



Children competing in a sack race at the NGN Family Day.

This report provides an update of the environmental, social and governance (“ESG”) achievements and progress of Power Assets Holdings Limited (“Power Assets” or together with its subsidiaries, associates and joint ventures, the “Group”) during the year ended 31 December 2016, and is prepared based on the ESG Reporting Guide under Appendix 27 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited.

It covers the key businesses of the Group, including the generation of thermal and renewable power, the transmission of electricity and oil as well as the distribution of electricity and gas, across the Group’s markets in the United Kingdom, Hong Kong, Australia, New Zealand, mainland China, the Netherlands, Canada, Thailand and Portugal, and summarises the key initiatives of our businesses and showcases how we deliver value to our stakeholders. The examples and initiatives selected have been presented in four chapters: environment, employment and labour practices, operating practices and community investment.

Our Approach to ESG

Our strong belief in growing our businesses responsibly and sustainably is embedded in the way we do business. Providing reliable infrastructure services and impeccable

customer experience top our ESG priorities. We aspire to strike a balance between managing key ESG risks and unlocking opportunities to create long-term value for our stakeholders and our business.

The Board oversees the overall direction of our ESG strategies and practices in this regard and we manage our ESG performance with transparency and accountability. We manage the ESG challenges and opportunities at the Group as well as the business level in a way that best suits the nature, scale and geography of the specific company concerned.

Stakeholder Engagement and Materiality Assessment

As a business with diverse operations, we interact day-to-day with a wide range of stakeholders, including employees, customers, suppliers, investors, regulators, non-government organisations and the community. We engage with our stakeholders in on-going dialogues through various channels such as meetings, workshops, seminars, interviews and surveys. Listening to our stakeholders helps us identify the matters most important to them, as well as their expectations on how we are expected to address them. We have prioritised the material ESG issues based on inputs from our stakeholders in this report.



Zhuhai power plant staff representatives and management interact in a general meeting.

Environment

We place great importance on our responsibility to the environment. Each of the Group's operating businesses strives to continuously lower its environmental footprint through emissions reduction and the efficient use of resources.

Emissions

We have in place a range of rigorous measures to minimise emissions as well as waste discharge.

Air and Greenhouse Gas (GHG) Emissions

Power generation is considered one of the key contributors to air and GHG emissions. We have a number of emissions control measures in place to mitigate the impact of our operations on the environment.

For instance, HK Electric is constructing two new gas-fired generating units that will be equipped with a selective catalytic reduction system. The system significantly improves nitrogen oxide (NO_x) removal performance and can further reduce NO_x emission by 90% compared to conventional gas-fired plant.

The three coal-fired plants in Zhuhai, Jinwan and Siping have enforced their emissions control in recent years to meet and outperform tightened regulatory requirements. In particular, Jinwan Power plant is among the first few coal-fired generation units in mainland China to achieve "Close to Zero" emission levels for air pollutants including sulphur dioxide (SO₂), NO_x and particulate matter. An extra tariff subsidy and an outstanding performance award of RMB 13.7 million from the government has been granted to the plant in recognition of its outstanding performance in air emissions management.

UK Power Networks (UKPN) reduced its carbon emissions by over 14% through a combination of measures including fleet refurbishment, site consolidation and the introduction of energy efficiency initiatives such as installation of LED lighting at some sites.

Developing clean energy businesses is another way to contribute to environmental protection. The Group's renewable energy businesses include the Iberwind wind energy business in Portugal, wind farms at Dali and Laoting in mainland China and wind and solar power systems in Hong Kong. Collectively, the Group's total installed capacity for renewable energy stands at 825 MW.

