



Extracting value from waste >>>



How can you extract value from waste?

Energy from waste covers a range of technologies and processes that turn waste products into valuable resources such as power, heat, and renewable energy. There are a number of processes used to convert waste into value, including incineration, anaerobic digestion of organic waste, gasification that turns organic matter into methane, pyrolysis to break down feedstock molecules to produce fuel, and bioenergy which derives fuel from biomass.

UK expertise in waste-to-energy

UK waste-to-energy companies excel at:

- Design, manufacture and supply of refuse collection and sorting equipment;
- Conversion of waste to biofuels;
- Design and engineering of advanced conversion components;
- Power generators and combustion of biopower; biomass for cofiring/coal conversion.

UK waste-to-energy companies exporting to the Middle East

Atkins

Atkins Middle East has around 2,500 staff with offices in Abu Dhabi, Dubai, Ras Al Khaimah, Sharjah, Muscat, Riyadh, Jeddah and Bahrain. Atkins has been at the forefront of consultancy services for the development and acquisition of waste-to-energy projects in the Middle East and internationally. The company has decades of expertise in clean power, nuclear and oil and gas to deliver lifecycle solutions in an evolving sector. Its engineers have the most up-to-date experience working with waste handling, waste gasification, syngas, and syngas clean-up. This is supported by wider experience with chemical, mechanical, biological and waste-to-energy processes. Atkins was the lender's advisor to the UAE's first waste-to-energy plant in Sharjah, providing a strong understanding of the waste streams (fuel) expected and assessing if there is any conflict or opportunity with the fuel source for that plant.

Kiverco

Kiverco is designing and building a number of waste processing systems in the UAE and in Saudi Arabia. Each project is bespoke to the specific waste stream and customer requirements, but all have been provided on a turnkey basis. Up to 95% of the incoming waste is processed and recycled for further use. Kiverco's recycling solution delivered for the Red Sea Project is designed to process in excess of 150,000 tonnes per year of construction waste on the Red Sea coast. The recovered materials will be recycled into new products as well as provide fuel to generate electricity at the nearby waste to energy plant. The plant will be used for years to come to process other waste streams in the area.



SLR

SLR provides global environmental and advisory solutions from a network of offices globally. The company has delivered successful energy transition projects for over 20 years, advising on and completing integrated, cost-effective clean energy and decarbonisation solutions across the value chain to meet Net-Zero commitments and achieve energy security.

Here in the region, SLR completed a concept design for an anaerobic digestion waste to energy solution for a multinational company in Port Qasim, Pakistan. The company also ran effective landfill projects in Yemen and Oman, demonstrating how to deliver engineered landfill in a responsible way, an approach that was pioneered in the UK. SLR are currently exploring opportunities to advise a textile mill in Pakistan for a waste to energy consultancy project.

Green Fuels

Green Fuels is a pioneer in renewable fuels, supplying biofuel equipment with capacity equating to \$500bn in fuel sales to customers in more than 80 countries. The company was awarded a Royal Warrant of Appointment to HRH the Prince of Wales and has contributed to many pioneering projects, including the first 100% biofuel-powered jet flight and the first 100% biofuel-powered train. Green Fuels is establishing capacity as a global sustainable fuel producer in sustainable aviation, marine and road fuels. The company's FuelMatic GSX biorefinery technology is being used in Oman's first sustainable biodiesel plant by its joint venture in the Arabian Gulf, Wakud International. Wakud's first biorefinery at Khazaen Economic City in Oman can process up to 20 tonnes of used cooking oil per day which is collected from restaurants and food processing establishments and made into European standard biodiesel.

Learn more about UK renewable energy solutions for your business.

Contact us

