

SOLAR ENERGY SECTOR

PORTFOLIO OF SERVICES



KEY SERVICES

- In-depth telecoms audits
- Telecoms infrastructure design
- Best-in-class hardware and software deployment
- Microwave radio, satellite, fibre and 3G/4G connectivity
- Cybersecurity
- Managed services with pro-active network management and monitoring

RESILIENT COMMUNICATION NETWORKS

At EMR, we actively assist solar farm operators and asset managers in their journey of digital transformation, facilitating a low carbon, smart grid future.

High availability data and enhanced remote network management lies at the heart of this transformation but the reliability of these data streams is directly aligned to the resiliency and performance of your communications network.

We specialise in secure, utility-grade network infrastructure, designed and built to manage mission-critical field assets and meet the rigorous demands of the solar industry.

As a trusted telecommunications partner with a proven track record of delivery for solar energy providers, we have a deep understanding of your business.

Our secure IP networks seamlessly integrate with your SCADA, CCTV and other IP-based applications. We address every stage of the service lifecycle, giving you the flexibility to choose the scale of engagement with us.

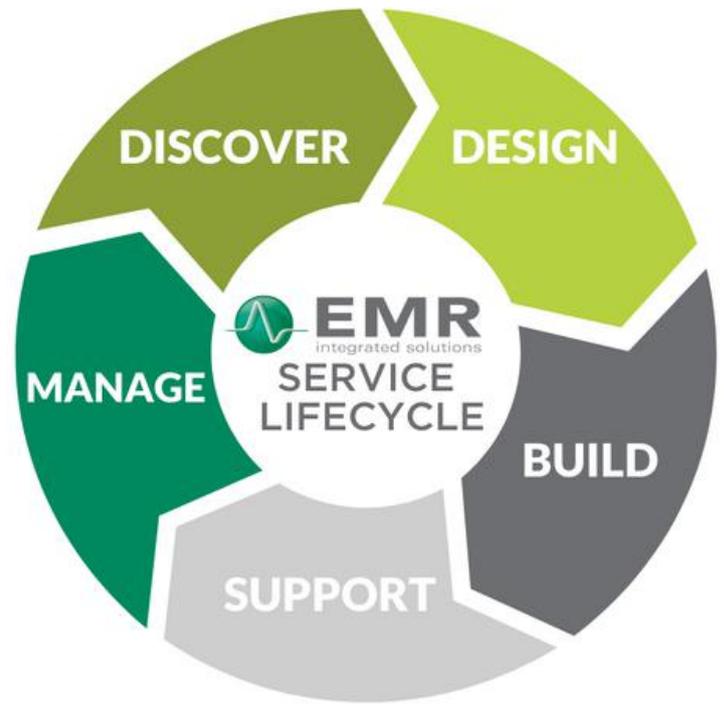
COMPLETE SERVICE LIFECYCLE

Underpinned by principles of resiliency and security

Our project engagements cover the full service lifecycle and can be equally applied to new builds or existing comms infrastructure that requires an upgrade.

We begin each assignment with a full telecommunications audit. This discovery exercise includes analysis of existing communications connectivity and telecoms service availability as well as an assessment of existing hardware and software.

A gap analysis ensues and this outlines detailed recommendations that set you on a structured migration pathway towards a high availability, utility-grade network that enhances security posture and minimises network downtime.



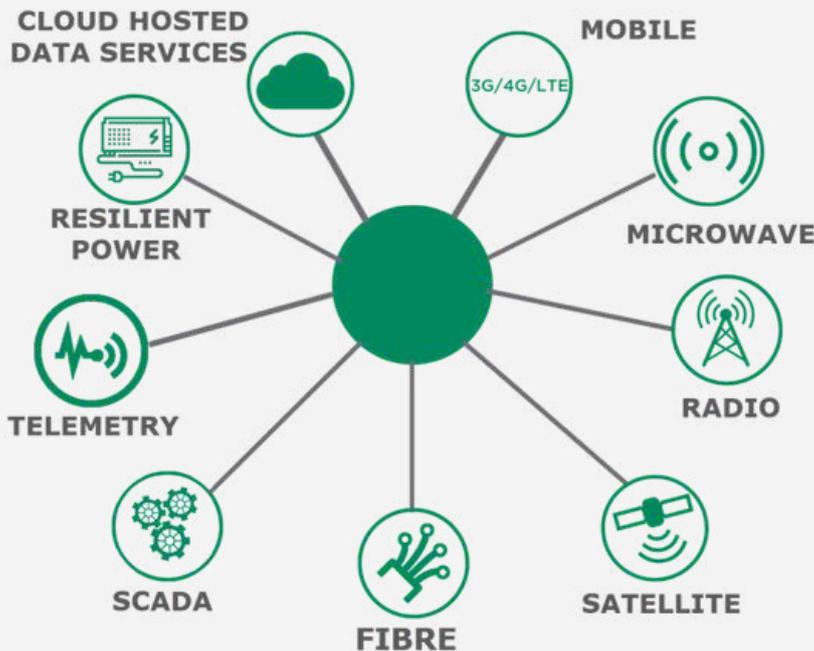
NETWORK DESIGN AND CARRIER SELECTION

Network design is conducted by our senior architects, professionally accredited and suitably trained to the highest industry standards.

