

Material cost savings

Lower carbon footprint

No capital costs



OS Gen

OS Generation Group is a sustainable energy company that **harnesses the power of on-site generation** to save money for its clients and carbon for the planet

On-site generation is cheaper than purchasing from the Grid

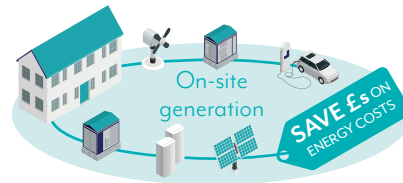
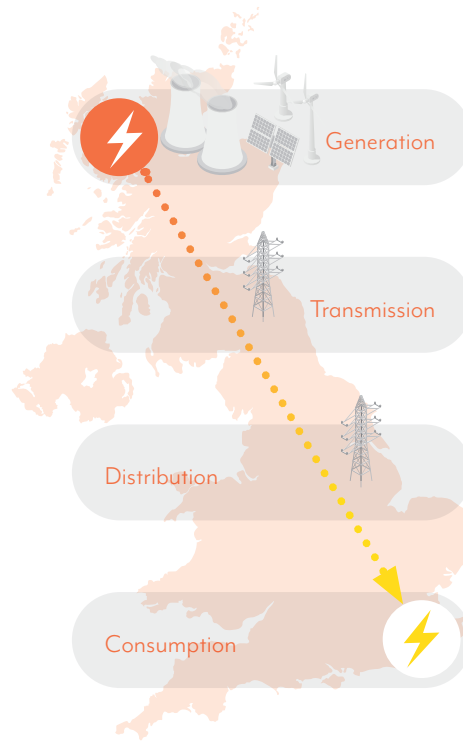
The cost of electricity delivered from the National Grid comprises three main parts:

1. Generation, transmission and distribution **losses**
2. Transmission and distribution **costs**
3. Sustainability and consumption **taxes**

Taxation and network operating costs account for close to 50% of the final retail price.

Similarly, the cost of gas supply and the cost of heat generated by old and inefficient oil or gas boilers coupled with additional fuel taxation, adds further energy costs.

On-site energy generation technologies are a cheaper alternative with the production of energy happening at the point of use. This has the advantages of efficient generation and distribution and the avoidance of taxation.



What OS Gen does – lower costs and lower carbon, zero risk

At zero capital cost to the customer, OS Gen installs and maintains clean energy technology on-site at their premises – an approach that avoids current grid generation and distribution inefficiencies.

OS Gen commits to supplying clients the low-carbon energy at a discounted rate for the duration of their contract with us.

Every client saves money, and every project reduces carbon, with footprints further reduced via accredited carbon offset programmes.

Customer benefits

Material cost savings

Through the efficiencies of on-site generation compared with the Grid OS Gen sells discounted low-carbon energy, typically saving clients between 15% and 20% per annum on their equivalent energy costs.



OS Gen fully funded

By funding the capital for the technology, installation and ongoing service and maintenance, client investment and operational risk is zero. Clients agree to a long-term Power Purchase Agreement (PPA) with OS Gen for the supply of discounted energy.

Capital Purchase options are also available.

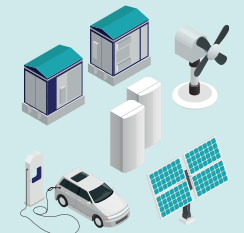
Carbon reduction and sustainability

Through a combination of low-carbon technologies and our OS Gen Sustainability programme, the energy generated can achieve a net zero carbon footprint over the life of the agreement. OS Gen invest in programmes which are accredited by organisations including Verra and adhere to the 17 United Nations Sustainable Development Goals (SDGs).



On-site generation technologies

OS Gen focuses on low-carbon and low-cost efficient generation and storage technologies including Combined Heat and Power (CHP), Solar PV, Battery Storage and EV chargers.



On-site generation solutions

OS Gen designs, installs and manages bespoke single and multi-technology solutions to deliver cost and carbon savings to its clients.

Grid-generated energy

Energy Management System



Electric Vehicle (EV) Chargers

Electric Vehicle (EV) chargers provide charging capabilities for EVs with a variety of power outputs. Power output of installed chargers can vary from 7kW upwards of 50kW. This can significantly increase the power consumption of the site and cost. This also poses challenges on grid capacity and distribution infrastructure with significant upgrade costs passed onto the client by network providers. However, installation of on-site generation technologies such as Solar, CHPs, Generators and BESS can alleviate some constraints that limit installation of EV Chargers.

Combined Heat and Power (CHP)

CHPs are static engines connected to an alternator to generate electricity. Heat from the engine is recovered and made available as hot water or steam. CHPs deliver efficiencies over 80% and provide significantly lower electricity and heat costs compared to Grid and boiler systems. CHPs deliver lower carbon energy compared to the Grid and benefit from carbon tax exemptions for the energy generated. CHPs can be fuelled by Natural Gas, Biogas, LPG and increasingly Hydrogen.



Heat Pumps

Heat Pumps use environmental energy to generate heating and hot water for your building. This works by extracting thermal energy (heat) from the air, ground or a local water source, which is then converted by a Heat Pump to generate heating and hot water. Heat Pumps can also be integrated with alternative energy sources to further improve the environmental impact of the heating and hot water whilst also minimising electricity costs and carbon.

Battery Energy Storage Systems (BESS)

A BESS collects energy from renewable energy sources such as CHPs, Wind and/or Solar panels or from the electricity network and stores the energy using battery storage technology. The batteries discharge to release energy when necessary, such as during peak demands, power outages, or grid balancing. This has the advantage of capturing energy that may be lost and through intelligent control systems deliver energy on-site avoiding peak grid prices, by releasing at times of deficit. They help improve energy efficiency and play a key role in energy resilience.



Micro-Wind

Micro-Wind turbines generate clean renewable energy and are one of the most cost-effective sources of electricity. Micro-Wind integrated with BESS and other baseload generation technologies, can help businesses achieve close to 100% of low carbon energy generation on-site.



Solar PV

Demand for Solar PV has grown, driven by increased affordability and improvements in generation output. A typical building will support enough Solar PV panels to generate between 8% and 20% of the total annual consumption. Solar PV integrated with BESS and with other baseload generation technologies including CHP and Micro-Wind, increases the proportion of lower carbon on-site energy generated and supplied to the building.

Other

OS Gen can include other energy generation systems such as Biomass, Anaerobic Digestion, Geothermal or Hydroelectric Power as required.