AVR-Afvalverwerking B.V. (AVR), our energy-from-waste business owned by Dutch Enviro Energy Holdings B.V., generates heat, steam and electricity from residual waste produced by society, preventing more than 324,000 tonnes of CO₂ emissions annually. Its energy-from-waste activities reduce the community's reliance on fossil fuels and curb CO₂ emissions whilst powering cities and industries. AVR now plans to capture CO₂ produced during generation and supply it to greenhouses for growing plants and crops. The technology is currently being tested in collaboration with an external expert and over 50,000 tonnes of captured CO₂ will be delivered for farming applications in 2018.



AVR conducts research on using CO₂ emissions from the plant for greenhouse farming.

Waste

We are cautious about the waste generated from our operations, including the byproducts from energy generation. Our collective efforts to reduce waste involve our staff, contractors, regulators and other third parties. We encourage waste mitigation from source and the reuse and recycling of waste for other projects.

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AVR signed the Green Deal with the Dutch government. As part of this agreement a granulate made of the bottom ash generated from the waste incineration process at its Duiven plant will be recycled as construction material for public projects.

Wales & West Utilities (WWU) reuses hazardous sludge waste from gasholder demolition, treating it and using it as backfill material. This enables the reduction of hazardous waste as well as requirement for imported backfill, which contributes to an approximate 65% carbon reduction when compared with traditional disposal, this project won a Brownfield Briefing award in 2016.

Use of Resources

Energy

The Group endeavours to reduce its resource consumption by striving for optimal efficiency of resource use throughout our operations.

Recently, Canadian Power's Meridian gas-fired combined cycle cogeneration plant implemented a new maintenance measure. By installing the newest available parts in the production process, it generates more electricity with less fuel and hence raises the overall plant resource use efficiency.

Since 2014 WWU has upgraded over 700 vans of its fleet with the latest engine management technologies to improve energy efficiency. It has also invested £1.3 million in new tippers and grab lorry vehicles, further enhancing the fleet's energy efficiency.

Water

Water is one of the key resources used in the power generation process. Our water saving measures focus on reuse and recycling. At its Lamma Power Station, HK Electric collects and reuses rainwater and plant processing water which would have otherwise been discharged directly. This initiative saved more than 102,000 m³ of water in 2016.

The Environment and Natural Resources

The Group is mindful about the impacts of its actions on biodiversity and local ecosystems. A range of environmental initiatives is carried out at the sites of its operations.

For example, Iberwind employs an experienced and specialised environmental team of engineers, archaeologist and biologists. Programmes and initiatives are implemented to avoid, minimise and compensate for the impacts of wind farm construction and operation on local ecosystems. For example, wetland management at the wind farm at Lagao Funda and wildlife monitoring measures at the wind farms at São Macário and Candeeiros are in place.



Kestrel conservation projects form part of the Candeeiros wind farm's mandate at Iberwind.

Timely Action to Manage Environmental Impacts

In July 2016, Husky Energy responded to a pipeline release in Saskatchewan, in western Canada. It took full responsibility and worked closely with communities, First Nations and regulatory authorities, to complete the cleanup. A full and thorough investigation was undertaken and Husky Energy will apply lessons learned from this to further improve its operations and response.

Regulatory Compliance

Apart from the abovementioned event related to Husky Energy, the Group is not aware of any non-compliance of laws and regulations that have a significant impact on the Group relating to air and GHG emissions, discharges into water and land, or generation of hazardous and non-hazardous waste during 2016.



Employment and Labour Practices

Our philosophy is that a happy and motivated workforce is the driving force for sustained success. We place great importance on employee management. Not only are we dedicated to cultivating a healthy and safe working culture, we are also committed to securing and nurturing talent through training programmes that assist our employees to achieve their potential.

Employment

Much of the Group's success is attributed to its dedicated and highly qualified people. Our businesses have been working actively to attract the best people and motivate them with a rewarding career, equipping them with the necessary skills and knowledge for the work.

WWU operates an annual apprenticeship programme where new recruits can work with experienced engineers to learn job-specific skills in the workplace and build their technical and business skills through off-the-job training in WWU's training academies. The apprenticeship programme, which commenced in 2005, has recruited 138 people for WWU. A similar apprenticeship programme is also in place at CitiPower and Powercor, benefitting more than 375 apprentices and trainees since its launch in 2001.