Thanks to the strength of our telecoms partnerships, we are uniquely positioned to recommend the most resilient and cost-effective networks for each of your sites, including high-performance fibre connectivity.

Even the most remote locations benefit from our expertise in utility-grade 3G/4G, satellite and/or microwave radio connectivity. And automatic failover to secondary communication links ensures maximum network uptime for your mission-critical data.

Assets can be controlled remotely without the need for on-site intervention and this allows solar energy providers to significantly reduce maintenance costs.



Customer Success

Greencoat Solar - UK

EMR recently secured a three-year contract with Greencoat Solar, to upgrade the communications infrastructure at their entire estate of 120 solar farms throughout the United Kingdom.

We design, deliver and support a resilient, secure, cellular network, ensuring an uninterrupted flow of site data and maximum network uptime for compliant grid management and asset security.

As part of the service, EMR's Network Operations Centre monitors all sites and immediately responds to operational alerts in the event of communications failure or systems outage and escalates where appropriate.

This gives Greencoat's asset managers a holistic overview of how its solar farm assets are performing in real time, with a single dashboard for critical operational data.



NEXT GENERATION UNIFIED THREAT MANAGEMENT

Cyber attacks on the utility sector are increasing with alarming frequency. Recent, high profile ransomware attacks have resulted in significant disruption to localised energy supply and negative financial impact on the bottom line.

At EMR, we encourage operators and asset managers to deploy best-in-class cyber security solutions as a preventative measure to protect the integrity of the communications network.

Our secure firewall solutions, based on Fortinet technology, automatically prevent, detect, and mitigate advanced attacks within minutes thanks to integrated AI-driven security and advanced threat protection.

Fortinet has been consistently recognised by Gartner as a Leader in its Magic Quadrant for next generation network firewalls.



Fortinet firewall appliances offer real-time intelligence on the threat landscape and identify thousands of applications inside network traffic for deep inspection. Security policy can be defined and set centrally and enforced remotely to all locations.

Advanced routing capabilities deliver high application performance with encrypted IPSEC tunnels at scale.

EMR's cyber security solutions coupled with our network management services provide a single pane of glass for consolidated security monitoring and escalation.

"With every project engagement, mitigating cyber risk through improved security posture is a core objective for us."



Alan Feenan, Sales Director, EMR

INSTALLATION AND COMMISSIONING

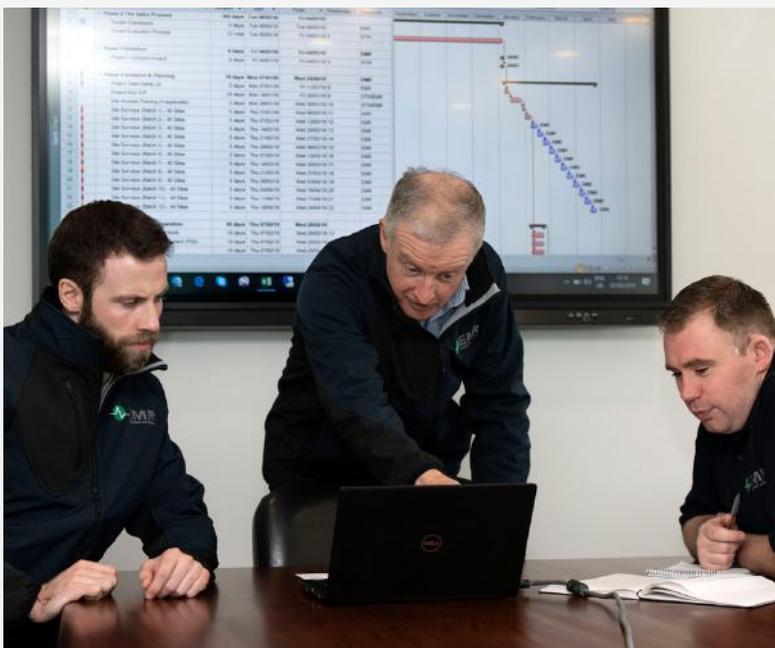
EMR's fully trained and certified installation and commissioning team have extensive experience working on renewable energy projects including large solar sites in the UK and Ireland.

Working to the highest standards in some of the region's harshest environments, they perform seamless installation of network hardware and complete the necessary tests and procedures to ensure full interoperability with SCADA and IP-based applications.

An ongoing program of health and safety training ensures that EMR staff always perform their duties with workplace safety in mind. From the use of protective clothing to recognising environmental hazards, this culture of rigid health and safety practices is firmly rooted in EMR's business philosophy.



PROJECT MANAGEMENT



Our formal project management office (PMO) with dedicated management and team handles project delivery for our utility customers across Ireland, UK and Europe.

