

# Environmental Protection and Sustainability Award

Sponsored by Titan Cloud

## Winner - GW Environmental Consulting Ltd Bioremediation Solutions for a Safer Cleaner Industry

The treatment of fuel spills and hydrocarbon contaminated waste water has traditionally involved environmentally unfriendly and carbon intensive processes, often simply moving waste from A to B for further treatment.

The use of harsh chemical cleaners on forecourts and refuelling equipment often degrades surfaces, exposes staff to harmful substances and creates additional chemically toxic waste.

Almost all of the UK waterways have failed chemical water quality tests as we seem to forget that nearly



everything that goes into a drain then goes into the environment and eventually our drinking water.

As part of a spill management response that has not changed in over 125 years sand or absorbent grit is frequently added to spills to create a secondary waste stream that needs to be managed.

Even where hydrocarbons are trapped in fuel separators they are then often removed by road tankers for waste processing elsewhere creating a large carbon footprint associated with the waste management stream.

GW Environmental Consulting Ltd have demonstrated that through the use



of naturally occurring bacteria and natural surfactants hydrocarbon waste can be treated and effectively reduced in situ.

Unlike many imported products our bioremedial solutions contain bacteria that are indigenous to the UK. The bacteria are kept in suspension in our concentrated solutions and become active when diluted with water. Once awake they ingest hydrocarbons reducing them to water and naturally occurring CO<sub>2</sub>.

Throughout COVID 19 we saw a degradation in naturally occurring bacteria required for the natural breakdown of waste due to the increased use of anti-bacterial products. Our bioremedial solutions help to put harmless yet essential bacteria back into the environment.

Our multi-purpose products can be used for spill management, routine cleaning and dosing have been proven to reduce risk, costs and environmental impact across forecourts, fleet depots and railway engineering facilities.

Where there is hydrocarbon contamination in the ground soil injection of our products can remediate hydrocarbon contamination without the need for expensive and carbon intensive digging and dumping activities. Our soil remediation products are especially beneficial where contamination sits under existing structures that may prevent physical excavation.

Our chemical free cleaning and dosing products create a safer



*L to R: Dara Ó Briain, Graeme Warnell from GW Environmental Consulting Ltd, Trevor Long, Titan Cloud and Michael O'Connell, APEA Chairman*

workplace for employees, reduce the chemical waste footprint of facilities, protect forecourt equipment, and most importantly protect the environment.

For more information on our bioremedial solutions range please email us at [info@gwenvironmentalconsulting.com](mailto:info@gwenvironmentalconsulting.com) or visit our website at [www.gwenvironmentalconsulting.com](http://www.gwenvironmentalconsulting.com)

## Environmental Protection and Sustainability Award Runners up

### **Emirates National Oil Company (ENOC) - Vapour Recovery System**

The Vapour Recovery System (VRS) is crucial for the forecourt industry, significantly reducing VOC's emissions by capturing and converting fuel vapours into usable fuel. This technology enhances operational efficiency, improves air quality, and aligns with global sustainability regulations. ENOC Retail's VRS has recovered 2.9 million litres of fuel, cutting CO<sub>2</sub> emissions by 6,679 metric tons and generating savings of approximately 8.77 million AED. The last 12 months leading to November 2024 are vital for assessing the system's impact, showcasing ENOC's commitment to environmental stewardship and sustainable practices in fuel retail.

### **Markey Building Services - Markey Building Services & Sustainability**

With over 15 years of experience in petrol forecourt development, including everything from knockdown rebuilds to EV charging hubs, for Markey Building Services, sustainability in the petrol forecourt industry is vital to meet evolving environmental standards and customer demand. As petrol stations transition to include EV chargepoints, adopting eco-friendly practices reduces carbon footprints, improves operational efficiency, and enhances the company's reputation. Sustainable construction methods, waste reduction, and energy-efficient installations ensure long-term success and market competitiveness in a rapidly changing industry. The majority of the company's energy needs are met through self-generated power from renewable sources like biomass, solar, or through imports from 100% renewable energy generators.

### **Nupi Industrie Italiane S.p.A. - Nupi - Pioneering sustainable innovation with ESG Excellence and SynESGy Certification**

Nupi Industrie Italiane S.p.A., a leader in advanced piping systems, emphasising innovation, quality, and sustainability in infrastructure and forecourt sectors. The company's commitment to ESG practices earned it the SynESGy B-level certification, underscoring its dedication to circular economy principles, energy-efficient production, and long-lasting products. Nupi's efforts include trigeneration plants for energy, partnerships in plastic recovery consortia in Europe and a focus on reducing its carbon footprint. This award entry highlights Nupi's proactive role in setting industry standards for sustainability, enhancing its market reputation, and addressing environmental challenges with measurable positive impacts.

## Awards

### Swan Civil Engineering - Total Protect

Total protect is a multifaceted system designed to safeguard fuel storage facilities. The system works by integrating various sensors and safeguarding systems on site to a control system. The system is able to monitor boreholes for contamination, drainage for escape of oils/pollutants and tank sumps for presence of explosive gases. Automated drainage valves are also integrated to the system so immediate action can be taken in the event of a loss of containment.

The system is able to monitor these areas in real-time ensuring pollution events are halted or reported immediately.