CitiPower and Powercor apprentices in the field.

Our businesses recognise employees' contributions to the success of the Group fairly and objectively by implementing equitable remuneration policies. To incentivise staff, our remuneration mechanisms are reviewed and re-adjusted regularly to remain competitive in the market.



HK Electric launches the "Let's Exercise" Campaign to get employees fit and active.

We seek to protect the wellbeing of our staff by encouraging a healthy work-life balance. To ease the stress that is associated with work, we offer a range of generous paid leave entitlements and flexible work arrangements. In 2016, AVR made it possible for employees to work part-time in shifts. In addition AVR introduced a Sustainable Employability programme, highlighted by a series of "Be Fit" workshops and lifestyle programmes on topics including exercise, eating and stress management to encourage healthier living. At HK Electric, employee wellness was promoted through a host of initiatives themed "Health and Happiness" including programmes such as "Let's Exercise" and "StairWELL". "A Good Neighbour Club" was also established with over 100 employees trained on counselling skills to provide support to colleagues in coping with emotional or stress issues.

We believe in the vast benefits and positivity that diversity brings to our corporate culture. We strictly enforce an anti-discrimination policy and have zero tolerance to harassment of any form. All employees, irrespective of race, gender or religious belief, receive equal opportunities and our recruitment and promotion processes are based purely on performance.

Employees are given numerous channels to express their concerns and communicate with the management. We regularly conduct surveys and hold seminars, workshops or forums to collect views from our people with the intention to improve our operational practices. These events also help to accumulate innovative ideas that can stimulate business growth.

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Development and Training

We invest heavily in training to keep our people abreast of the latest developments in the industry to help them perform better. Our training programmes are developed by the respective business units to be most relevant to their specific needs. Subsidies are provided for eligible external training courses to encourage all employees to further refine their skills and abilities to help us achieve our goal of delivering excellent services to our customers.

Health and Safety

The Group believes that the safety of its employees is paramount. Many of our businesses have their safety management systems certified in accordance with local and international standards. Having an effective safety management in place helps us effectively identify occupational hazards and implement controls to safeguard our employees.



Fire drills form part of RPCL's workplace safety regime.

One of our priorities in promoting health and safety in the workplace is to encourage our employees to take ownership of improving safety awareness and practices. Northern Gas Networks (NGN) conducts "safety tours" and open forums to allow employees to express concerns and observations about safety conditions at workplace. This has helped reduce work-related injuries and fatalities at NGN in the past five years.

HK Electric continues to promote safety risk management through its "Work Safe Behaviour" programme, which was launched in 2011. By engaging employees in identifying and reporting potentially hazardous acts at work, the programme has helped promote safety awareness and low-risk practices in the company's electricity generation, transmission and distribution operations.

CitiPower and Powercor, for example, developed a *Stop, Think and Drive Expo* to improve driver safety as well as promoting safety as everyone's responsibility. Employees attending the Expo pledged to make real, positive changes based on their experiences. The Victorian Transport Accident Commission supported the initiative, filming an employee for an online video as testament to the business' commitment to best practice workplace safety management.

Labour Standards

Stringent measures are undertaken to monitor our operations in upholding international and local labour standards. Internal controls have been implemented to detect the use of child or forced labour in our operations together with procedures to respond to any unethical practices that may arise.

Regulatory Compliance

During the reporting period, we were not aware of any non-compliance with laws and regulations having a significant impact on the Group relating to employment and labour practices; and occupational health and safety. Nor did we identify any incidents relating to the use of child or forced labour.

Operating Practices

The Group understands it is imperative to manage our relationships with our suppliers and customers in a responsible and sustainable manner. We are dedicated to delivering consistent and quality services to our customers and collaborating with our suppliers to create win-win scenarios. We actively seek customer feedback and adopt their suggestions wherever applicable, in order to upgrade our services and improve customer satisfaction.



