THE CHALLENGES AND NEEDS OF A GROWING ENERGY SECTOR

Motorola Solutions 2023 Energy Survey Report

MOTOROLA SOLUTIONS

KEEPING THE LIGHTS ON WITH THE LATEST TECHNOLOGY

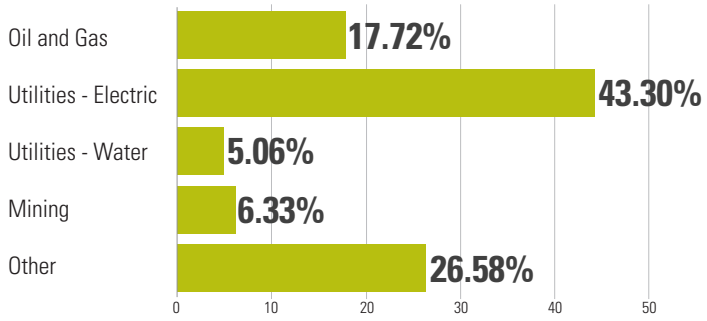
Maintaining safe and productive operations within the energy sector is not just imperative for the businesses within it but also the wellbeing of populations and economies that rely on it. Disruptions to energy services can have significant impacts on the wider community, so it is essential that they are kept to a minimum. That's why industry leaders are continually investing in new technology to ensure seamless communications, improve insight and increase intelligence – all in service of reducing threats to safety and productivity.

To better understand current and future communications technology trends in the energy sector, Motorola Solutions surveyed workers across several markets, including oil and gas, electric utilities, water and wastewater utilities, and mining. Respondents represent both senior and middle managers across multiple functional areas, such as operations, telecommunications, safety and security, and administration.

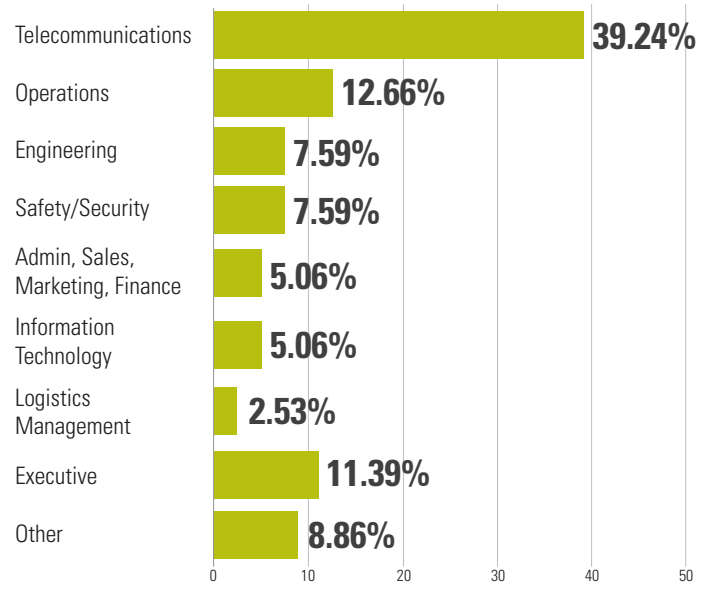
The 2023 Energy Survey reveals an industry embracing change. Businesses are investing more in technologies like video security and continue to move away from analog to digital radios, while more and more are seeing the value in robust cybersecurity. And underlying all this is the need for unified, reliable communications technology.

RESPONDENTS AT-A-GLANCE

INDUSTRY:



JOB FUNCTION:



SMARTPHONES AND TWO-WAY RADIOS CRITICAL TO COMMUNICATIONS

The most commonly used devices in the energy sector reflect the need for functionality, durability, and reliability. Smartphones, used by **79%** of respondents, offer additional intelligence that enables workers to quickly and easily communicate while using modern apps to accomplish dedicated tasks. Two-way radios, used by **74%** of respondents, offer durability and reliability in the energy sector's physically demanding workplace environments.

PRIMARY FORM OF VOICE COMMUNICATIONS

Smartphones: 79%
Two-way radios: 74%

Those aren't the only devices being used by companies in the energy sector, though. Just over 65% of respondents indicated that they're currently using laptops and/or desktop computers as part of their communications and security network. Further to this, 31% are using internet/IP voice devices.

ASTRO 25 SYSTEMS

The industry's most trusted P25 radio system delivers reliable and secure wide-area communication with the ability to collaborate across multiple organizations. ASTRO systems are built for the safety of your personnel and the protection of your operations.

P25 radios like the APX Next and N70 are intuitive digital devices that come with key features ideal for the energy sector. Enhanced location tracking allows you to plot users on a map, create ad-hoc talkgroups defined by geofences and ensure everyone in the area is connected. Their enhanced audio produces louder, best-in-class sound so that you can hear and be heard when it matters most, even in noisy environments.

There are intrinsically safe models, designed and tested for extreme ruggedness with mission-critical all-weather touchscreens so that they can be used in the most challenging conditions.

The ASTRO P25 radio system also includes a range of cybersecurity features to keep your network secure. Based on the National Institute of Standards and Technology (NIST) framework and industry best practices, the system enables security at every step of the way through a variety of methods including secure access controls, data traffic monitoring, and encryption.

