

The need to decentralise power demand and decarbonise plant operations is growing each day in the fight against climate change.

There's an evolution taking place, especially where petrochemicals and refining are concerned.

An increasing number of businesses are embracing the Energy Transition and committing to become NetZero by 2050. Here at Aggreko, we're at the

forefront of that transition and work with customers, employees and partners to achieve those net zero goals through decentralisation and decarbonisation.

Here's how our power projects are helping modernise the petrochemical and refining sector.



Power projects and it's relevance to petrochemical and refining

Our Power Projects focus on the decentralisation and decarbonisation of power plant operations. Make your energy a high priority with our rapid deployment and flexible fuel options.



The Energy Transition

The Energy Transition relates to the global energy sector's shift from fossil-based systems to renewable energy sources, and it has a significant role to play in petrochemical and refining industry. It will drive the integration of these new and emerging renewable energy sources, helping the sector reach net zero in the process.

Aggreko's commitment to the Energy Transition will see three major goals being rolled out across our sectors by 2030.

- A reduction in the amount of fossil diesel fuel used in customer solutions by at least 50%.
- Reductions in local air quality emissions of our solutions by 50% (this includes all emissions from diesel, gas and other fuels)
- Achieve Net Zero across all our own business operations

By instilling cleaner technologies and fuels for our customers, we're able to guarantee the same or even a better level of reliability and competitiveness for all our sectors. By 2050 our global fleet will move toward liquid fuels and gas options only helping us achieve Net Zero.



Decentralisation

Many professionals in the field have billed decentralisation as the future of sustainable energy, but there are still questions about what it entails. Decentralisation involves the use of small plants (or micro-generators) to produce energy close to its point of use.

Decentralisation is one of the most important strategies in environmental policy in the last 30 years, it will deliver wider access to stable power for communities and businesses globally, compared to traditional centralised methods that are now often ageing power assets and national grids.



Decarbonising plant operations

The decarbonisation of the power sector reduces its carbon intensity, which helps plants lower their emission output. It happens by increasing the share of low-carbon energy sources, including renewables.

By making changes, such as shifting from coal to loweremission natural gas and increasing the prominence of low-carbon power generation, plants can reduce carbon dioxide emissions and run smarter while being more energy-efficient.



Making energy a high priority

Businesses are waking up to the importance of cleaner energy, especially in an effort to meet industry regulations. But many still aren't confident that the power at their facilities operates in the best manner. Therefore, the need to continue scrutinising and ensure that approaches aren't already outdated only increases in importance.

Now is the time to think about the future plants and how they can perform more economically while meeting new standards in energy efficiency. That means putting aspects like decarbonisation and decentralisation at the front and centre of power plants across the globe.

Rapid deployment of fuel options

The rapid deployment of fuel options offers flexibility and allows plants to perform at an optimum level. As power specialists, we use a wide range of fuels for power generation, including:

- Natural gas power allows plants to burn natural gas as their primary fuel
- LPG liquid petroleum gas is a hydrocarbon gas that exists in a liquefied form. It's highly efficient, and it boils at low temperatures so it doesn't evaporate
- Standby/emergency diesel/gas power when main grid supplies fail, standby diesel and gas power can minimise disruptions and offer emergency power
- Hybrid power: battery storage and solar the transition of solar energy from DC to AC electricity
- Flare to gas is a petrochemical process used in heat and electricity production.

Why power shouldn't limit plant operations

Plant operations are volatile, and there can be consequences for failing to meet regulations. Businesses could incur fines for flaring waste products, while grid restrictions may lead to a limit in production due to existing confined utility contracts. Plants could also suffer substantial monetary losses due to unplanned maintenance, leaving them with power limitations.

However, power doesn't need to limit operations. Partnering with Aggreko means that your power can work for you, thanks to decentralisation and re-purposing waste power to improve the facilities at your plant.

We're on top of your power challenges, offering both long and short-term solutions. Through fast mobilisation, we can facilitate faster set-ups, delivery and commissioning, resulting in shutdown reductions, decreasing cost and secured peak shaving opportunities.

Change is coming to the petrochemical and refining landscape at a rapid pace. Don't get caught out and face the consequences, finding yourself having to play catch up in the process. Aggreko can guide you by delivering results that positively impact and put you on the way to smarter plant operations that benefit your bottom line and the environment.





Summary

The need for modern-day power plants is essential in the race to meet net zero emissions. We're at the forefront of necessary energy changes at Aggreko and are helping our clients navigate the Energy Transition through decentralisation and decarbonisation while ensuring your business needs are met and operations run smoothly.



