

## MONITORING MAINTENANCE ENGINEERING TODAY

- 6 in 10 have hands-on operational responsibilities.
- 4 in 10 responsible for equipment reliability and engineering compliance.
- Fewer than a third responsible for maintenance strategy.
- 68% have more than one strategy in place.

### Company strategies in place



### What are the advantages to your highest priority maintenance strategy?



## GETTING THE RIGHT SKILLS IN PLACE

- Attracting and retaining talent is the top challenge for 2023.
- Rated just as important as inflation and more so than supply chain issues.
- Over 6 in 10 already outsource some activities.
- Main drivers to outsource – need specialists or lack skills in-house.
- Benefits of maintenance services: cost-effectiveness, flexibility, efficiency.
- Only 1 in 10 who don't outsource are considering.

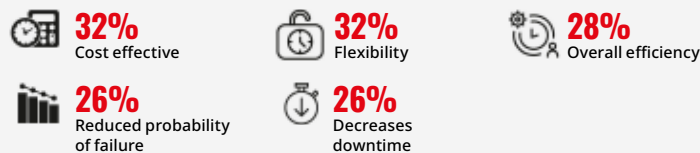
### Challenges for maintenance in the next 12 months



### What are the factors that have led to you outsourcing?



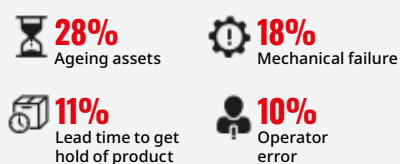
### What are the main benefits to using a maintenance service?



## TELLING THE TRUE COST OF BREAKDOWNS

- 20 hours a week spent on unscheduled maintenance.
- At an average hourly cost of over €5.5k, or more than €110,000 a week.
- Scheduled maintenance is scarcely less expensive.
- 18 hours of planned downtime per week at an average weekly cost of €102,900.
- Wide variations between company sizes and sectors.
- Maintenance absorbs up to 10% of operating budgets on average.
- But as much as a fifth at larger firms.

### Drivers of un-scheduled plant downtime



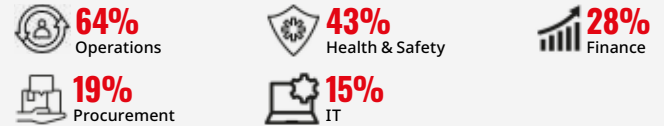
### Percentage of annual operating budget spent on maintenance processes



## COLLABORATING WITH STAKEHOLDERS TO RAISE PERFORMANCE – OVERVIEW

- Wide range of stakeholders in the business.
- Respondents say collaboration across the organisation is vital.
- Over 8 in 10 work with procurement on supplier and cost management.
- Product availability is the leading supplier requirement.
- Followed by quality assurance, responsiveness and price.

### Department functions of main stakeholders



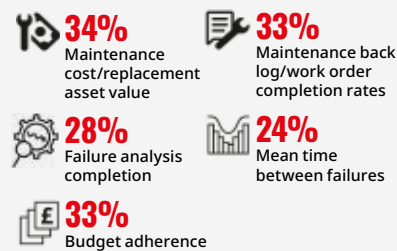
### What is most important for a supplier to deliver?



## COLLABORATING WITH STAKEHOLDERS TO RAISE PERFORMANCE

- Almost 3 out of 4 are benchmarked against at least two KPIs.
- Maintenance cost/replacement asset value is the leading KPI.
- Budget adherence along with backlogs and safety are also key.
- But over half don't believe data used to measure them is reliable.
- This may reflect operator errors being reported as maintenance failures.

### Maintenance KPIs in place



### How reliable is the data you are currently measured on?



## HARNESSING TECHNOLOGY TO IMPROVE EFFICIENCY – OVERVIEW

- 9 out of 10 use tech to monitor and manage maintenance.
- CMMS and EAM are most popular.
- Half use at least two condition monitoring (CM) techniques.
- 7 out of 10 say CM improves understanding of asset health.
- Almost 1 in 3 say CM changes behaviour.

### How do Condition Monitoring techniques impact plant and asset performance?



## HARNESSING TECHNOLOGY TO IMPROVE EFFICIENCY

- Most popular condition monitoring measures vibration and electric current.
- 1 in 4 of those considering outsourcing will use it to introduce mobile monitoring.
- Sector-specific solutions included rail industry TRUST system for fault reporting.
- Some used modules in ERP systems – SAP mentioned by a number of people.
- Overall picture emerges of high levels of technology usage in maintenance.

### Types of condition monitoring techniques used



### Technologies used to monitor or manage maintenance

