



# The Ultimate Guide to Proactive EHS

How to use data to improve compliance



# Introduction

Establishing and maintaining an effective EHS compliance program is integral to a company's long-term success and growth. Depending on the size of your team and the amount of resources available, it might be a struggle to keep up with the challenges that can arise when you are trying to keep up with the ever-changing landscape of environmental and safety regulations.

Modern businesses that haven't changed their data-collection processes are starting to get hit with the negative consequences. As leadership teams across industries realize how impactful these consequences are to their company's bottom line, finding more efficient solutions becomes an increasingly urgent problem for EHS leaders to solve.

## The Sustainable Business

Sustainability is more than just a buzzword in today's modern economy. While companies used to think of it as a tool for public relations, we now have a body of evidence to suggest that sustainability helps a company's profits in more ways than one.

As a result, leadership teams are starting to change their organizational vision to incorporate goals focusing on environmental and social impact, alongside the traditional goal of simply making money.



# Contents

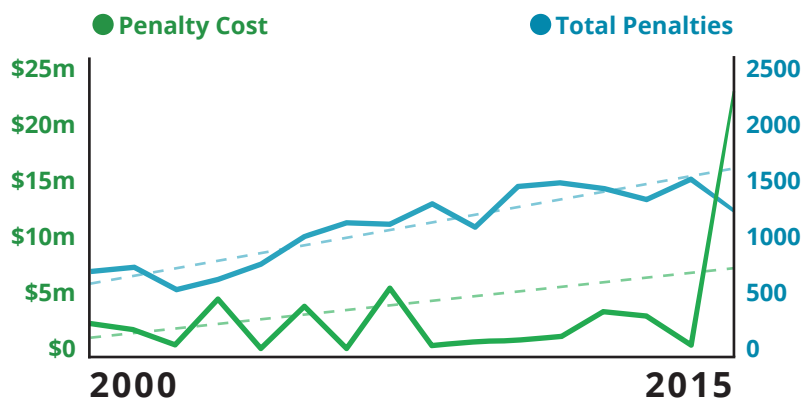
- 04 **The Cost of Non-Compliance**
- 05 **Proactive vs Reactive Compliance**
- 06 **Measuring your EHS Program**
- 07 **The EHS Maturity Model**
- 08 **Digital Solutions for EHS Data**
- 09 **The Basic Anatomy of EHS Data Software**
- 10 **Pros & Cons of Digitizing Data**
- 11 **Developing a Roadmap**
- 12 **Best Practices for Implementation**
- 13 **Building a Business Case for Better Data**
- 14 **Conclusion**
- 15 **About Mapistry**

# The Cost of Non-Compliance

Not complying with EHS laws and regulations can have a huge impact on your business. Financial repercussions come in many forms, including fines, civil lawsuits, damaged reputation, damaged employee relations, and even facility closure.

As consumers increase pressure on government officials to better enforce environmental and safety measures, these penalties have increased both in quantity and in average cost over the years.

## Environmental & Safety Penalties per Year



## The Impact of Data Solutions

Before we started seeing a rise in financial penalties for non-compliance, EHS teams were able to rely on simpler solutions (such as paper inspection forms or logging data in spreadsheets) and stay compliant with no issues.

As regulations have increased, the data that needs to be collected and analyzed in order to simply stay compliant has become much more complicated. Not having a dependable solution for data management can very quickly create an endless cycle of reactive corrective actions that do little to prevent minor problems from turning into major fines.

# Is your EHS Program Reactive or Proactive?

As the role of EHS teams evolves from staying compliant to being sustainable by strategizing and incorporating company-level goals focused on growth, it is more important than ever to create a culture of proactive compliance.



Suppose your organization struggles with staying compliant due to a lack of necessary tools or staffing. In that case, you'll have difficulty convincing your executive team to allocate more resources toward your program because it is already hurting the organization's bottom line.

So how can EHS leaders break free from this vicious cycle and get the support needed to create a proactive program? By improving the keystone to any good compliance program – Data collection and analysis.

# Measure the Maturity of your EHS Program

So, how do you know where your program stands and where it needs improvements in order to become a truly proactive compliance program?

By assessing your program on four key concepts that contribute to an overall sustainable and profitable EHS program, you can understand the strengths and weaknesses of your existing program and then develop a roadmap for implementing necessary changes.

## Phases of Maturity

### 1 Initiated

EHS initiatives exist but are not implemented at a company level and are not supported by consistent processes, leaving gaps in compliance.

