

The risk-opportunity divide:

Closing the chemicals management gap with sustainable chemistry



sustainable
chemistry

Table of contents

Foreword.....	1
1. Executive summary.....	2
2. Introduction.....	4
3. Primary goals & pressures.....	6
4. Key risks.....	9
5. Blocker: The knowledge & chemical information gap.....	12
6. Opportunities through sustainable chemistry.....	17
7. Blocker: The technology & resources gap.....	19
8. The long view.....	26
9. Appendix - Related resources.....	27

Foreword

Sustainable chemistry: The cornerstone of compliance and sustainability



In recent years, the growing emphasis on environmental responsibility and sustainable practices has transformed the landscape of chemicals management. As companies navigate increasing regulatory pressures such as updates to the EU's REACH regulation and reform of TSCA in the US, and meet growing consumer demand for safer and greener products, **the adoption of sustainable chemistry has become a critical factor for success, yet it has remained off the radar for many companies.**

At **Enhesa Sustainable Chemistry**, we believe sustainable chemistry is the springboard for any successful sustainability initiative. We define it as **proactively examining the chemicals used in products and processes and embracing transparency** in two ways: working with suppliers to learn more about the chemicals that go into products and processes; as well as understanding the hazards behind those chemicals so that companies are empowered to choose safer, more sustainable chemicals.

This report presents the findings of a comprehensive survey of chemicals management professionals in August 2024, exploring their primary goals, the blockers they encounter to meeting their objectives and opportunities they recognize.

The results reveal a significant gap in the prioritization of sustainable chemistry. Many businesses struggle to integrate it into their operations and chemicals management programs fully. This oversight can expose businesses to various risks, but for us it evidences the need for sustainable chemistry practices and solutions.

We hope this report will provide useful insights for all practitioners and decision-makers looking to strengthen your business's sustainable chemistry practices and achieve your chemicals management and sustainability goals.

We encourage you to explore the findings and consider the opportunities for improvement within your organization.

Jillian Stacy
VP, Enhesa Sustainable Chemistry



1. Executive summary

This report presents the findings of a survey of chemicals management professionals conducted in August 2024. The survey aimed to explore and understand the current state of sustainable chemistry practices within the chemicals management industry.



1. Significant gap in prioritization of sustainable chemistry

Many companies are yet to fully integrate sustainable chemistry into their practices, leaving them exposed to regulatory and reputational risks.



2. High pressure from regulators and consumers

Survey respondents report that regulators (81%) and consumers (60%) are their main sources of pressure for their chemicals management and sustainability goals, indicating strong external pressures for activity versus just 11% of respondents who cited the C-suite as a driver.



3. Challenges in supply chain transparency

With 71% of respondents noting inconsistent responses from suppliers on chemical information, companies face significant hurdles in obtaining complete chemical data, hampering their efforts to comply and be transparent.



4. Knowledge gaps

This lack of chemical data limits companies' ability to carry out proactive chemical assessments and choose safer, sustainable alternatives.



5. Resource constraints

Half of respondents identify limited resources as a major blocker, and time constraints also prevent companies from efficiently assessing chemicals.



6. Opportunities through sustainable chemistry

Respondents recognize that adopting sustainable products could lead to safer products, improved product performance and processes, improved efficiency, enhanced brand reputation, and potentially increased market presence, highlighting the benefits of investment in these areas.



2. Introduction

The broader context of chemicals management and sustainability

In today's global business environment, chemicals management is an increasingly complex and crucial aspect of corporate responsibility. Regulatory requirements, consumer demand and the need to minimize environmental and health risks are reshaping the way companies approach chemicals management and their sustainability initiatives.

This report is based on a survey we conducted among those working in chemicals-related professions, including chemicals management, regulatory affairs, sustainability, and supply chain.

The survey sought to understand:

- the primary goals and drivers behind chemicals management and sustainability efforts;
- the biggest challenges and risks companies face;
- the tools and processes companies use to assess chemicals;
- approaches to managing supplier engagement; and
- opportunities for improvement, particularly through the adoption of sustainable chemistry practices.

