



AGM is a communications and control solutions provider for distributed control networks in the fields of energy and oil, water, waste-water, irrigation and the environment. This page focuses on AGM's solutions for the oil and gas industries.

Smart Asset Optimization for Oil Pipelines and Oil Fields

AGM is offering its knowledge in communications and control, and 33 years of experience in **optimization, retrofit and upgrading** projects for SCADA/DCS networks for the oil and gas industry.

Using COTS (Commercial Off The Shelf) products and retaining existing investment in equipment and worker training enables AGM to offer smart, economical upgrade and optimization solutions in line with evolving technologies and changing business requirements.

AGM's solutions serve:

- Oil and water pumping stations' automation, from a single oil/gas/water drilling well to a vast drilling farm
- Pipeline monitoring and control including low-cost cathodic protection monitoring
- Oil industry assets automation upgrades
- Asset optimization and integrity management of water treatment systems

To offer better solutions, AGM has developed an add-on element: an original communication management unit to be installed at the remote field stations between the PLC and the communication transceiver (RF and/or cellular or other), empowering the distributed system, making each station smarter and having the dramatic impact the PC revolution had on the "dumb terminals" organizational environment in the 1980s.

This original product, called R-Win, enables smart, gradual and economical SCADA/DCS network optimization and upgrading.

Client benefits from **AGM's asset optimization solutions, the R-Win way**, include:

- a) Communication resilience by lateral communication (MESH). Each remote pumping or monitoring station is able to carry out two-way, real-time communication with neighboring stations and the control center. Each station can serve as a wireless network router (bridge, S&F).
Each site (oil/water pumping station, oil rig, piping hub, etc.) can have both cellular and RF communication, dual SIM networks and remote configuration.
- b) All stations can initiate communication; control center polling is not needed; local/regional autonomous control processes are a standard option.
- c) Implementation of modern, high level data security.
- d) Existing system equipment and applications, at SCADA center and remote stations, stay in place.
- e) Internet access capability is an option for all stations under security limitations. Your server is the network manager; there is no need for third-party service except for your cellular communication provider.
- f) Integration with Preventive Maintenance applications.
 - [Client upgrade case story](#) includes a link to R-Win technical review
 - [Distributed control network, the R-Win system architecture drawing](#)



Offshore Oil Spills Detector

The oil leaks monitoring system is a compact, floating wireless sensor that detects the presence and monitors the buildup of hydrocarbons on water. The system is designed for installation offshore.

Oil Spills Detector

The unit detects the presence and monitors the buildup of thin layers of hydrocarbons in wet and dry environments. Timely alerts are transmitted to relevant addresses.

Petroleum and power companies have installed the system in sumps for early detection, and for alerts & control of oil leaks and spills from:

- Above-ground oil storage tanks
- Transformer sumps & remote power distribution substations
- Oil/water separators
- Cooling water systems and trenches
- Wastewater sewer systems

Harbors, rivers, lakes & streams under oil spills damages risk could greatly benefit from this technology. The Oil Spill Detectors are based on co-development with GE subsidiary. Read a letter of [recommendation from GE](#).

Oil pipeline network monitoring & control

The energy infrastructure transports oil, gasoline and natural gas, as well as many other petroleum based products through network of pipelines from the producer's oil fields to processing plants to distribution terminals and clients.

This kind of network needs monitoring and control with real-time response capabilities.

AGM is offering its knowledge in **expansion & upgrading** projects using COTS (Commercial Of The Shelf) products, retaining existing investment in equipment and training.



Oil fields and processing plants monitoring & control

A SCADA/DCS system provides tools to effectively manage the operations of oil, chemicals processing plant and oil field in real-time.

This kind of distributed controlled site calls for AGM's expertise in **real-time communication** based on its 33 years of experience in such applications as:

- Pumping stations automation
- Pipeline monitoring & control
- Tank farms monitoring & control
- Preventive Maintenance interface