## On-site energy



#### Low carbon route to energy self-sufficiency

When buying electricity from a supplier, approximately 20% of the cost is to pay for transportation from a large power plant, through the networks, to your connection. By generating your own energy on-site, these costs can be avoided and any surplus can be sold for extra revenue. Generating your own energy also gives you control to lower your carbon emissions and increase the reliability of your electricity supply.

#### Generation technologies

We consider all technologies available on the market and design a solution that is best suited to your needs and the existing site infrastructure. Our solution will combine the benefits of a range of technologies, including:



Gas engines



LED



Solar



CHP



Solar PV



Batteries

#### Financing

With energy solutions, a technically optimised project can often get derailed by commercial factors. With all of our solutions, project financing is a crucial element to our design. We will work with you to decide which model best fits your business's budget and ambitions. This may involve a fully funded project so that no investment is required from you or off-balance sheet structures.

#### The benefits of on-site generation

#### **Financial**

Financed solution

Cost and risk reduction

New revenues

#### **Technical**

Latest technologies

Live energy monitoring

Personalised solution

#### Security

Increased site resilience

On-going partnership

#### Environmental

Lower energy use

Reduced CO<sub>2</sub> emissions

Sustainability



### On-site energy



#### Single Partner for a full solution

Our solutions will deliver a project that is optimised across the entire value chain and tailored to your technical, financial and operational needs. Everything that we install is highly efficient or renewable and will provide your business with operational savings, reduced  $\mathrm{CO}_2$  emissions and greater independence from the power grid. Once all equipment has been installed, we don't walk away. We will look to further optimise your energy from our full suite of services including:

- Energy monitoring and remote fault detection
- Operations and maintenance
- Demand side response

#### Case study

# Alton Towers Reducing costs, improving sustainability

#### Better performance

The 550-acre Alton Towers site includes a conference centre, four hotels that can accommodate 2,500 guests, and Europe's largest waterpark — which needs to heat 1,000m³ of water and pump 66m³ of air/second.

Centrica Business Solutions provided a consolidated package, acting as manufacturer, installer and service provider. A CHP unit was installed on site, alongside the waterpark, generating up to 850kW. If there are any issues with the CHP, Centrica support ensures they are dealt with quickly—and the unit returns to peak efficiency.

#### Right result

The CHP unit generates power at source so energy efficiency has increased to 80%, and with a direct lowering of the resort's carbon levy, there is the added attraction to investors of a more sustainable business. Centrica Business Solutions funded the unit and installation, saving the resort's capital budget, which allowed it to invest in customer-facing attractions.

#### Why Combined Heat and Power unit

- Combined Heat and Power unit generating 850kW
- Variable speed drives to allow better control of the site
- State-of-the-art monitoring system providing cloud-based analytics