Presenting the survey data and analysis, this report will highlight how sustainable chemistry practices can help companies address their regulatory and sustainability challenges.

Why sustainability is so important in chemicals management

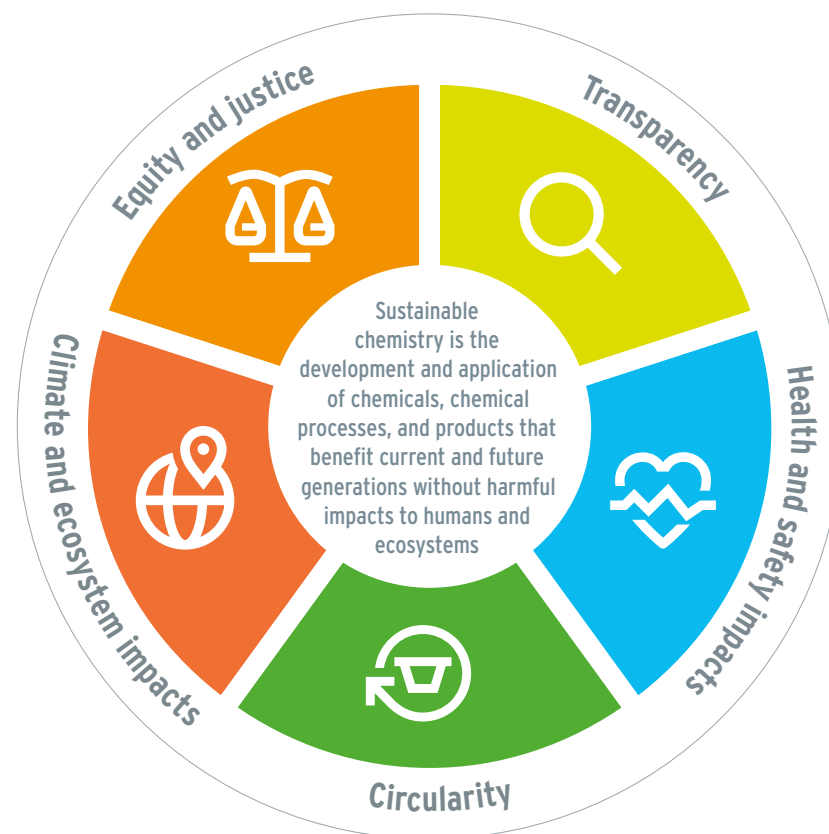
Sustainability can mean many things but for any company considering the impact of chemicals in their products and processes, it is essential. Even companies that don't realize they use chemicals inevitably interact with them, such as through hiring cleaning services

that rely on chemical products, using inks and toners for printers in offices, supplying ID cards to employees—**everything is made of chemicals**.

Governments and regulatory authorities worldwide have introduced - and continue to develop - more stringent, stricter chemical regulations related to multiple aspects of sustainability, while consumers demand safer and more sustainable products.

The EU's REACH regulation, the CSDDD, and TSCA's Significant New Use Rules (SNUR) for PFAS are just a few examples of regulatory requirements companies must navigate. All place a considerable emphasis on sustainability and increase the burden on businesses.

Chemicals are the foundation



3. Primary goals & pressures

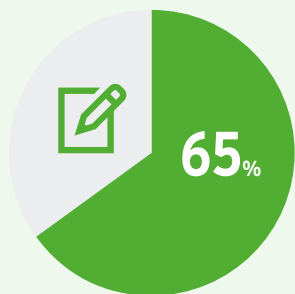
Why companies prioritize chemicals management and sustainability

Understanding the motivations behind companies' adoption of chemicals management and sustainability initiatives highlights important business values. Our survey revealed the top three 'most critical' goals as:

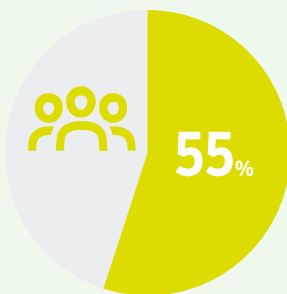
- 1. Staying compliant with chemical regulations:** ensuring adherence to chemicals regulations is the top priority, identified by 65% of respondents as 'most critical'.
- 2. Protecting the environment, consumers and workers:** wide-ranging environmental responsibility is an important goal, highlighted by 55% of respondents.
- 3. Safeguarding the business from penalties and scandal:** risk mitigation is a key concern, cited by 53% of respondents as 'most critical'.