SAPN field staff member explaining the working of a meter to a customer.

Supply Chain Management

We are well aware of the environmental and social impacts that may ensue along the supply chain and we are committed to minimising such risks in collaboration with our suppliers. ESG-related considerations form an important part of the assessment process and have a heavy weightage in our consideration of potential suppliers and contractors. For instance, Zhuhai, Jinwan and Siping power plants' sourcing processes only allow them to consider suppliers and contractors with proven experience, reliable performance and long-term track records in the power sector in mainland China.

Regular monitoring, audits and evaluation are carried out to assess the performance of our suppliers. In addition, we collaborate closely with our suppliers to ensure that our requirements and shared goals are understood. Through these regular conversations, we are able to maintain a mutually beneficial relationship with our suppliers. Australian Gas Networks (AGN), for example, incentivises their key supplier of gas distribution and transmission operating and management services for improved productivity and service quality.

Product Responsibility

We take pride in providing reliable services. Throughout our businesses, we utilise complex monitoring systems that can detect potential disturbances in near-real time, allowing us to prepare in advance and organise precautionary measures as needed. Our systems also allow us to pinpoint disruptions in our processes,



WWU wins the prestigious Gold Award from the Royal Society for the Prevention of Accidents for the third year in a row.

where we can take actions with precision to resolve the problem and restore services to our customers swiftly. These controls help us maintain high service quality and reliability. For instance, HK Electric has maintained a world-class supply reliability of over 99.999% since 1997. WWU received the Responsible Large Business of the Year Award from Business in the Community, Wales, and UKPN made history by becoming the first company to win the prestigious Utility of the Year Award for two consecutive years.

Customer Satisfaction

Regular communication with customers is essential to upholding a high level of customer satisfaction. We systematically interact with our customers through various means including telephone, SMS alerts and other modern technologies.

Additionally, our businesses regularly conduct surveys to assess customer satisfaction with different aspects of our services. We then follow up to address relevant comments promptly.

CitiPower and Powercor's continued focus on customer outcomes was evident in achieving a combined 2016 customer satisfaction result of 85%. In addition, in 2015-2016 CitiPower and Powercor continued to outperform other Victorian businesses in the Energy Water Ombudsman Victoria annual reports, recording the lowest number of complaints of any Victorian distributor for the fourth consecutive year.

In 2016, CitiPower and Powercor continued to respond to customers' growing preference for digital tools with the business launching new digital platforms, such as myEnergy, to enable improved customer self-service.

UKPN is conducting a study involving the installation of smart meters with in-home displays in participating households to monitor the impacts of vulnerable customers' energy usage on the electricity network. This study will clarify how different demographics use energy, enabling better service efficiency.

In 2016 Wellington Electricity Lines launched a new smartphone app called OutageCheck to provide customers with up-to-date information about power outages on its network. OutageCheck, updated 24x7, empowers customers to make more informed decisions.



Customer Data Privacy

We believe that protecting customer data is key to a trusting relationship between our companies and our customers. Data privacy policies implemented at the business level guide how we collect and use personal information. Access to customer data is restricted to authorised personnel only on a need-to-know, need-to-use basis. Systems and controls are in place and updated as required to assist in the prevention and detection of customer data loss. We emphasise the importance of protecting customer data privacy to all our employees through internal communications and training.

Anti-corruption

The Group has high expectations of its staff integrity and honesty. Our management has a zero-tolerance stance to corruption and fraud. Anti-bribery and anti-corruption standards have been incorporated in our policies and operating practices and these are communicated to our employees as well as external stakeholders. Power Assets has established a whistle-blowing mechanism to allow stakeholders to report suspected activities in a confidential manner. Reported cases are subject to independent investigations and followed up properly. Cases are reported by the Internal Audit Department to the Audit Committee and senior management.

