risks and opportunities. Material issues on a project's risk landscape are considered, resulting in an appreciation of its compliance with our values and strategic objectives, which are then addressed during the project-development process. During 2014 we undertook or commissioned 14 ESDDs in 14 countries and completed 5 ESAs in 4 countries.

Our Project Development team stays abreast of the HSSE issues using local networks for research and business intelligence to augment ACWA Power's own internal due diligence. Adverse sustainability factors can be deal breakers in investment decisions, even when economic and growth factors are positive. Potential risks of corruption and other unethical practices have deterred ACWA Power from investing in certain regions. ACWA Power's Board Investment Committee formally reviews and approves the business development plan while ethics, anti-competitive and anti-corruption obligations are managed at an operational level by being reflected in project agreements and contracts.

Once we have made the decision to invest, we focus on adding value beyond the minimum contractual and legal requirements in order to ensure effective value creation at the local level. Our key success is our ability to implement groundbreaking technical and financing solutions while fostering trust-based relationships with long-term value for our partners and stakeholders.

## Ensuring Financial Sustainability

ACWA Power contributes to financial sustainability through building a robust and innovative financial model for each project. This enables us to be trendsetters and drive the IPP sector to continuously deliver best pricing, which enables governments to either pass on these savings to end users or reinvest the avoided costs in other public works.

ACWA Power is clearly adding value to each economy in which we operate through submitting our lowest possible bids. We are driving the sector by creating competition and reducing tariffs, which keeps the IPP model inherently competitive and an economic option. It is important that our model of operation is inclusive of all stakeholders, so that their affordable tariff expectations are at the forefront of the organization's commitments. As a consequence, the internal rate of return is set at a level at which ACWA Power can work in a sustainable way toward a mutually beneficial outcome over a project's entire life cycle. This practice of low tariffs provides barriers for our competition, ensures the security and sustainability of our facilities, and provides a positive return on investment for our shareholders.

## Focus on Technology

Technology facilitates and supports the mitigation of our risks through the application of evolving reduction of energy prices and GHG emissions while assuring plant availability.

Our internal Technology team sets us apart from our peers as it provides seamless services, by capturing and sharing depth and breadth of "know-how" built from the inside out, while providing developments that enable the flexibility and speed of response.

Our company's contribution to the improvement of local technology standards and practices can be seen in the increased level of project requirements and local norms in Saudi Arabia, including the first use of flue gas desulfurization (FGD) technology, which has had a positive environmental impact. Prior to the Shuaibah IWPP in 2010, Saudi Arabia did not have an FGD plant. ACWA Power changed that through a US\$132 million investment, and since then FGD technology has become the norm in all power projects in the Kingdom, including government projects.

### Nam Dinh, Vietnam – First Deployment of CFBC

The Nam Dinh 1 plant, to be developed on a build, own, transfer (BOT) will be equipped with clean-coal technology called circulating fluidized bed combustion (CFBC), an alternative to pulverized coal combustion (PCC) that will reduce CO<sub>2</sub> emissions.

To assure HSSE compliance, we are undertaking a detailed gap analysis on the original EIA and Social Assessment to IFC standards, and will publish the results. Similar gap analyses for compliance have been done for other projects.

## Business Development in 2014

In 2014, we built on previous achievements, stabilized and improved performance, addressed challenges head-on and so became a tougher and more effective team.

We achieved financial close and commenced construction on the Kirikkale Merchant IPP, in Turkey. This is noteworthy for us and the Turkish Electricity sector as we achieved non recourse project financing for a merchant plant for the very first time in Turkey.

ACWA Power extended its reach by opening an office in Hanoi, Vietnam and signing up to a JV with Teakwang Power Holdings, Korea for the development of a 1200 MW coal fired CFBC plant in Nam Dinh, Vietnam.

We were named preferred bidder for Redstone Solar Tower Thermal Power, a 100 MW CSP plant in South Africa, which was subsequently awarded in January 2015. This plus our other achievements in South Africa and Morocco led to our being awarded The African Renewable Developer of 2014 at the African Infrastructure Awards in early 2015 in Cape Town, South Africa.

We commenced operation of Barka 1's expansion phase one, with a capacity of 45,460 m<sup>3</sup>/day, and achieved financial close for Barka Expansion in January 2015 and commenced construction for Barka 1 Expansion phase 2, which will produce 56,826 m<sup>3</sup>/day. Other important accomplishments included the finalizing of a concession contract with the Government of Mozambique for developing of the Moatize 300 MW IPP coal fired power plant near Tete and the

acquisition of 70% of the Khalladi Wind IPP, a 120 MW wind farm in Morocco.

As part of our wider strategy, ACWA Power increased its shareholding in Shuqaiq Water and Electricity Company to 40% by acquiring 6% from Mitsubishi Corporation of Japan. Similarly we increased the effective shareholding in Petro-Rabigh from 23.9% to 37% and became the 100% owners of the First National Operation and Maintenance Company (NOMAC).

Finally, the International Finance Corporation (IFC), a member of the World Bank Group, became a shareholder of ACWA Power with a US\$ 100M investment and we signed a co-investment agreement with Arabian Petroleum Investments Corporations (APICORP) which is set to strengthen our capacity to fund our growth plans. ■



## Respecting Indigenous Rights

ACWA Power takes a holistic approach to protecting local populations in places where we operate, and includes the assessment of indigenous and cultural rights in it's project due diligence and subsequent ESIA phases. In the unlikely case that an indigenous rights issue is identified, it's management is based on good international practices and current IFC standards. Moreover, ACWA Power actively supports local stakeholder engagement programs before and after project development in order to learn, update and respond to indigenous population issues.

In Saudi Arabia, the UAE, Morocco and Oman, the primary responsibility for considering indigenous rights practice falls to the Government-sponsored Offtakers as they pre-define site locations as part of the request for proposal and the bid stage. The Offtaker includes a preliminary ESIA in the bid document, along with an outline of planning consent, which identifies existing indigenous rights issues that need to be addressed during the construction and operation phases.

Currently, no project sites under ACWA Power's control have experienced material indigenous rights issues.



## Commitment to Climate Action and Renewable Energy

The elephant in the room for the international power industry is carbon. All pollution-reduction plans propose a hierarchy of actions that prioritizes avoiding or eliminating pollution followed by making reductions. Carbon emission reduction plans must start by avoiding emissions which we started in 2009 by investing in renewables<sup>1</sup>. Since then we have taken a leading role in the conversation on renewable energy in the Middle East by demonstrating that this energy source is already cost-competitive.

ACWA Power is currently investing US\$ 7 billion in its renewables portfolio. At the beginning of 2012, we had 2.5 MW of renewable energy in our portfolio of 13,500 MW of contracted capacity. At the end of 2014, four assets were in operation: the Hofa and Ibrahimiya windfarms in Jordan, a 50 MW photovoltaic plant in

Bulgaria; and a waste-to-energy plant in the Czech Republic. plus Two plants were under construction, the 160 MW Concentrated Solar Power (CSP) Noor 1 IPP plant in Morocco and the 50 MW Bokpoort CSP IPP in South Africa. These facilities constitute a renewable energy portfolio with total capacity of 262.5 MW.