Top 3 most critical goals

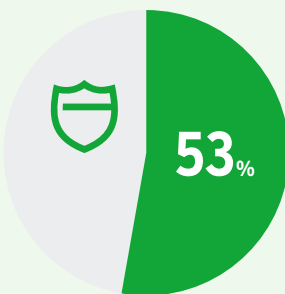
To stay compliant



To protect environment, brand, and workers



To safeguard the business from penalties/scandal



Additionally, companies identified two other goals as 'critical':

- **Achieving supply chain transparency:** an important goal for 57% of respondents.
- **Making safer, more sustainable products:** close to half (49%) consider it 'critical'.

The findings show that respondents recognize the importance of regulatory compliance and environmental stewardship, and its role in avoiding reputational damage. They also want to protect their employees, consumers and the environment, regardless of whether this is a requirement for compliance.

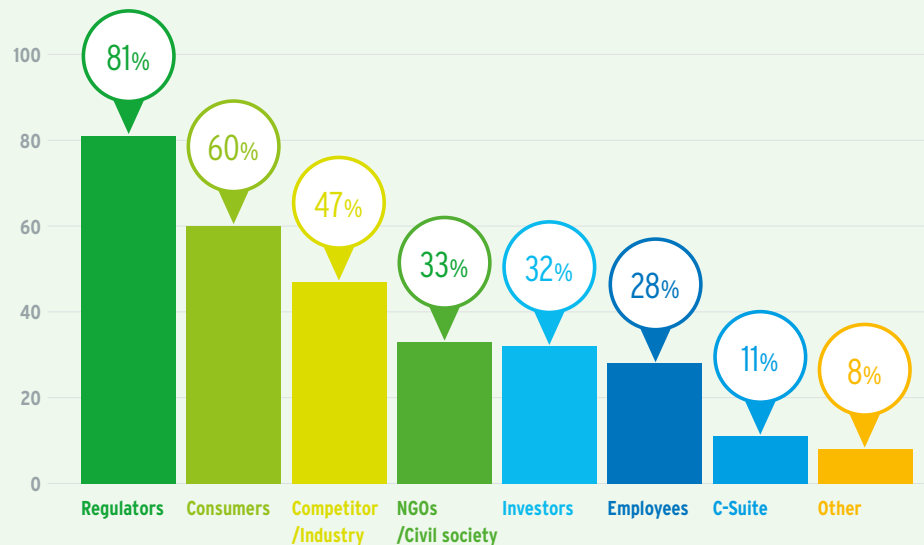
Where companies feel most pressure

Our survey also identified the sources of pressure behind companies' activities in chemicals management and in adopting sustainability initiatives:

Unsurprisingly, 81% of respondents indicated **regulators** as their main source of pressure, followed by **consumers** (60%) and **competitors** (47%).