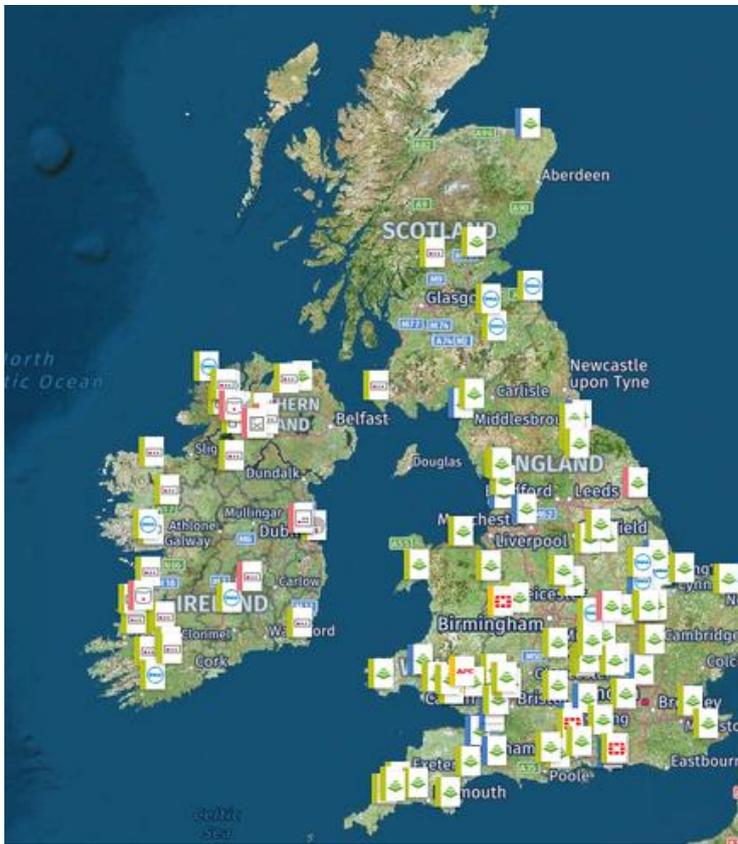
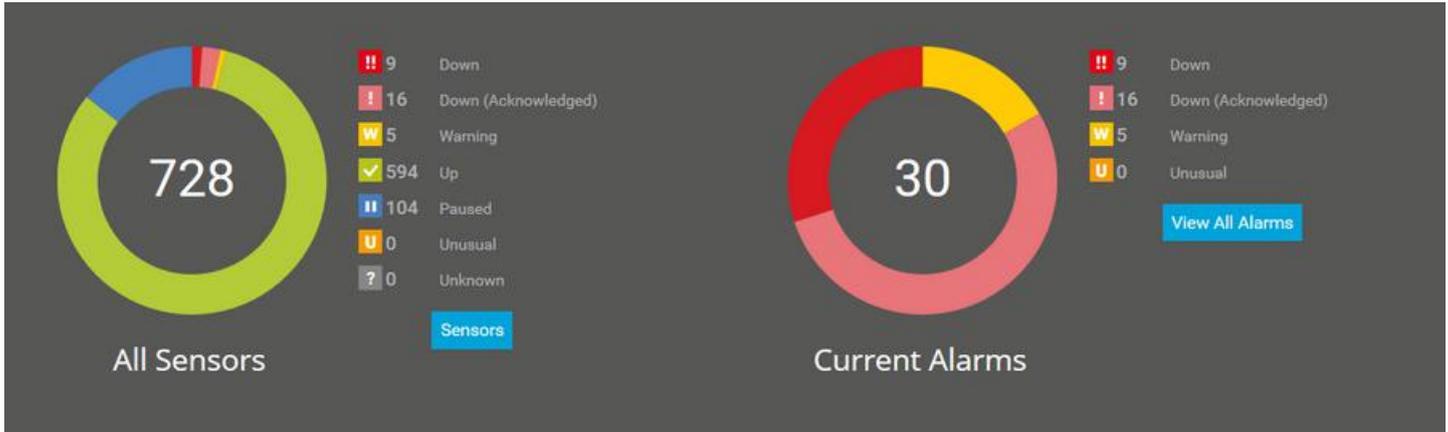
The PMO provides a blend of overarching project direction and ongoing control and serves as the central communications hub between senior management, supervisors, engineering, sales, finance, service, logistics and the customer.

Staff are certified to the latest project management standards with a firm focus on delivering projects on time, on budget and to agreed project deliverables.



MANAGED SERVICES

Proactive network monitoring and escalation



- ✓ Proactive managed service designed to pre-empt technical issues and ensure swift resolution
- ✓ Promotes maximum network uptime of field assets
- ✓ Advanced threat management to enhance the security of utility networks
- ✓ Liaison with third-party providers to provide speedy problem escalation
- ✓ Detailed incident reporting for compliance and governance requirements

STRATEGIC PARTNERS

FORTINET



NEC

TELESPAZIO
a LEONARDO and THALES company



EMR
integrated solutions

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IRELAND: Tel: +353-1-8013131

UNITED KINGDOM: +44 (0)118-9952283

Email: info@emrsolutions.ie | Web: www.emr.ie