**January '15 - renewables contracted capacity of more than 1 GW**

In early January 2015, we received confirmation and the award of four new projects: Noor II (200 MW) & Noor III (150 MW), both in Morocco and Phase 2 of Mohammed bin Rashid Solar Park (200 MW) in the UAE and the Redstone CSP (100 MW), South Africa. These are in addition to acquisitions of the Khalladi wind IPP (120 MW) in Morocco which provide a combined output of 770 MW.

ACWA Power has achieved its success by delivering the lowest tariff the world has seen and then bettering this level in the next bid. The 2012 bid price for

the Noor I CSP parabolic trough project in Ouarzazate, Morocco was US\$18.9 cents per kWh. This was improved on in 2014, for Noor II with a price of US\$ 15.7 cents per kWh. We bid US\$ 12 cents per kWh in 2013 for a 100 MW PV plant in Saudi Arabia, which was eclipsed by our 2014 price of US\$ 5.84 cents per kWh for the 200 MW Phase 2 Mohammed bin Rashid Solar Park for the Dubai Electricity and Water Authority.

These reductions are made possible by focusing on every element of the cost model, and keeping margins at a reasonable level. Our team works hand-in-hand with a broad base of technical, financial and tax specialists to identify continuous improvements and bottom-up savings.

The sharp drop in technology costs experienced in recent years have also played a major role in ACWA Power's achieving record-low tariffs though a further contributing factor has been the highly leveraged financing we have been able to acquire.



Ibrahimiya & Hofa Wind Farm, Jordan

<sup>1</sup> We define renewable as energy resources naturally regenerated (or replenished) over a short time scale that are derived directly or indirectly from solar and/or natural environmental mechanisms. Renewable energy excludes power derived from or based on fossil fuels.



Noor 1 IPP, Morocco

## Groundbreaking Renewable Energy Solutions

Morocco is well-endowed with renewable energy resources that offer a sustainable alternative to its current dependency on fossil fuels. The Noor Solar complex currently under development near Ouarzazate will combine several utility-scale solar power plants using various solar technologies, making it, with a total capacity of 510 MW, the largest solar power complex in the world. By deploying the latest CSP technology with salt thermal storage, the facilities are serving as the flagship projects of the “green approach” of the Moroccan Agency for Solar Energy (MASEN) and are demonstrating that utility-scale renewables can be used to provide basic electrical supply.

The Noor I CSP is a greenfield IPP and was the first phase of MASEN’s Noor Solar Complex. The 160 MW CSP uses parabolic troughs with 3 hours of thermal storage and is expected to generate more than 2% of the Morocco’s power demand.

Construction began in June 2013 and operations are scheduled to start in the fourth quarter of 2015. ACWA Power provided a tariff for Noor I that was 28.6% lower than the second-best bid, saving US\$ 250 million for the Kingdom of Morocco. The project will avoid carbon emissions of approximately 470,000 tCO<sub>2</sub> per year, which equates to just less than 12 MtCO<sub>2</sub> over a 25-year life span.

The recently awarded Noor II CSP IPP (200 MW parabolic trough) and Noor III CSP IPP (150 MW solar tower) projects will be constructed in parallel and constitute the second phase of the development of the Noor Solar Complex.

The complex is at the heart of the Moroccan government’s ambition to produce 2 GW of solar power by 2020, equivalent to about 28% of Morocco’s current installed generation capacity.

The projects will serve to support Morocco’s Green Economy by avoiding approximately 1,108,600 tons of CO<sub>2</sub> per annum. Beyond climate action and environmental benefits, MASEN will also accrue financial benefits from the sale of Certified Emission Reductions

(CERs), which are expected to provide ongoing funding of renewables investments in Morocco.

The Noor II and Noor III projects are both equipped with thermal storage capacity of three and seven hours respectively, enabling these plants to dispatch a record-high amount of power generation, well into the night. This will significantly support Morocco in meeting its peak electricity demand during the early evening.

ACWA Power was awarded the three Noor projects after a rigorous evaluation process under the rules of the World Bank. The ACWA Power Consortium also committed to source a minimum of 30% of the scope of the projects by value from local Moroccan contractors and the local manufacturing industry, as a means of industrial integration and support for the local economy. ■

Noor Solar Complex will supply 8% of Morocco’s energy demand while simultaneously avoiding 1.1 MtCO<sub>2</sub> per annum

## Sustainability in Asset Management

ACWA Power is currently managing and overseeing the construction and operations of 27 facilities. One central challenge is maintaining a cohesive and coherent approach to our key sustainability risks across our entire asset portfolio and throughout the value chain. We ensure that our requirements are applied by empowering and then monitoring our ProjectCo subsidiaries and NOMAC in their adoption and effective implementation of good utility practices. Our Chairman and senior management team regularly travel to each of our ProjectCo's and assets and personally communicate our values and messages to all our employees and stakeholders.

## Performance of Operational Facilities

The performance of ACWA Power's asset portfolio in 2014 continued the progress of previous years and demonstrated each asset's worth and value. The portfolio's overall performance highlights the company's strength and position as the largest regionally owned independent developer, owner and operator of power and water desalination facilities. The fleet delivered 71,965 GWh of electricity, with year-on-year growth of 6.4%, commercial availability of 93% and a load factor of 86%. Desalinated water exports totaled 747 million m<sup>3</sup> with marginal year-on-year growth of 0.35%, commercial availability of 92%

and an 87% load factor. The steam exported from Rabigh IWSP was 12 million tons to the Petro-Rabigh refinery complex.

During 2014, the Barka Reverse Osmosis (RO) expansion project achieved commercial operation, and Qurrayah IPP (QIPP) progressed through hot commissioning and achieved partial ICOD status for five of the six power groups. QIPP encountered technical issues related to its gas turbines, which delayed the project commercial operation date. A root-cause analysis was carried out by the OEM and EPC, and the remediation measures were completed during Q1 2015. During the second half of 2014, QIPP still delivered early production of 6,440 GWh of electricity.

The breakdown of production is illustrated on the next page with the Saudi plants accounting for 82% of total electricity export and 96% of desalinated water export. The majority of renewable energy is generated by the Karadzhhalovo PV plant that exported 74.9 GWh, which represents 0.1% of our electricity production. Fuel and Energy Consumption data is presented on page 46.

## Product & Service Quality

ACWA Power provides two tangible products namely electricity and potable desalinated water plus steam from one of our facilities. The voltage and frequency of generated electricity are controlled and synchronised with the national grid to ensure compliance transmission networks. Water quality

is routinely tested prior to dispatch to the Offtakers' holding tanks in order to ensure compliance with national water standards. It is our commitment that 100% of our products that reach the market have been quality-assured, certified and accredited through internationally recognized standards.

## Rewarding Success

ACWA Power trialed an Awards Program for the KSA assets during 2014 that recognized and rewarded sustainability related achievements. There were three awards, dedicated to Safety, Saudization, and Availability & Reliability. The primary reason for the awards, after recognizing good practice, is for ACWA Power's teams to learn from each other and to help us improve our performance.