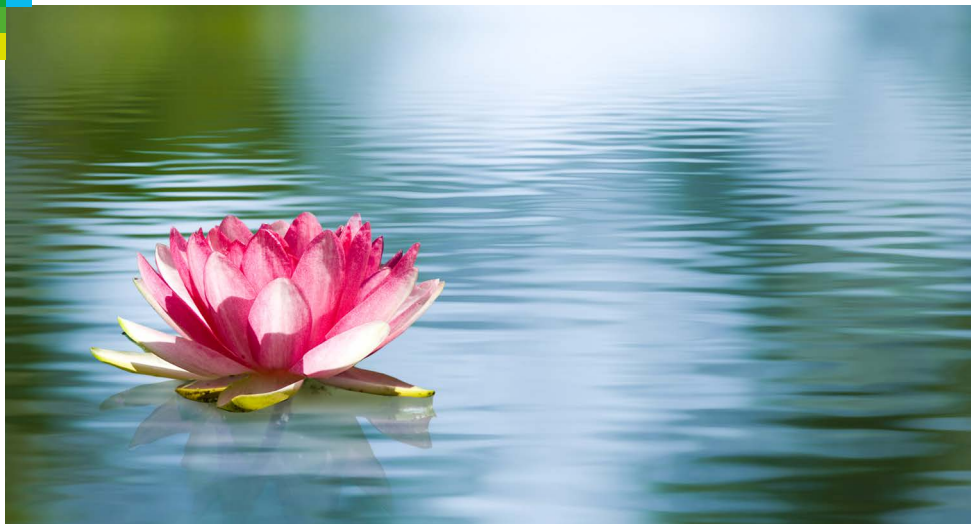
Notably, more respondents felt **employees exerted more pressure than company leaders** as the driver for chemicals management and sustainability initiatives. In fact, executives ranked lowest among all the pressures, with only 11% of respondents citing C-suite leaders, compared with 29% citing employees.

The findings highlight the complex interplay of factors – legal, market-driven and internal – that influence companies' decisions to prioritize chemicals management and sustainability. While regulatory pressures are significant, the dynamics of consumer expectations, employee concerns and competitor dynamics are also influential.



Source: Enhesa Chemicals Management & Sustainable Chemistry Survey, August 2024. N-399

Q2. Where would you say the pressure to achieve these goals is coming from?



4. Key risks

Where companies are at risk

Companies have a variety of reasons for embarking on chemicals management and sustainability initiatives. However, where do they feel most at risk of not achieving their primary goals? Our survey highlighted three major areas of concern:

Non-compliance

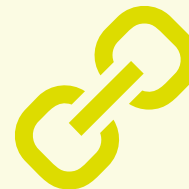


Not staying up to date with regulations: Considered a significant area of risk. More than half (51%) of respondents indicate being at risk, and a further 25% indicate a high risk.

Not meeting regulatory requirements: Nearly half (48%) of respondents say their company is at risk of non-compliance, and 17% say this is a high risk.

The top two identified risk areas are both around regulatory compliance. Even if teams are aware of upcoming changes in regulations, making sure that the company is compliant with requirements remains a significant risk factor.

Supply chain transparency



Inconsistent responses: According to 71% of respondents, suppliers do not consistently respond to requests for information.

Partial information: Even when suppliers do respond, 64% say that they only provide a portion of the information requested.



Challenges in supply chain engagement prevent companies from knowing with certainty which chemicals are in their supply chains. This lack of transparency affects companies' ability to meet reporting and disclosure requirements as part of regulatory compliance.

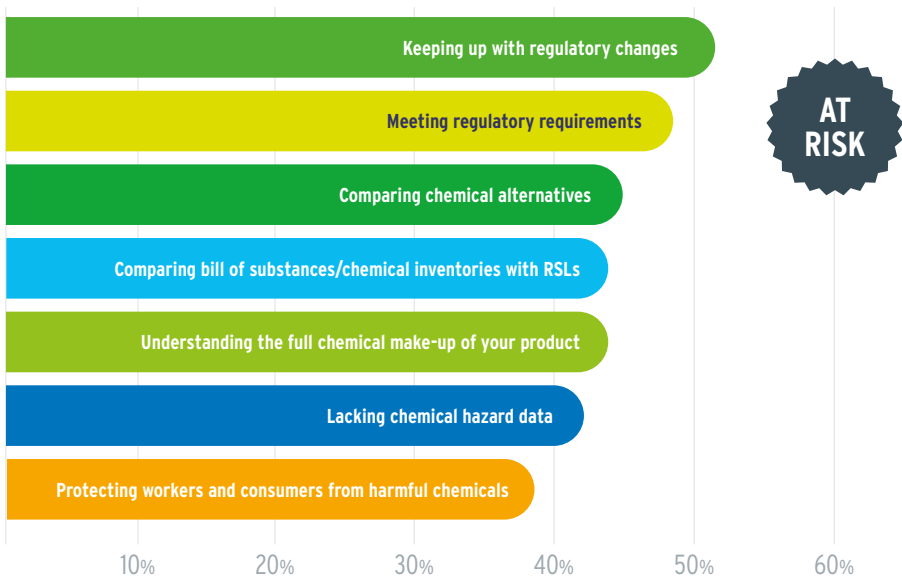


Hazards & problematic substances

Comparing chemical alternatives: The third highest area of risk, with 44% indicating their ability to compare chemical alternatives is at risk, and one in seven identifying this as a high risk.