### 2 Defined

EHS program exists but has little impact on the overall business's operations because there is not easy access to data to support growth.

### 3 Managed

EHS program is mostly compliant and has some internal processes but with lack of true support from leadership, has difficulty keeping the company compliant across multiple departments.

### 4 Supported

Leadership offers basic support for EHS compliance initiatives but does not actively champion projects or goals across teams.

### 5 Optimized

Sustainability is integrated into the company's mission, leadership sponsors EHS initiatives, and compliance goals are implemented across teams.



Assess your program with the EHS Maturity Model

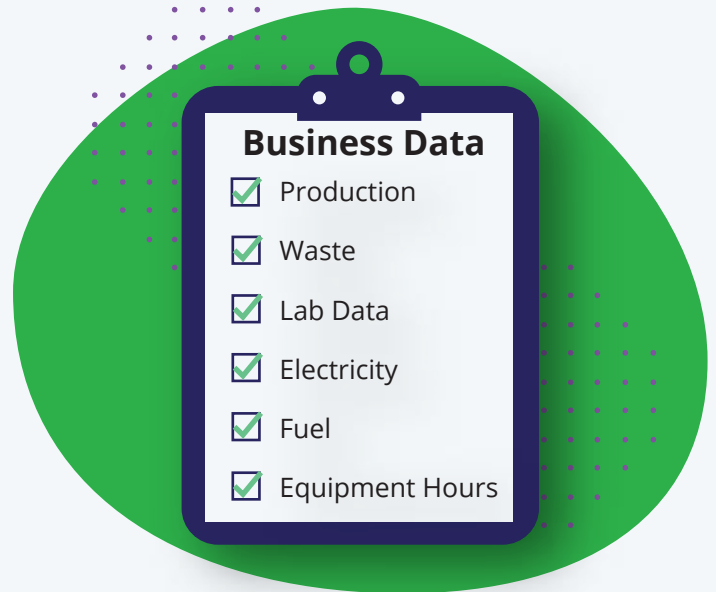


# The EHS Maturity Model

	Strategy	Processes	Metrics	Goals
Initiated	EHS compliance is a cost-center that gets little support from leadership	Processes are non-existent or just starting to be created	Manual collection of compliance data with on-site storage that is not easily shareable	No EHS goals or very few new goals that have just been created
Defined	Leadership is interested in learning more about improving EHS compliance	Little to no processes, all manual with inconsistencies and room for error	Mostly manual collection of EHS data that is digitally uploaded and stored across different platforms	EHS goals exist but are not consistently enforced and have little accountability
Managed	Leadership communicates general support of planned EHS initiatives	Some processes exist but only within the EHS team, not across the company	EHS data is digitally collected and stored across multiple platforms, making it difficult to analyze efficiently	Goals exist for the EHS team but are not being consistently set or met
Supported	EHS Leader reports team goals and initiatives to leadership team	EHS team has consistent processes, but very few and mostly inconsistent cross-team processes	Data is digitally captured, stored, and visualized across multiple platforms	EHS goals exist across the company, but are not consistently met at a company-level
Optimized	EHS initiatives are sponsored by leadership and goals are incorporated across all teams	EHS processes are rolled out company-wide and are simple enough to easily train new employees on	Data is digitally captured, stored, and visualized in a single platform, making it easy to analyze and share insights from	Data-driven EHS goals are implemented throughout the company to encourage a culture of compliance

# Digital Solutions for Managing Compliance Data

As is the case with companies in other industries, business leaders are now turning to EHS management software to fill compliance gaps and create streamlined processes that cost less time and money. The benefits of using software to manage compliance operations are vast, and as a result, the ROI of turning to these solutions is high. Let's take a look at the different solutions for data management in a digital environment.



## Three Methods of Data Collection



- 1 Web/Mobile App
- 2 File Upload
- 3 API Integration

When compared to traditional methods of manually logging data on paper forms or spreadsheets, digital solutions can streamline your data collection and reporting process significantly.



# The Basic Anatomy of EHS Data Software

## Business Data

Production  
Waste  
Lab Data  
Electricity  
Fuel  
Equipment Hours

API Integrations

Manual Logging

File Upload

Options for streamlining your data range from automated data capture (API integrations) to uploading CSV files.

Once the data is sent to a digital platform, you will be able to aggregate it and configure the output.

## EHS Data Management Platform

Data Aggregation  
Calculations  
Record-keeping

Reporting

Analytics

Alerts

# Pros of Digitizing Data

## Efficiency

Quickly input sampling data, complete inspection forms, assign corrective tasks, and receive automated alerts to prevent required actions from getting missed.