The program has proved successful and plans are under development to extend the scheme to the entire asset portfolio. ■

### The award winners for 2014 were:

- **Best Safety Performance Award** – Hajr for Electricity Production Company
- **Best Availability & Reliability Award** – Shuqaiq Water and Electricity Company
- **Best Saudization Award** – Rabigh Arabian Water and Electricity Company

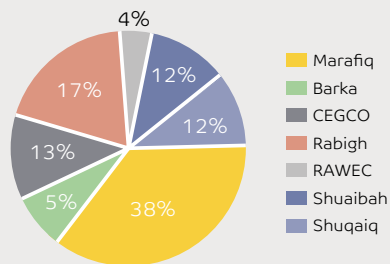


Noor 1 IPP, Morocco

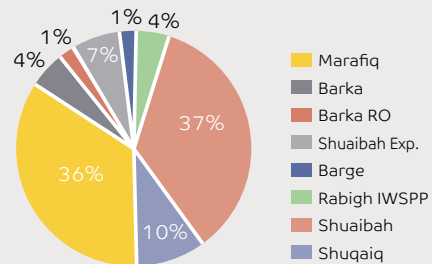
### Electricity and Desalinated Water – Production and Exported

	Electricity Gross Generation (GWh)	Electricity Net Export (GWh)	ACWA Power's Share of Net Electricity Exported (GWh)	Water Exported (million m <sup>3</sup> )	ACWA Power's Share of Water Exported (million m <sup>3</sup> )
2014	71,965	65,940	19,782	747.4	215
2013	61,530	55,822	17,301	745.0	213
2012	52,887	47,594	12,585	747.0	214

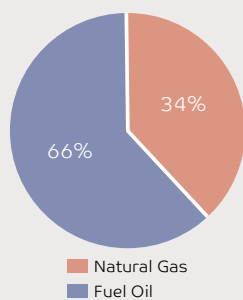
#### Electricity Delivered per Facility



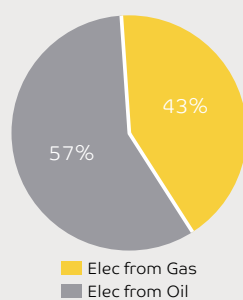
#### Water Dispatched per Facility



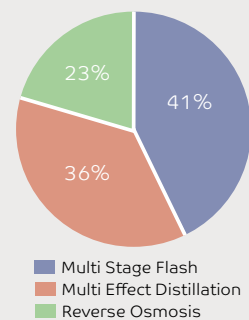
#### Fuel Consumption Water & Electricity Production



#### Fuel Consumption for Electricity Production



#### Water Production by Technology





## Availability, Reliability and Efficiency

Stringent performance standards covering reliability and availability of assets are included in the Power and Water Purchase Agreements (P(W)PAs) between Project Companies and national Offtakers.

Availability and reliability are our key business drivers, as they can significantly impact our financial and reputational performance and so we monitor and report on this performance daily.

We have demonstrated our performance by repeatedly responding to increased demand during the annual Haj and high seasonal periods in Saudi Arabia. The 2014 summer commercial availability of 97.2% was exceptional for our power plants, and just on 98% for the Saudi facilities. The water plants' summer commercial availability was 95.5%, which was higher than the budget estimate of 93%. Our main IWPP facilities, Shuqaiq IWPP, Barka IWPP and Rabigh IWSP, have delivered on reliability and availability throughout the year, which have supported our year-on-year performance. Marafiq IWPP and Shuaibah IWPP performed particularly well during the peak demand period over summer.

The performance of all the remaining facilities, including Rabigh IPP, Shuaibah IWP and the CEGCO plants, were better than budgeted.

We are continually seeking practicable ways to improve the capacity, efficiency, productivity and environmental performance of our operations. The technology team supports our assets by

- **Capacity and Efficiency:**  
Assisting current units to create more power while optimizing their waste streams
- **Waste and Seawater Management:**  
Utilization of mineral extraction for commercial use and minimization of waste
- **Membrane-Based Desalination (MBD):**  
Employing an option that uses one-third of the energy required for thermal desalination while reducing thermal discharges. ACWA Power's MBD developments are unique and pioneering on a global scale.
- **Capacity Building:**  
Maintenance of strong links to Project Companies in order to establish an effective internal competency platform and an allocation of mixed teams to look at issues, as well as to find solutions and exchange views on incidents and solutions, thus optimizing the use of knowledge throughout the group.

Since our facilities are relatively new, they feature higher-than-average resource efficiency. In addition, all facilities need to comply with current World Bank/IFC resource-efficiency performance targets, resulting in an overall notable efficiency performance. The weighted average efficiency and thermal heat rates (a measure of efficiency) for ACWA Power's asset portfolio has improved

from 2013 to 2014. An Improvement of 4.2% seems marginal but leads to a significant relative reduction in the carbon intensity of the portfolio, as detailed on page 41. This has enabled the asset portfolio to avoid emitting approximately 857 ktCO<sub>2</sub> of which 257 ktCO<sub>2</sub> is AWCA Power's share (based on equity stake) as a result of technology advances and efficiency gains over the year.

### Asset Heat Rate & Efficiency

Year	Average Heat Rate - combined kJ/kWh	Av. Heat Rate for Elec. Only kJ/kWh	Efficiency for Electricity Production %	Overall HR for KSA Assets - Elec only kJ/kWh	Overall HR for International Assets- Elec. Only kJ/kWh
2014	10,712	8,461	43%	8,198	9,878
2013	11,181	8,676	41%	8,344	10,317
2012	11,633	8,649	42%	8,295	9,968





Qurayyah IPP, KSA

## Assets in Construction

ACWA Power had four assets in construction during 2014. The two solar energy assets, Noor I CSP in Morocco and the Bokpoort CSP in South Africa, which both use similar technology of concentrating parabolic troughs with thermal storage. Rabigh 2 IPP is in construction north of Jeddah in Saudi Arabia. It is a greenfield project with a net generation capacity of 2060 MW. The project will utilize natural gas as its main fuel and Arabian Super Light as backup fuel. The 3,927 MW combined cycle gas turbine Qurayyah IPP project, also in Saudi Arabia is coming to the end of its construction phase and is in final commissioning. It is the third in a program of multiple IPP projects under development by the Saudi Electric Company. The Project is dual fuel, with natural gas as the primary fuel and diesel oil as a backup and scheduled to achieve PCOD during 2015.

A significant challenge during construction is assuring and delivering on our sustainability and HSE performance standards throughout our supply chain. We actively engage with our Tier 1 EPC Contractors and OEM suppliers who are typically multinational conglomerates that understand and aspire to recognise international standards. The second tier of the supply chain is predominantly made up of local suppliers whose sustainability and HSE management experience and performance does not always meet our expectations. During 2015 we will drive our performance expectations further into the supply chain in cooperation with our Tier 1 partners. ■



Bokpoort IPP, South Africa

## Portfolio Assurance, Governance and Risk Management

ProjectCo governance structures are highly dependent on the nature and scale of each project. There is always a breadth of skills in each ProjectCo team and its Board and so they use their considerable influence and competence to shape sustainability practices while ensuring alignment with ACWA Power's standards at the local level.

We ensure that governance structures at the ProjectCo level are representative of ACWA Power's commitment to transparency. Therefore, the majority of our ProjectCo Board members are non-executive Directors, while the key board committees are chaired by an Independent Director. Our Conflict of Interest Policy stipulates that all Board Directors, the Chairman, Board Committee members and management must disclose their related party interests in relevant transactions to avoid conflicts of interest. If any conflicts arise, the member is restricted from voting.



During the ProjectCo formation stage, a primary evaluation of business and sustainability risks is undertaken and mitigation plans deployed. Furthermore, each company has a formal Board Audit and Risk Committee supported by a local Risk Manager that reports to the regional Manager.