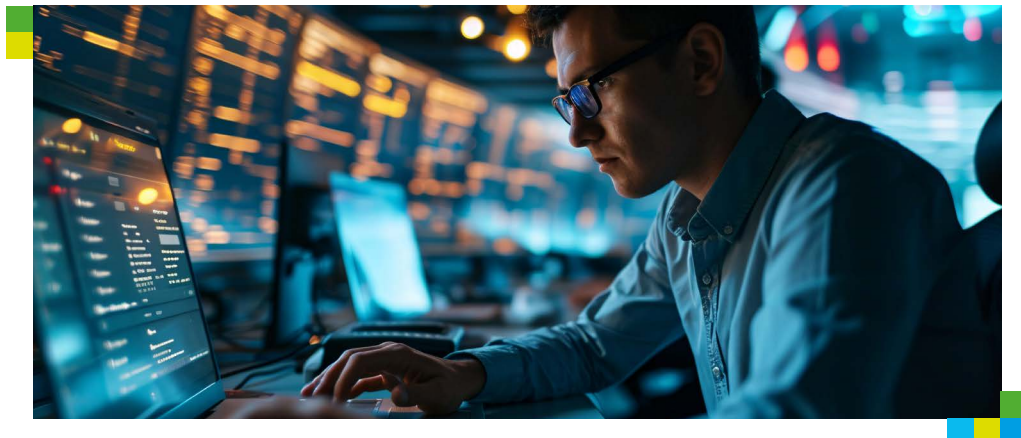
Safer, sustainable products: Additional areas of concern include the lack of chemical hazard data, noted by 41% of respondents as a risk, and the protection of workers and consumers from harmful chemicals, highlighted by 39% as a risk.

Difficulties in comparing and evaluating chemical alternatives hinder the selection of safer and more sustainable options. This compromises companies' efforts to safeguard workers and to make claims about product safety with confidence.



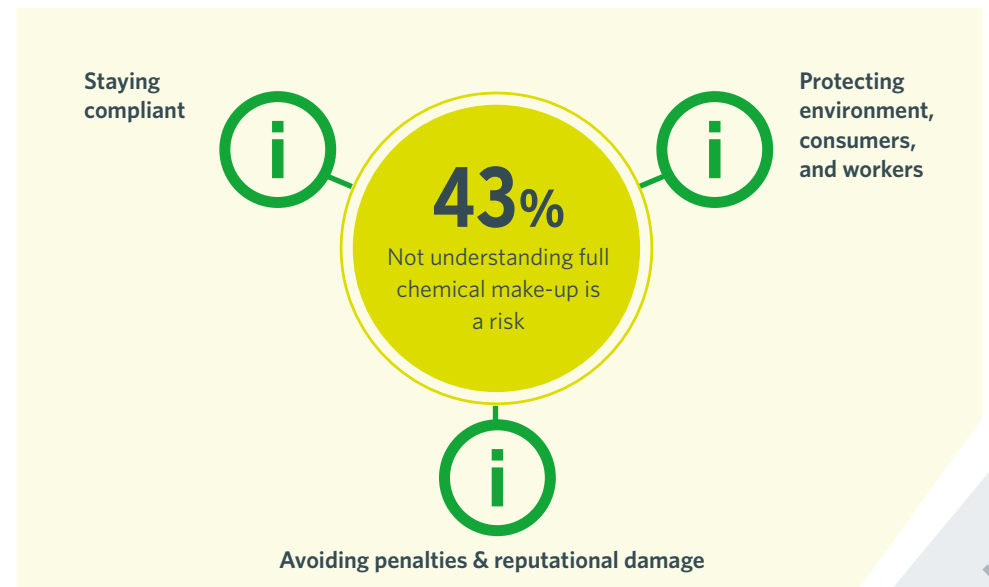
Source: Enhesa Chemicals Management & Sustainable Chemistry Survey, August 2024. N-399

Q3. What would you say are your company's biggest areas of risk?