Regulatory Compliance

We were not aware of any incidents of non-compliance with laws and regulations that have a significant impact on the Group concerning health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress during the year; nor are we aware of any breach of laws and regulations that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering.

Community Investment

Our philosophy is that a successful business is not just about achieving economic viability but also realising its social responsibility. Our businesses have made significant contributions and contributed to the socioeconomic health of their communities by providing aid and education to the disadvantaged and taking on major roles in promoting environmental conservation and healthy living.



HK Electric environmental conservation activities include tree care and weed removal.

Supporting the Disadvantaged

As a business that provides essential support to many communities, we believe that businesses should play their part in tackling societal challenges. In line with the United Nations Sustainable Development Goals, our community efforts are to assist those in need.

To support the rapidly ageing population in Hong Kong, HK Electric continues to run the “CAREnJOY” programme to help the elderly improve their quality of life. The programme trains elderly ambassadors to help other senior citizens. In 2016, selected ambassadors and HK Electric volunteers visited about 1,000 elderly living on their own and helped them buy bulky necessities. They also used the occasion to promote the safe and efficient use of electricity.

WWU works to tackle fuel poverty through its “Warm Home Assistance” scheme, providing funding to the less fortunate in Wales and the southwest of England for heating services. Since the launch of the scheme in 2009, WWU has funded over 12,000 connections to the gas network and has committed to connecting another 7,000 households by 2021.

AGN donated around A\$500,000 to community initiatives including various groups of people in need through organisations such as Foodbank SA which retrieves and distributes surplus food to people in need, and the Hutt Street Centre who provides over 50,000 meals for the homeless.

Education and Lifelong Learning

The Group believes that education is the foundation to a knowledge-based, inclusive society. Our businesses collaborate with various organisations to promote lifelong learning.

HK Electric formed a collaborative partnership with The Hong Kong Council of Social Service and established the University of 3rd Age (U3A) Network to promote lifelong learning among the retired elderly in Hong Kong. The initiative has provided over 86,000 learning opportunities for the retired population in Hong Kong since its launch in 2006. A total of 48 self-learning centres have been established and more than 5,000 courses have been arranged under this initiative.

Greener Living

We leverage our business strengths for community projects. One of our goals is to mobilise and collaborate with the local communities to explore ways to provide cleaner energy and enable greener living.

Since 2003, the HK Electric Smart Power Campaign has been promoting energy saving and low-carbon lifestyle, involving tens of thousands of people every year. The highlight of 2016 was the new "Happy Green Community Ambassadors" programme which engaged about 30 secondary school students in a one-day training camp on energy efficiency and power generation to nurture awareness of conservation and green living. The "Green Energy Dreams Come True" programme funded 12 projects by secondary school students to develop green living ideas. Each team received seed money of up to HK\$50,000 to implement its ideas.



Students joining the HK Electric Smart Power Campaign to put green ideas into practice.

CitiPower and Powercor collaborated with Newstead, a town 138 km northwest of Melbourne, Australia, to support its transformation to a town powered purely by renewable energy. CitiPower and Powercor supported the initiative by sharing industry knowledge, providing technical advice about the town's energy load profile, conducting impact assessment of local generation on grid stability and reliability, and performing financial modelling.



Employees and family members participating in Powercor's popular Tour de Depot initiative.

Health and Wellbeing

A community's health is key to its prosperity. Sporting events boast extraordinary socioeconomic and health values that can bring communities together. CitiPower and Powercor continued the annual Powercor Tour de Depot charity cycling series for the second year running in 2016 to promote healthy living and raise fund for those in need. Three cycling events were hosted in three Victorian towns: Warrnambool, Mildura and Shepparton, raising over A\$220,000 for charities that support various social groups in need.

In 2016 Ratchaburi Power Company organised a community health project for 13 public health centres spread across nine sub-districts in Thailand and continued its Mobile Clinic programme providing free eye clinical services to the local community in Ratchaburi.