Each ProjectCo is required to implement a risk management framework based on ISO 31000 within 18 months of formation. This provides a formal structure for the management of key risks arising from, amongst other issues, construction and commissioning, pricing, insurance, fuel supply, operations & maintenance, economic & financial, health, safety & environmental management as well as contractual and legal obligations.

## Security Practices

We have limited direct control of security practices within our operations, as these are the remit of the ProjectCo and its supply chain. However, all security operations are required to fully comply with local security industry and national legislation. Security management and resources of construction and operational sites are the contractual responsibility of the EPC contractor or O&M service provider respectively. IFC environment and social performance standards list specific requirements regarding the training and management of security, especially with regard to its potential impact on local communities. We include these requirements in development contracts for all assets.

In Morocco, 100% of our security personnel have undergone training in ACWA Power's human rights policy and security procedures. In South Africa, the EPC contractor has included "human rights good practices" in the security personnel's training program.

All power stations and desalination plants are considered key national assets therefore, there is normally additional security provided by the host countries through their national defense force or industrial security services that augment the sites' capabilities and resources.



## Emergency Planning and Response

Emergency preparedness and response is a significant part of ACWA Power's HSE management arrangements. All construction and operational sites have formal emergency prevention, detection and response plans, which include crisis communication structures.

All sites have formally appointed competent resources for managing emergency situations. We undertake annual emergency drills and training, including a minimum of six-monthly tests. We monitor all drills and generate formal reports with lessons learned to ensure continuous improvement. Facilities that are co-located or share sites with other power and desalination plants arrange combined emergency drills that test the sites' overall preparedness. These drills are periodically observed and monitored by local authorities and civil defense personnel.



## Health, Safety, Social and Environmental Management

ACWA Power's HSSE management process is designed in accordance with globally accepted good practice standards across all levels of operation. We believe we are leading HSSE improvement and safety culture change in some of the locations in which we invest and operate, based on our ongoing international benchmarking activities.

Our integrated environmental, health & safety management system was recently assessed by the IFC for conformance to the IFC Performance Standards. The few minor deficiencies that were identified have been implemented and now meet IFC's stringent guidelines.

As part of the development of the HSSE management framework, we performed a formal risk assessment of all our products, activities and services. The most significant HSSE risks encountered by ACWA Power's office based staff arise from office conditions and business travel, both of which are actively managed by our administration team.

During the feasibility assessment and development or acquisition phases for new assets HSSE issues are identified and managed by undertaking HSSE due diligence assessments and then commissioning ESAs that are completed by independent consultants. Asset performance-related and technical issues with HSE consequences are covered by ACWA Power's minimum OTS which is applied to all projects and is based on ensuring compliance with local legislation and the WB/IFC EHS Guidelines. At the start of construction, project-specific HSE and social action plans are established as part of the implementation of the ESIA which is also a contractual obligation. ESIA compliance is monitored by both the ProjectCo's and the Corporate HSSE teams, who are supported by independent environmental consultants that conduct audits on the lenders' behalf. For example at CEGCO, audits were conducted over a 24-month period and were accompanied by capacity building activities such as employee lectures, workshops and vocational training around HSSE.

We have published a customized HSE training booklet titled "Safe Construction". To date over 8,000 copies have been distributed, and the booklet has been translated into eight languages - Arabic, English, Hindi, Chinese, Korean, Spanish, Portuguese and Afrikaans.

At an operational level, NOMAC has an integrated management system that covers HSE and has been certified to the ISO and OHSAS standards since 2010. CEGCO received notification in late December 2014 of their successful independent certification of their integrated HSEQ management system to the same international standards.

We perform an annual occupational health checkup for all operational employees covering a range of parameters, including lung tests and audio tests. All construction sites have access to on-site nurses and doctors, with remote sites having on-site ambulances and emergency-response resources.

ACWA Power offers rewards programs to motivate stakeholders to abide by the company's HSSE policies.

They include recognition, bonuses and cash incentives for good performance and rewarding reporting of near-misses. We believe that incentives combined with a zero-tolerance enforcement of standards are instrumental in driving HSSE in action and fostering a safety culture across ACWA Power.

Emergency and critical health and safety incidents are taken very seriously and reported through agreed channels within four hours to enable the deployment of formal emergency-response plans as necessary. All incidents are followed up through formal investigations to identify root causes and lessons learned, the outcomes of which are shared. Incidents and noncompliance events are reported monthly and collated for publication in ACWA Power's annual corporate report.

We conduct periodic management and performance audits which are followed by a detailed report of findings, conclusions and recommendations. These are then monitored and tracked until closure. ■



Petro-Rabigh IWSP, KSA

## Health, Safety and Environmental Performance

No work-related fatalities occurred during 2014 - however a non-work-related motor vehicle accident occurred on the public road leading to the Bokpoort project, South Africa, in which an off-duty contractor was fatally injured. The entire project team was deeply shocked by the incident, and the findings of the root-cause analysis have been thoroughly implemented to avoid similar incidents in the future.

HSE performance across the asset portfolio sustained the overall trend of previous years with continued maturation but with mixed performances (see page 46 for full details). Reportable Lost Time Incidents (LTIs as per OSHA definitions) on our construction projects have increased compared to previous years but are still below international benchmarks. The increase coincided with the start of construction of our projects in Africa and the lack of adequate enforcement of standards in our Tier 2 contractors. The corporate and site HSE teams supported the main EPC contractor and this trend was reversed towards

the end of 2014. Both sites have since worked more than a million man hours without LTI. The Qurrayah IPP and Rabigh 2 IPP both achieved LTI free performance.

More LTIs occurred at our operational sites in 2014 than in 2013 though the past year's performance was still better than that of 2012. Seven of our operational facilities had no LTIs including Shuaibah IWP, Shuqaiq IWPP, Marafiq IWPP, Barka IWPP, Desalination Barges, Rabigh IWSP and Karadzalovo CSP. The majority of the incidents occurred at one set of sites that was addressed in the later part of the year, and the early indications are that a step change in attitude and culture has occurred, which bodes well for 2015. ACWA Power's combined LTI rate (construction and operational sites per 200,000 hours worked) was 0.22 which was better than the European benchmark of 0.25, which is ACWA Power's target.

The HSE reportable KPI is a composite indicator that covers fatalities, LTIs, dangerous occurrences, environmental pollution incidents and occupational diseases. The KPI was developed as a single indicator to cover the full span of HSE

performance and management. There is no simple or direct comparison at a UK/EU level as health & safety and environmental performance is monitored and reported separately. HSE reportable incidents and incident rate have increased year on year primarily due to improved understanding and increased transparency in reporting. Overall environmental incidents, occupational diseases and dangerous occurrences are infrequent events with none of those during 2014 resulting in off-site or irreversible damages.

We use a blend of performance and management indicators to balance the evaluation of HSE outcomes with the input and active effort of the site and corporate leadership and HSE teams. The effort placed on routine HSE tours, inspections and audits is evident as the near-miss rates continue to increase year-on-year. The priority challenge remains effectively implementing and sustaining a near-miss reporting procedure and ethos. Near-miss reporting will be one of the main focus areas for 2015, especially on construction sites, plus retaining the emphasis on process and fire safety, housekeeping, and supporting the continual improvement of the HSE teams' expertise and competence. ■

### Summary of Health, Safety and Environmental Performance

Scope	Year	Lost Time Incidents	LTI Rate	HSE Incidents	HSE Incident Rate
Operational Facilities	2014	14	0.38	24	0.65
	2013	10	0.25	36	0.84
	2012	26	0.92	43	1.52
Construction Sites	2014	14	0.15	24	0.26
	2013	4	0.03	16	0.12
	2012	0	0	25	0.18



## Zero Harm Campaign

At the start of 2014, we launched our Zero Harm campaign, which translates into Arabic as “Without Harm” and is transliterated as “Bedoon Adah.” To our knowledge, we are the first GCC-based organization to adopt and translate this global safety maxim, which supports our HSSE vision of “Positive societal contribution with Zero Harm”.