Critical risk: lack of transparency

Forty-three percent of respondents identified not understanding the full chemical make-up of their products as a risk for their companies. This indicates that many companies may lack complete transparency, which could directly undermine their ability to achieve their three primary goals: compliance, supply chain transparency, and the development of safer products. Therefore, addressing this issue is essential for risk mitigation.



5 Blocker: The knowledge & chemical information gap

While respondents are clear on their companies' primary goals for chemicals management and sustainability, our survey identified a critical gap in knowledge and chemical information. This puts businesses at risk of not achieving their primary objectives as challenges around information hold them back.

- **A limited understanding of what's needed for chemical assessments:** 44% of respondents indicate this as a pain point. For around one in seven, it is a strong pain point.
- **Challenges of sharing information with internal stakeholders:** 43% note difficulties around effective communication within the business. For around one in eight, it is a strong pain point.

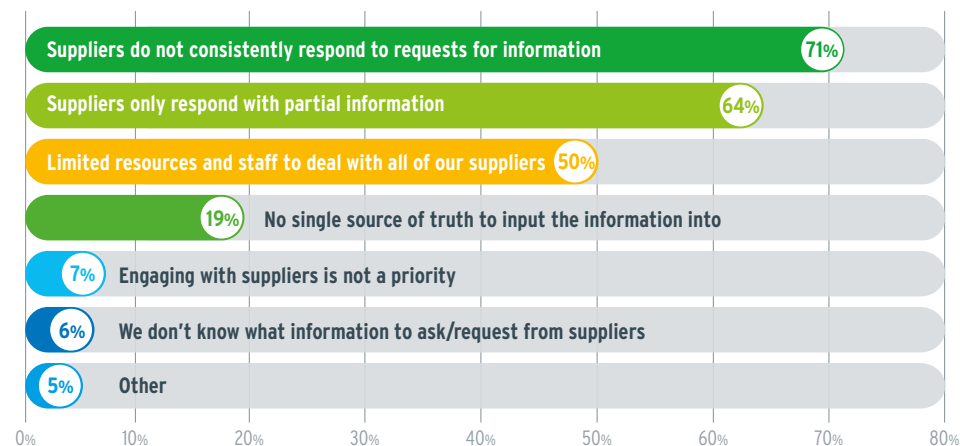


Additionally, respondents identified pain points around supply chain transparency, which is one of their major areas of concern. This is driven by receiving incomplete information about the chemicals and ingredients within their supply chain.

- **Suppliers do not consistently respond to requests** (71%), and even when they do, **key information is often missing** (64%).

Due to the knowledge and chemical information gap both internally and externally, companies are hampered in their ability to:

- **easily compare suppliers**, with 78% unable to do so with the level of information they have;
- **research safer, greener alternatives**, as 67% feel unable to explore alternatives;
- **choose safer chemicals and products in their sourcing decisions**, with 62% unable to do this; and
- **confidently understand the hazard profile**, with almost 60% struggling to do this across the full formulations of their products.



Source: Enhesa Chemicals Management & Sustainable Chemistry Survey, August 2024. N-399

Q16. Which of the following are challenges for you in your supplier engagement efforts?



3 tips on bridging the knowledge and chemical information gap with sustainable chemistry

The knowledge and chemical information gap identified in our survey presents a significant barrier for companies wanting to achieve their primary goals. Sustainable chemistry practices, however, can help businesses meet their objectives in chemicals management and sustainability. Here, Enhesa experts share their insights and offer practical advice.