ROBUST SECURITY MEASURES ARE ESSENTIAL FOR THE ENERGY SECTOR

When it comes to the physical security measures in place within the energy sector, access control and video security are the most widely used capabilities. But energy companies are not resting on their laurels; our survey reveals that many are continuing to invest in facility security technologies in order to keep their workers safe and operations running smoothly.

The majority of our respondents (71%) said that they are using access control to ensure unauthorized individuals do not enter certain areas. Furthermore, **video security is also a key part of safety measures within the energy sector, with 67% of respondents highlighting that they currently use it** and 40% indicating that they intend to invest in this over the next five years.

71% of respondents are using access control.

67% of respondents are using video security which is a key part of safety measures within the energy sector.

To take things further and unify security and communications technology, 83% of respondents said it would be valuable to have a video and access control integration with radios.

Motorola Solutions' Integrated Technology Ecosystem

Motorola Solutions has created an integrated technology ecosystem to address the unique challenges of the energy sector. From AI video analytics to unified digital communications and cybersecurity, there are solutions to meet the growing needs of this vital industry.

Today, your security is measured by how fast you know what's happening at any given moment. How quickly you can pinpoint when something unusual is occurring. Our **video security** solutions help you find and share critical intelligence faster, so you can respond to events with the speed and decisiveness that keeps your people, operations and assets safe. Artificial Intelligence enables you to spot and respond to critical events faster.

H5A RUGGED PTZ CAMERA

ESPRIT SERIES

EXSITE ENHANCED SERIES

H5A BULLET CAMERA

TOP THREE REASONS ENERGY COMPANIES ARE INVESTING IN SECURITY

1. Organizational Priority

More and more organizations are realizing the importance of safe and secure operations, not just for the welfare of their employees but also for the protection of their operations and systems. So, they are prioritizing security and investing in technology and facilities that help keep their sites secure.

2. Incidents at Facilities

The energy sector has seen a continued increase in the number of safety and security incidents occurring at facilities across the country, prompting organizations to invest more in robust security systems. Last year there were a reported 390 incidents at facilities, compared to 220 in 2018.* These incidents were caused by a range of factors, from natural disasters and severe weather to vandalism and physical attacks.

3. Incidents Involving Employees/Personnel

Many of those incidents will have risked the safety of energy employees and personnel, and these are of course particularly concerning for organizations. Increased spending in security systems helps lower the amount of incidents that occur and enables a quicker response when something does happen.

CYBERSECURITY ADDS VITAL PROTECTION

Energy companies do not just have their physical sites to worry about; they also need to protect their cyberinfrastructure. There are an increasing number of threats targeting utilities, often with political or economic motives. Most organizations are aware of these dangers - 78% of respondents to our survey already have a cybersecurity solution in place, while 8% plan on implementing it in the near future. And, on a scale from 1-10, an average of 7.3 was determined by respondents as to the importance of cybersecurity at their facility. **Learn More** about the NIST cybersecurity framework.data, and analytics.

DIGITAL COMMUNICATIONS HAS BECOME THE NORM

The energy sector is seeing a continued shift to digital communications technology, and for good reason. Digital radios offer better voice quality, stronger coverage, and longer battery life. Yet, the move to digital is about more than performance. With digital radios, workers can access a range of integrated applications, analytics, and communications capabilities that transform operations. Today's digital radio applications include a universe of options for video, security, dispatch, and many more solutions that enhance security, efficiency, and productivity.

Just 7% of respondents still use analog radios, while 18% intend to switch from analog to digital within the next five years. The industry has embraced the benefits of digital communications, allowing companies to keep workers safe and operations protected.

MOTOTRBO TWO WAY-RADIOS

If you have diverse or dispersed employees, who work in noisy or quiet settings and need real-time data or clear voice capability, and who require sleeker shapes or larger screens, we will put the right device in the right hands to connect your entire operation and keep your business running smoothly.

R2

A next-level workhorse, the MOTOTRBO R2 marries durability and ergonomics to ensure confident, easy handling. And with superior range, configurable audio and seamless integration, the R2 is a reliable addition to an uninterrupted workday.

R7

MOTOTRBO R7 offers game-changing audio capabilities in a rugged, future-ready device. Its advanced audio processing ensures that your communications are loud and clear, while its rugged construction is ready for harsh environments, and advanced connectivity options get your workforce ready for tomorrow.

Ion

Your business runs on voice and data. But if your devices can only access one, you're not running at your best. The rugged Ion smart radio is the first business-ready communication device with all-on voice and broadband data capabilities.

XPR 7000e

The XPR 7000e Series is designed for the skilled professional who refuses to compromise. With high-performance integrated voice and data, and advanced features for efficient operation, these next-generation radios deliver complete connectivity to your organization.

Learn more and explore how we're bringing energy sector communications technology into the future.

MOTOROLA SOLUTIONS

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GAINING A COMPETITIVE EDGE THROUGH CONNECTIVITY AND INTELLIGENCE

Our survey highlights that most energy companies are planning to upgrade their devices, applications, and networks in the coming years to achieve one or all of these goals. Smarter, more connected systems and equipment will give them unprecedented visibility over their operations, enabling them to improve service to customers, prevent safety and performance issues, maximize supply chain efficiency, protect against cyber-attacks, and support global energy needs in the 21st century.

Motorola Solutions technology can help you get there, empowering organizations like yours to thrive with an integrated, flexible, always-connected infrastructure that can accommodate evolving communications and safety needs.