This “Zero Harm” campaign was supported by a comprehensive HSE management plan covering our top 10 HSE risks across each of the corporate, ProjectCo, O&M and facility levels.



### Transmittable Diseases

Our Health & Safety activities extend to addressing transmittable diseases. Our South Africa operation, for example, has active educational programs around HIV, and we offer assistance on-demand. Similarly, we support our employees and contractors in Mozambique with malaria testing, mosquito nets, spraying and medical support.

### Managing PCB Responsibly

The acquisition of CEGCO's facilities in Jordan resulted in ACWA Power's portfolio including transformers and electrical switchgear that contain polychlorinated biphenyls (PCBs). CEGCO is coordinating with the national authorities, who are working in conjunction with UNEP on a national PCB strategy. PCB-containing equipment is being managed as per good industry practices awaiting completion of the national strategy and responsible removal and destruction of the contaminated oil. The rest of the asset portfolio is PCB- and asbestos-free, as the assets were all constructed and commissioned after 2005.



Bokpoort IPP, South Africa

## Impact of Climate Change on Assets

The direct effects of climate change are currently considered to be immaterial to our assets and business operations. Our plants have been designed in recent years with due regard for potential sea level rises, and the majority of our sites are not located in vulnerable or exposed coastal areas. Potential temperature increases would not particularly affect performance efficiency as such increases are predicted to be, at worst, moderate over the next two decades. Furthermore, we have mitigated against the risk of increased and more violent seasonal storms in the design of our facilities.

The only potential long-term climate change challenge could be water abstraction from aquifers and rivers which would have regional consequences effecting ACWA Power's plant locations. Water is an issue we manage carefully, and our plants are always designed to minimize water consumption.

## Commitment to Quality

Quality management is an important element of ACWA Power's project-development process, especially because of the long life span of our projects. Quality management has been purposefully decentralized to each team, and into each team's processes and KPIs, in order to leverage employees' expertise.

Our quality management process includes hold-points, internal and external reviews, and assurance checks. During the final-stage of each bid, a comprehensive presentation is delivered to the Board's Investment Committee (that includes two independent Board members) in order to review and approve development and investment decisions. Debriefing and look-back sessions are held after the completion and submission of each bid.

The Board Audit and Risk Committee, supported by the Head of Internal Audit, has responsibility for assessing, reviewing and reporting on our conformance to internal procedures and best practices.

## Aligning Our Suppliers

We are committed to ensuring that our own good practices and compliance systems are maintained across the supply chain. We engage with prospective suppliers during project-development to outline our HSSE requirements and undertake comprehensive HSSE due diligence assessments. We require our supply chain to adhere to best practices by including these requirements into contracts. ACWA Power conducts periodic HSE and quality inspections and audits of its suppliers and their sites.

Labor practices audits are undertaken, for example in Morocco, where 90% of suppliers were screened in 2014. If any violations are identified, such as non-payments to employees, then the supplier is highlighted as a potential future risk.

While ACWA Power places significant emphasis on Tier 1 suppliers, we recognize that HSSE assessments of Tier 2 and other suppliers need to be strengthened, since depending on Tier 1 suppliers to assess their subcontractors has been identified as insufficient. This aspect will be a focus area for 2015.

### Supplier-Assessment Activities

<b>Development Phase</b>	<ul style="list-style-type: none"> <li>• Potential EPC contractors, O&amp;M contractors and primary service providers undergo a HSSE due diligence.</li> <li>• Tier 1 contractors are typically multinational corporations and so have established and independently certified HSSE management systems that meet international standards.</li> </ul>
<b>Bid Phase</b>	<ul style="list-style-type: none"> <li>• EPC contractors are carefully assessed through meetings, interviews, document reviews and site visits.</li> <li>• EPC contractors are engaged to ensure they comprehensively understand ACWA Power's standards and are able to deliver our standards and meet our expectations.</li> <li>• EPC contractors are not permitted to start on-site until all HSSE documentation and competencies of the site-based resources have been checked and approved by ACWA Power.</li> </ul>
<b>Operations &amp; Maintenance Phase</b>	<ul style="list-style-type: none"> <li>• HSSE competence of the O&amp;M service provider is assured with the contractual requirement of certification to the ISO 14001 environmental and the OHSAS 18001 health and safety management standards.</li> <li>• ACWA Power regularly reviews management and performance via meetings, periodic site visits and formal audits.</li> </ul>



## Environmental Responsibility

ACWA Power follows a strict policy of always specifying the more stringent of either the local or WB/IFC HSE and technical performance specifications. For example, in Saudi Arabia, the IFC specifications are followed for air emissions, while the national Saudi Arabia requirements are observed for water management and discharge.

Each ESIA is accompanied by an Environmental Management Plan (EMP) that is integrated into the EPC Contractor's and O&M Service Provider's project specific environmental management system and contracts. ACWA Power ensures that these plans and standards are implemented and met through local authorities' audit processes, periodic independent inspections, corporate site visits and annual performance reports to the IFC.

## Biodiversity

Biodiversity is an integral issue of the ESIA of all assets, as we aim to gain knowledge and understanding of the ecosystems in the areas in which we operate and to assess their vulnerability. We mandate monitoring and action plans according to IFC and IFI Standards.

ACWA Power does not currently hold any assets directly adjacent to areas of significant biodiversity or vulnerability and as of today, no material long-term issues have been identified.

A condition of the lending agreements includes periodic marine surveys of the intake and outfall areas of coastal areas - these are undertaken by independent environmental scientists.

One challenge during the construction phase is the management of silt deposits arising from the construction of the water intake and outlet channels. Impacts on water quality are mitigated through the use of silt curtains by the marine contractors as a contractual requirement. ■

## Biodiversity Assessments - Protecting Local Habitats

In South Africa, during the Bokpoort biodiversity assessment, ACWA Power was notified that there were vulnerable species within our project-site boundaries. Subsequent to this notification, special precautions have been implemented to identify and relocate these animals should they be encountered by construction or O&M personnel.

Similar studies have also taken place for Redstone IPP South Africa, Rabigh 2 IPP, Saudi Arabia (including six-month scuba audits), Moatize IPP, Mozambique and Kirikkale IPP, Turkey without any material issues being identified.



Sociable weavers Bokpoort IPP, South Africa

## GHG Emissions

We account for carbon emissions across all of our operations in accordance with the scope boundaries and guidance of the Greenhouse Gas (GHG) Protocol and the GRI G4 Guidelines. Scope 1 GHG emissions arise from the combustion of fuels by our assets during the production of electricity and desalinated water. Indirect GHG emissions, Scope 2, come from purchased electricity used as back up supply and for production of desalinated water using reverse osmosis. Our other indirect GHG emissions, Scope 3, arise from the on-site management and business operation of our assets and regional offices.

