

CASE STUDY

LIFE SCIENCES

# Environmental Firm Slashes Site Maintenance By 96%

**Ecologia**  
experts on the ground**LOCATION**

United Kingdom

**INDUSTRY**

Life Sciences

**WEBSITE**

ecologia-environmental.com

**CHAMPION**

Tom Hayes

**Ecologia is a UK-based environmental contractor specializing in the investigation and remediation of soil and land contamination projects across the UK and Europe. This project involved land remediation and treatment at a large petrochemical facility in Italy. The multi-phase system was launched in 2016 and is scheduled to run for three years to remove volatile hydrocarbon contamination in shallow soils and groundwater.**

## Site requires regular maintenance and monitoring (but talent is in the UK)

Typically, a large scale project like this would require setting up a local office with up to two full-time technicians to monitor and respond to issues on site at all times. However, Ecologia's central response center was based in the UK, as were most of its engineers. This meant it would need to send an engineer to Italy for annual maintenance checkups for three days or more. The company wanted to find a way to monitor everything from its UK HQ, while cutting labour and travel costs. "Once we get to this level," said Tom Hayes, an Ecologia director, "we can put our equipment anywhere on the planet and still get regular and timely access to performance data and predictive maintenance information."

## Challenges

- ✘ Site required regular maintenance and monitoring
- ✘ Engineers and technicians had to travel from the UK to Italy annually
- ✘ Maintenance tasks took days to complete

## Solution

- ✔ SmartSights WIN-911

**When an alarm occurs, SmartSights WIN-911 sends alerts via text, email, or phone to the right person at the right time, enabling faster response and reduced downtime.**



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**Tom Hayes**  
Director, Ecologia

**Benefits & ROI**

- ✓ 96% reduction in annual site maintenance hours
- ✓ No requirement for onsite office (with 2 ongoing FTEs)
- ✓ Proactive problem resolution via response center
- ✓ Reduce need to send staff to hazardous areas
- ✓ Cut energy usage from eliminating travel costs



“When an alert is raised, WIN-911’s built-in decision tree structure recognizes the situation and escalates it until action is taken by the appropriate parties.”

**Tom Hayes**  
Director, Ecologia

**Maintenance tasks cut from three days to less than an hour**

Ecologia chose to install SmartSights WIN-911 software as part of the Rockwell Automation SCADA system to monitor its three separate extraction wells.

Each unit is housed in a 20 ft shipping container, which contains a high-power vacuum pump the size of a small car as well as more than 40 other components. Monitored alarms include flow rate, temperature, ground water levels, pipe pressures, total fluids (liquid and gas), and the concentration of contaminant gas.

“The units are undertaking vacuum extraction of contaminated groundwater and liquid oil in a very inaccessible part of the site,” Hayes said. “The contaminating oil is actually spread out on top of groundwater to a thickness of 0.5m and will take between two and three years to successfully remove.

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“With the system we have in place we can monitor and change the process remotely,” said Hayes. “We can see what extraction is going on in each individual well and make decisions on the running parameters. Previously, we would have to go to site, annually and monitor/change the PLCs, typically over a three day period; we can now do this in less than an hour from Kent.”

### Expand business opportunities from local to global

SmartSights WIN-911 allows Ecologia to monitor the control units remotely and implements a smart notification system with mobile management capabilities and intelligent escalation should a situation such as a valve leak or temperature spike occur.

When an alert is raised, WIN-911’s built-in decision tree structure recognizes the situation and escalates it until action is taken by the appropriate parties. The early notification provided by WIN-911 helps Ecologia assess and manage any concerns with the treatment units. More importantly, WIN-911 remote capabilities enables Ecologia a whole new business expansion opportunity.

“We are seeing a significant uptake in the deployment of our services from multinational companies,” said Hayes.

