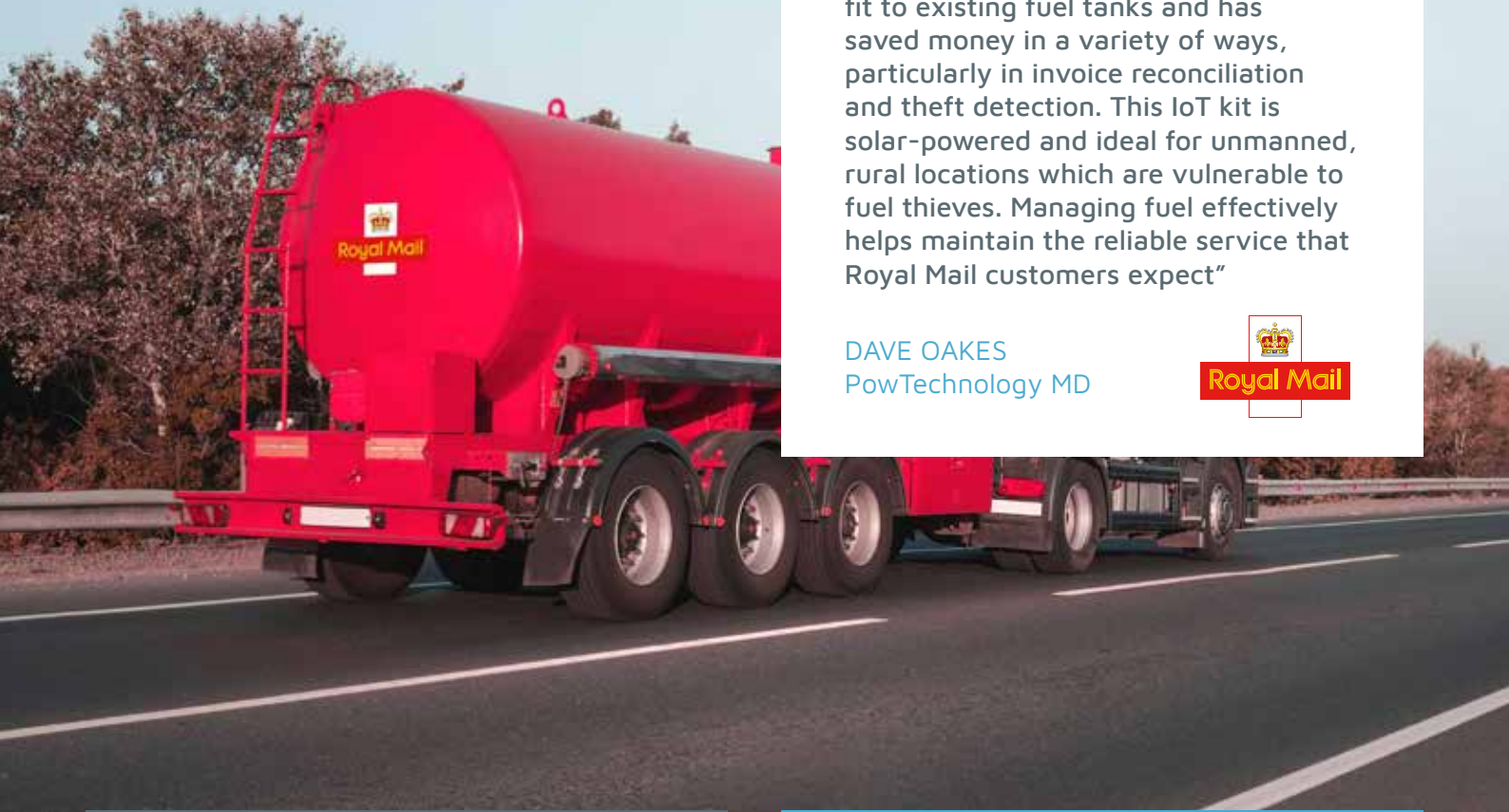




“This project offered a simple retrofit to existing fuel tanks and has saved money in a variety of ways, particularly in invoice reconciliation and theft detection. This IoT kit is solar-powered and ideal for unmanned, rural locations which are vulnerable to fuel thieves. Managing fuel effectively helps maintain the reliable service that Royal Mail customers expect”

DAVE OAKES  
PowTechnology MD



## The task

Royal Mail is a British multinational postal and courier service, with over 250 depots across the UK. Fuel for delivery vehicles was purchased centrally, but daily manual stock levels were required to place orders. There was no way of verifying the time/ volume of deliveries to ensure correct billing or if fuel was being stolen, a problem at unmanned rural locations. Losses and fuel unaccounted for was costing £5M pa!

## The result

Data collection, analysis and management including invoice reconciliation stock-taking and order placement is automated Fuel theft has been detected immediately with thieves apprehended. Deliveries are optimised to suit both the fuel supplier and Royal Mail reducing logistical costs. Forecasting, based on usage information, allows easy planning of routine tank maintenance.

## The solution

PowTechnology solar-powered telemetry was installed to report fuel levels every ten minutes, providing the basis of various management reports and automated actions such as raising purchase orders, communicating with sites about deliveries and activating an anti-theft alarm. Data interfaces with fuel suppliers routing & scheduling software.

## Summary

- | Automatic invoice reconciliation
- | Automatic ordering
- | Short deliveries challenged
- | Immediate theft alerts
- | Overfills detected