GHGs, SOx and NOx from our assets are calculated based on chemical equations using actual performance data that are periodically checked with field measurements combined with acceptable carbon-estimation techniques based on national grid data plus data supplied by our service providers. We have assessed and considered indirect emissions arising

from production and use of products as well as those emissions arising from purchase, use of capital goods and services as immaterial. In addition, we have not included the carbon footprint arising from our corporate and regional office operations, as based on our published 2012 data and an estimate of 2014 data, their contribution is less than 0.01% of our total carbon disclosure.

Total CO<sub>2</sub> emissions for 2014 were 48,237 ktCO<sub>2</sub>, of which 15,520 ktCO<sub>2</sub> was ACWA Power's share based on our percentage ownership of each asset. The weighted average carbon intensity of our portfolio's electricity was 525 kg/MWh and 14.04 kgCO<sub>2</sub>/m<sup>3</sup> of desalinated water, which is comparable to best European performance.

ACWA Power is continually increasing the efficiency of fossil fuel conversion and thermal power generation, hence reducing the carbon intensity of electricity and desalinated water (CO<sub>2</sub>/kWh and CO<sub>2</sub>/m<sup>3</sup>). The 3,927 MW CCGT Qurrayah facility in Saudi Arabia has a world-class performance of 390kg CO<sub>2</sub>/MWh.

The Rabigh 2 IPP 2,060 MW CCGT that is currently under construction has improved performance by a further 7.2% and emits just 359kg CO<sub>2</sub>/MWh. This will result in an annual reduction of 472 ktCO<sub>2</sub> of emissions compared with an equivalent electrical energy production of Qurrayah while using 8.8% less gas. In addition, as most of our asset portfolio is comparatively new, our overall carbon intensity is significantly lower than that of the older coal and oil-fueled power plants of our regional competitors.

During 2014, we had two cases of emissions non-compliance, both of which were reported to the authorities and neither of which resulted in regulatory action findings. The first incident refers to three short duration marginal non-compliances by the Marafiq IWPP on NOx levels, while the other relates to the inoperability of the flue gas desulphurization plant of the Rabigh 1 IPP. Both of these issues are currently being addressed by the asset management team and plant personnel.

## Air Emissions

Year	CO <sub>2</sub> Emissions				SO <sub>2</sub> Emissions		NOx Emissions	
	CO <sub>2</sub> '000 Ton	ACWA Power's share of CO <sub>2</sub> '000 Ton	CO <sub>2</sub> intensity of Electricity kgCO <sub>2</sub> /MWh	CO <sub>2</sub> intensity of Desal. water kgCO <sub>2</sub> /m <sup>3</sup>	SO <sub>2</sub> Ton	ACWA Power's share of SO <sub>2</sub> Ton	NOx Ton	ACWA Power's share of NOx Ton
2014	48,237	15,520	525	14.04	221,615	89,040	39,408	15,000
2013	42,689	13,984	538	10.29	171,971	69,113	38,348	14,604
2012	35,571	10,162	499	9.40	98,604	19,538	29,852	9,111

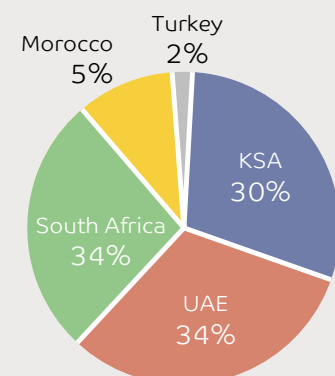
As an international organization based in 12 countries, we consider carbon emissions from business air travel to be material, even though its relative contribution to our total footprint is comparatively small. We have implemented a company-wide videoconferencing facility that is significantly reducing our need for travel, as demonstrated in the data table below. Between June and December 2014, we had 1,055 videoconferences between 167 registered internal and external participants for a total of 128,634 minutes. Our employees have actively embraced the new system, as it has the added benefit of improving quality of work-life balance by reducing the need for frequent business trips.

## Business Travel CO<sub>2</sub> Emissions

2012	2013	2014
1,946 tCO <sub>2</sub>	1,759 tCO <sub>2</sub>	1,501 tCO <sub>2</sub>

Note: Data covers KSA, UAE, South Africa, Turkey and Morocco. NOMAC and Jordan omitted.

## Carbon Emissions from Air Travel per Regional Office





## Effluent Discharges

Since most ACWA Power facilities are comparatively new — having been designed and built in the last seven years — our water performance (see page 46) is significantly better than the industry average. Our discharge rate has increased year-on-year, however, the ratio of sea water discharge to fuel consumption and electricity generated has reduced. Ten environmental spillages were reported during 2014, with a total volume of less than 1 cubic meter. None of these incidents extended off-site, and all were completely remediated.

## Barka, Oman – Water Saving Program

The Barka plant introduced water management initiatives to reduce consumption by 25%. The program includes periodic maintenance of steam traps, arresting of system leakages and the switching off water sampling systems when not in use.

The Barka plant has also redirected over 4,000 liters of water - previously dumped through the draining system - to the facility's irrigation system. This water is now utilized in the facility's garden irrigation system resulting in reduced internal water and electricity consumption.

## Waste and Chemical Management

We have an effective waste management process that extends throughout our asset life cycle. All operational sites and construction projects have formal waste management arrangements that are implemented as part of the site HSE management system and CEMP respectively.

All our sites have a scrap yard for storing obsolete or redundant materials for re-use and/or ultimate recycling. Site managers encourage their teams to make use of the scrap yard before ordering new materials, as reusing materials is more environmentally responsible and also more cost-effective than buying new.

The significant reduction in non-hazardous waste in 2014 (see page 46) is due to Qurrayah IPP completing construction that generated significant waste relating to equipment packaging during 2012 and 2013. ■



Shuaibah IWPP

# Where to from here?

We believe that our long-term competitive advantage emerges at the intersection of sustainability and our vast supply and value chain. So, we are incessantly working to embed sustainable development principles into every aspect of our business - from planning to project development to asset management and assurance. Our nine primary sustainability risks (as below and page 14) will be our priorities in 2015 and beyond;

- Ethical Business & Governance
- Regulatory Frameworks and Political Stability
- Operations and Maintenance Standards
- Health, Safety and Environmental Management
- Supply Chain Management
- Plant Performance, Carbon and Renewables
- Community Engagement & Value
- Competent and Skilled People
- Offtaker Satisfaction

Alongside governance is the need for a robust risk management approach, which we have developed and deployed across our business. The backbone of our continued success in project development and company formation is ACWA Power's audit and risk management functions. We will build on the existing systems and processes with the integration of additional ethical and sustainability aspects.

As we continue to expand our international operations from our Saudi Arabian roots, we acknowledge the increased impact and responsibility associated with our growth and the need to ensure we undertake robust due diligences of the markets we enter. This includes leading the conversations on meeting global power and water

demand while addressing affordability and environmental impacts - which are material issues for our business.

We firmly believe that our asset portfolios' full worth and value can only be confirmed when supported with a solid foundation of effective Operations and Maintenance and sustained performance. This necessitates ensuring we have an effective operational structure to manage our fast growth. We have revised and aggregated key performance indicators on our material business and sustainability issues which are being trialed in our monthly reporting. We aim to improve our internal reporting systems to ensure we have meaningful indicators with which management can track performance and progress against our obligations and objectives.