## Visibility

Consolidating required documents, records, and data to one central repository lets you access and share information with stakeholders in minutes.

## Accountability

Calculating and visualizing data automatically so you can quickly spot trends within any of your facilities and assign corrective or preventative actions.

## Cost-Effective

Reduces costs not only by preventing fines but also by simplifying the workflow of compliance tasks which reduces costly inefficiencies and employee turnover.

## Accuracy

Minimizing annoyingly repetitive manual tasks by automating your data logging reduces the risk of human error and ensures consistent data.

# Cons of Digitizing Data

## Implementation

It can be difficult to train different facilities on new technology since operations can be unique to each site.

## Customization

If you are using software that isn't specifically built for EHS compliance, it can be tricky to customize input and output for the data that you need.

# Developing a Roadmap for Improvement

Building a thorough technology roadmap for improving your EHS program allows you to:

- Build a case for additional funding or staffing
- Integrate EHS with core revenue drivers
- Increase productivity and engagement
- Cut costs by removing unnecessary technology and applications
- Improve cybersecurity
- Easily resolve conflicts around priorities



## Step 1: Prepare

- Identify potential data sources: From basic inspections and corrective actions to utility bills to machinery
- Align with IT: Shared objectives; capabilities; scheduling and bandwidth
- Set the bar for data quality: Success depends on consistent and accurate data



## Step 2: Collect Data

- Get your end users on board with trainings, accessible equipment, and easy-to-use software
- Digitize core compliance activities, including inspections and tasks
- Leverage historical data by bringing together CSVs and other data sources into a single system of record



## Step 3: Automate Data

- Identify top areas for automation and streamlining
  - Batch Systems: e.g. CommandBatch
  - Water Sensors: e.g. Waterscope
  - Waste Generation: e.g. SafetyKleen
- Leverage vendor APIs to integrate with unique data sources



## Step 4: Develop Outputs

- Create dashboards, reports, and visualizations
- Set up alerts and monitoring on known thresholds
- Spend time digging into the data to identify unique issues and opportunities
- Assess, iterate, and improve in partnership with IT

# Best Practices for Implementation

In order to create a data-driven EHS program, you will want to make sure that your roadmap is clear, realistic, accessible, and scalable. As you plan the implementation of each step, make sure to keep these key concepts and questions in mind so that your roadmap stays focused.



Create both long-term and short-term goals for your EHS program. Consider:

- How will these changes impact your company's sustainability and profitability?
- What data do you need to collect to stay compliant?
- What core compliance activities can be digitized?



Understand what data you will be collecting and where it is coming from. Consider:

- What data are we collecting today, and how is it being captured and stored?
- Are there any APIs or integrations that we can use to consolidate historical data?
- Which digital solution is easiest to use and onboard for our specific needs?



Plan for how you will use the data you collect to stay proactive with your compliance. Consider:

- What stakeholders should have access to data, and how should it be shared?
- What dashboards or reports are the most useful for showing progress towards established goals?
- What trends do you want to be able to spot, and are there any automated alerts that can be set up?



# Building a Business Case for Improving Data Capture

The irony of building a business case to show your leadership team the ROI of sponsoring your data collection improvement initiative is that you'll need data to make a strong case.

Don't let that stop you though – we've put together a template that will help you align your selling points with your organization's main business goals and convince the powers that be to invest in the future of your EHS program's data.



# Conclusion

As technology continues to advance and environmental and safety regulations become more complicated to manage, it only makes sense to begin adopting technology that can help simplify your workflow and prevent risk. Though it can be intimidating to consider starting integrating software, the longer you put it off, the more risk you incur.

No matter which solution you choose of the hundreds available, you need a tool that will work for your unique facilities, permits, and regulations. A good EHS data management software will help you:

- Easily track past and present compliance tasks and data
- Onboard new employees and reduce turnover
- Mitigate risk and find the root cause of your pain points

And, above all, create a better world for current and future generations.



Mapistry is a robust, end-to-end compliance software that allows EHS teams to minimize the time it takes to create and carry out environmental and safety decisions, and increase the confidence with which they can make those decisions to begin with.

We've helped EHS teams from leading heavy industries nationwide reduce cost, waste, and inefficiency.



## Why choose Mapistry?

### Intuitive

Easy to set up and quick to implement

### Purpose-built

Tailor-made by EHS compliance experts

### All-in-one

Everything you need, in one place

### Accessible

No data caps and unlimited users

*Fueling a sustainable economy, one company at a time:*