Health, Safety and Environmental management and performance is a priority that cuts across all of our operations and activities and throughout the life cycles of our assets. The focus for 2015 will be on improving active and visible HSE management by mandating and monitoring frequent HSE inspections by the leadership teams and near miss reporting by all personnel. Process safety remains at the top of the agenda for our operational facilities as they strive to maintain their performance record. During 2015, ACWA Power will certify its existing corporate HSE management system to the international ISO 14001 and OHSAS 18001 management system standards.

We recognize that our company does not operate in a vacuum and so we need to actively engage and collaborate with our partners. The support of our various stakeholders is imperative to our ongoing success and thus we have started to work actively on sustainability challenges in supply

chain management. We recognize this as an area we need to improve on, and we plan to develop a road map in 2015 aimed at effectively managing our risks and sharing our expectations of ethics, integrity and sub-contractor management with our Tier 1 suppliers and their Tier 2 subcontractors.

We have engaged in a broad range of local community-development projects, through which we have delivered substantial socio-economic value in the regions where we invest and operate. In 2015 and beyond, we plan to formalize our sustainability strategy by learning and sharing our regional and local experiences. Our next steps will be centered on collaboration with regional government agencies, business partners and specialist NGOs to raise awareness of local deficiencies and to find common solutions. This plan is also essential to our business success.

Our Corporate CSR goal for 2015 is to drive the performance and value creation of each of our community based projects with the newly established CSR committee providing an oversight and coordination role to maximize impact. In addition, we plan to implement a CSR project dashboard to track the progress and measure the shared value creation of our community and regional activities, while also ensuring that they link back with a clear line of sight to our overall organizational vision and mission.

In terms of plant performance and carbon management, we continue to advance and implement resource consumption efficiency measures and carbon reduction plans through harnessing renewable energy sources and the latest technologies. We have set objectives that include 5-10% of renewables in our assets portfolio, which we plan to achieve through multi-billion dollar investments.



Karadzhalovo PV, Bulgaria

We are also committed to repeatedly demonstrating that renewables are an already cost-competitive energy source by supporting relevant initiatives and exchanging intelligence with our peers. In addition, as our renewable power plants and our world-class CCGT facilities come on stream we predict a further significant reduction in the carbon intensity of our electricity.

Our projected growth in 2015 will necessitate a significant investment in our people plus attracting the most competent and motivated professionals to join our teams. Our track record of local hiring will be continued and will be supported by increased training and development of both hard and soft skills.

Our primary customers are the Offtakers who purchase our products and the

end-users who consume them and so their continued satisfaction with our reliability and service delivery is of utmost importance. By delivering on each of the other sustainability risks we can be confident that we will be meeting our stake holder's needs.

At ACWA Power, we take pride in our tremendous growth over a relatively short time period, quickly evolving from a start-up to a multi-billion-dollar corporation in just ten years. We believe that we can accomplish similar achievements in the areas of CSR and sustainability as we continue to build strong alliances with our partners with whom we have confidence to take on the next decade. Although we have had great stories to share in this, our inaugural Sustainability Report, our

journey in this space continues. Going forward, we intend to demonstrate high standards of transparency and accountability by disclosing to our stakeholders not only our achievements, but also the challenges we face on our material issues.

We are determined to build on what we have achieved thus far, we pledge to deliver positive shared financial and economic value, to cement our core values in the way we work and partner with others, and to expand our contribution to sustainable development in the regions where we operate. ■

## Your Feedback:

We value your thoughts and observations on our first Sustainability Report and our corporate performance.

Please contact us via our website: [www.acwapower.com](http://www.acwapower.com), our local offices or directly to [CSR@acwapower.com](mailto:CSR@acwapower.com)



**Michael Nates**  
Director, Corporate  
Responsibility & Sustainability

# HSE Data

## ACWA Power 2012-2014 Health & Safety Performance

HSE KPI	Calculation	2012	2013	2014	HSE Targets
<b>Operational Facilities</b>					
Hours Worked	Total	5,656,557	8,562,852	7,429,579	-
Lost Time Incident (LTI) <sup>2</sup>	Total	26	10	14	0
LTI Rate <sup>3</sup>	Average Rate	0.92	0.25	0.38	0.2
HSE Incidents (reportable) <sup>4</sup>	Total	43	36	24	0
HSE Incident Rate	Average Rate	1.52	0.84	0.65	1
Near-Misses	Average/sites	71	220	233	480-960
Near-Miss Rate	Average/sites	0.03	0.62	0.84	> 4/person/pa
HSE tours, inspections & audits	Average/sites	133	285	336	>300
<b>Construction Sites</b>					
Hours Worked	Total	27,328,284	6,838,771	18,238,818	-
Lost Time Incident (LTI)	Total	0	4	14	0
LTI Rate	Average Rate	0	0.03	0.15	0.35
HSE Incidents (reportable)	Total	25	16	24	0
HSE Incident Rate	Average Rate	0.18	0.12	0.26	1
Near-Misses	Average/sites	20	104	977	>1800
Near-Miss Rate	Average/sites	0	0.02	0.43	> 4/person/pa
HSE tours, inspections & audits	Average/sites	707	298	1035	>600
<b>ACWA Power</b>					
Hours Worked	Total	32,984,841	35,401,623	25,668,397	-
Lost Time Incident (LTI)	Total	26	14	28	0
LTI Rate	Average Rate	0.16	0.08	0.22	
HSE Incidents (reportable)	Total	68	52	48	0
HSE Incident Rate	Average Rate	0.41	0.29	0.37	0.60
Near-Misses	Average/sites	64	165	265	>1800
Near-Miss Rate	Average/sites	0	0.17	0.55	> 4/person/pa
HSE tours, inspections & audits	Average/sites	205	247	469	>600



## Fuel and Energy Consumption

	Electricity Imports MWh	Natural Gas million m <sup>3</sup>	Fuel Oil '000 ton	Diesel ton	Fuel for Electricity %	Fuel for Water %	Energy Consumption for Electricity TJ	Energy Consumption for Water TJ	Total Energy Consumption TJ
2014	315,069	5,885	11,953	16,749	78%	22%	567,032	121,377	724,621
2013	332,150	6,277	10,202	21,362	77%	23%	484,341	109,660	625,073
2012	292,352	6,478	8,535	21,942	74%	26%	411,656	109,000	554,624

## Sea Water Discharges

Year	Power Plant million m <sup>3</sup>	Water Plant million m <sup>3</sup>	ACWA Power's Share of Sea Water Discharge million m <sup>3</sup>	Sea Water Discharge / Fuel Consumptions m <sup>3</sup> /GJ	Sea Water Discharge / Gross Generation m <sup>3</sup> /MWh	Environmental Incidents
2014	7,523	4,237	3,851	17	163	10
2013	6,308	5,088	3,612	18	185	6
2012	4,447	4,940	2,705	17	177	4

## Chemical Consumption, Waste Generated and Environmental Incidents

Year	Chemical Consumption Ton	Hazardous Waste Ton	ACWA Power's Share of Hazardous Waste Ton	Fly Ash Ton	ACWA Power's Share of Fly Ash Ton	Non-Hazardous Waste Ton	ACWA Power's Share of Non-Haz Waste Ton
2014	70,107	1,691	580	33,971	13,099	19,604	5,537
2013	77,234	26,170	10,443	28,165	10,970	287,123	106,399
2012	72,731	861	276	8,820	3,073	281,141	103,499

# Terms and Abbreviations

AFED	Arab Forum for Environment and Development	MASEN	Moroccan Agency for Solar Energy
CCGT	Combined Cycle Gas Turbine	MBD	Membrane-Based Desalination
CEGCO	Central Electricity Generating Company	MED	Multi Effect Distillation
CEMP	Construction Environmental Management Plan	MSF	Multistage Flash
CFBC	Circulating Fluidized Bed Combustion	NOMAC	First National Operation & Maintenance Company
COD	Commercial Operation Date	NTP	Notice to Proceed
CSP	Concentrated Solar Power	OEM	Original Equipment Manufacturer
EHS	Environment, Health and Safety	Offtaker	Contracted buyer of power and/or water
EMP	Environmental Management Plan	OHSAS	Occupational Health and Safety Assessment Scheme
EPC	Engineering, Procurement, Construction	OJT	On Job Training
EP	Equator Principles	OTS	Owner's Technical Specification
ESDD	Environmental & Social Due Diligence	O&M	Operations and Maintenance
ESIA	Environmental and Social Impact Assessment	ORM	Original Equipment Manufacturer
FGD	Flue Gas Desulfurization	PCB	Polychlorinated Biphenyl
GCC	Gulf Cooperation Countries	PCC	Pulverized Coal Combustion
GHG	Greenhouse Gas	PCOD	Project Commercial Operation Date
GRI	Global Reporting Initiative	PPA	Power Purchase Agreement
HIWPT	Higher Institute for Water and Power Technologies	ProjectCo	Project Company
HSE	Health, Safety, and Environmental	PV	Photovoltaic
HSSE	Health, Safety, Social and Environmental	PWPA	Power and/or Water Purchase Agreement (P(w)PA)
ICOD	Initial Commercial Operation Date	RO	Reverse Osmosis
IFC	The International Finance Corporation, member of the World Bank	SMEs	Small and Medium Enterprises
IPP	Independent Power Project	SPV	Special Purpose Vehicle
ISO	International Organization for Standardization	WPA	Water Purchase Agreements
IWP	Independent Water Project	UAE	United Arab Emirates
IWPP	Independent Water & Power Project	UNEP	United Nations Environment Program
KSA	Kingdom of Saudi Arabia	WB	World Bank
LTI	Lost Time Incidents	yoy	year on year

## General Standard Disclosures

In terms of General Standard Disclosures (GSD), we cover 37 out of the 58 GRI indicators. To be compliant with core level GRI G4 reporting a company must report on 34 out of the 58 indicators. Additionally, 3 sector-specific indicators can be reported on as part of the GSD which are EU 1-3.

General Standard Disclosures		
Indicator Category	Indicator	Page
Strategy and Analysis	G4-1	1
	G4-2	1, 4, 12
Organizational Profile	G4-3	3
	G4-4	3
	G4-5	3
	G4-6	3
	G4-7	3
	G4-8	3
	G4-9	3, 11, 13
	G4-12	3
	G4-13	3
	G4-14	29
	G4-15	9, 26
	EU-1	5
	EU-2	5, 31
	EU-3	3
	Identified Material Aspects and Boundaries	G4-18
G4-19		9
G4-20		9
G4-21		9
G4-23		9
Stakeholder Engagement	G4-24	10
	G4-25	10
	G4-26	10
	G4-27	10
Report Profile	G4-28	9
	G4-32	9, 46
Governance	G4-34	15
	G4-35	16
	G4-36	16
	G4-39	15
	G4-40	15
	G4-41	15
	G4-42	16
	G4-43	15, 16
	G4-49	15, 16
	G4-52	15
Ethics and Integrity	G4-56	15
	G4-57	15
	G4-58	15

## Material Issues Specific Standard Disclosures

All material issues identified in the Materiality section are covered in the Report. A few non-material issues are included as we have the information available. These include Market Presence, Materials, Employment and Environmental Grievance Mechanisms. Page references are provided to each Disclosure on Management Approach (DMA) and its relevant indicators.

Specific Standard Disclosures		
Indicator Category	Indicator	Page
Economic Performance	DMA	9, 13
	EC-1	13
Market Presence	DMA	11
Indirect Economic Impacts	DMA	11, 17
	EC-7/8	17, 19, 21
Procurement Practices	DMA	9, 17, 21
	EC-9	17, 21
Availability and Reliability	DMA	9, 33
	EU-10	33
Research and Development	DMA	9, 27, 33
System Efficiency	DMA	9, 33
	EU-11	33
Materials	DMA	9, 42
Energy	DMA	9, 29, 31
	EN-3	31
Biodiversity	DMA	9, 40
	EN-12	40
Emissions	DMA	9, 41
	EN 15to18	41
Local Communities	DMA	9, 17, 19, 26, 28
	SO-1/2	19, 26, 28
Anti-Corruption	DMA	9, 15
	SO-3/4	15, 26, 27, 31
Anti-Competitive Behavior	DMA	9, 15, 35
	SO-7	15
Compliance	DMA	9, 26
	SO-8	15, 37
Disaster / Emergency Planning & Response	DMA	9, 35
Effluents and Waste	DMA	42
	EN 22to24	42
Environmental Compliance	DMA	9, 41
	EN-29	41
Supplier Environmental Assessment	DMA	9, 39
	EN-32	39
Environmental Grievance Mechanisms	DMA	11, 36, 37
	EN-34	37
Security Practices	DMA	9, 35
	HR-7	35
Indigenous Rights	DMA	9, 28
	HR-8	28
Employment	DMA	11
	LA-2	12
Occupational Health and Safety	DMA	9, 36, 37
	LA-7	36, 37
Diversity and Equal Opportunity	DMA	9, 11
	LA-12	11



### Kingdom of Saudi Arabia

2nd Floor, Building 5, Business Gate Office  
Complex, Airport Road,  
P.O.Box 22616, Riyadh 11416  
Tel: +966 11 283 5555  
Fax: +966 11 283 5500

### United Arab Emirates

22nd Floor, Nassima Tower,  
Sheikh Zayed Road,  
P.O.Box 30582, Dubai  
Tel: +971 4 5090 555  
Fax: +971 4 3859 625

### China

Tower B, Ping An International Finance Centre,  
P.O.Box 2101, Beijing 010027  
Tel: +86 10 5979 2330  
Fax: +86 10 8438 1078

### Morocco

Villa-6G7, Angle Avenue,  
Mehdi ben Barka et Atthuya,  
Hay Riad. 10100 Rabat  
Tel: +212 537 287878  
Fax: +212 537 714165

### South Africa

7th Floor, 90 Grayston Drive, 2196 Sandton  
Johannesburg  
Tel: +27 11 722 4100  
Fax: +27 11 722 4113

### Turkey

Barbaros Plaza, Emirhan Caddesi,  
No:113 Kat:19  
Dikilitas - Besiktas, Istanbul  
Tel: +90 212 259 3396  
Fax: +90 212 259 3397

### Vietnam

Floor 11, BIDV Tower,  
194 Tran Quang Khai Street,  
Hoan Keim District, Hanoi  
Tel: +84 43 935 2966  
Fax: +84 43 935 2969

[www.acwapower.com](http://www.acwapower.com)



Hard copies printed on carbon neutral paper produced from  
100% recycled fibre without chlorine bleaching.