1. Conduct proactive Chemical Hazard Assessments (CHAs)

Colleen McLoughlin,
Director of Toxicology, Enhesa Sustainable Chemistry



Many companies are still reactive, addressing issues as they come up rather than pivoting to a proactive approach. Sustainable chemistry involves not just reacting to existing regulations but actively assessing chemicals for their potential hazards. This means examining all chemicals, including those not currently restricted, to anticipate future regulatory trends and risks.

Sustainable chemistry practices also emphasize gaining a deeper understanding of the environmental and health implications of the chemicals in use. This understanding is crucial for businesses to identify potential hazards and risks early on, allowing companies to take steps before they face problems.

With regulatory changes shifting towards a hazard approach – such as that proposed in the EU Green Deal and changes to the CLP – this proactive stance is increasingly crucial. Chemical Hazard Assessments are getting more complex, and the question for businesses is whether their current approach is enough to keep up with new science and new endpoints companies now have to look at.

Tools such as our [Chemical Assess](#) solution, which rapidly identifies chemical hazards, provide an effective and reliable way to conduct verified assessments and make confident, informed decisions through on-demand screening for more than 300,000 substances.

2. Streamline chemical data management and collection

Nina Janjetovic,
Expert Service Manager, Enhesa Sustainable Chemistry



Sustainable chemistry practices include improving supply chain visibility and transparency so that companies have a clear view of the chemicals in their products and processes. Positive supplier engagement is crucial for staying compliant with chemical regulations and helping companies meet their goals for safer and more sustainable products.

With increasing regulation and consumer demand for ingredient transparency, businesses are under growing pressure to disclose more detailed information about the chemicals they use. Regulations like global PFAS reporting requirements and the CSDDD are all pushing for greater supply chain transparency.

The challenge is that companies often don't know what information to request, and suppliers are reluctant to share details due to confidentiality concerns. Plus, data is often incomplete and comes in different formats. Building stronger, more cooperative relationships with suppliers is therefore essential.

That's where solutions like our [Supply Chain Connect](#) tool come in. It helps businesses identify potential chemical hazards within their supply chain, collect necessary data in an accessible and standardized format, and protect suppliers' proprietary information. It simplifies the process, improves accuracy, and boosts confidence about transparency in their supply chain – all of which helps businesses make more confident claims in their chemicals management and sustainability initiatives.

3. Enhance cross-functional understanding and clarity on sustainable chemistry

Jillian Stacy,
VP, Enhesa Sustainable Chemistry



One of the greatest challenges companies face around knowledge and chemical information is the range of different departments involved in chemicals management, each with their own concern: EHS teams focus on environmental emissions and worker exposure; regulatory affairs or compliance/legal teams track regulatory changes; product design and R&D prioritize the function and performance of chemicals in the product; sourcing/procurement concentrate on the feasibility of obtaining those chemicals and bringing them into the business; and internal toxicologists worry about the hazards behind those chemicals. This results in various teams working on chemicals issues and storing data in various places. No wonder gaps appear.

The solution is to bring these various pieces of chemical data into one system accessible across the organization, which is what our solutions offer. Additionally, when a company proactively assesses chemical hazards so that it can choose safer, greener alternatives, the other aspects, such as compliance, environmental and worker exposure, and others, become less of a risk.



6. Opportunities through sustainable chemistry

What could companies accomplish with sustainable chemistry?

In our survey, we asked respondents what they believed could be accomplished if their company invested more in sustainable chemistry practices. Their answers fell into two categories:

Improving safety and efficiency

The first was broadly safety-related, with comments such as:

- “Overcome worker exposure during chemical handling”
- “Safer products, more sustainable products”
- “Protect people and the environment”

Respondents also recognized potential efficiency and productivity improvements, with comments such as:

- “More efficient and safer operations”
- “Free up time to implement larger projects”





Boosting reputation and market presence

Investment in sustainable chemistry could also lead to market growth and improved external reputation:

“*Broader market penetration, increased sales*”

“*Better compliance and product enhancements*”

One respondent emphasized that it might enable the company to *“help consumers understand the sustainable qualities of our products”*, making their products more attractive to consumers.

Another suggested that sustainable chemistry could *“make our company a benchmark for the industry”*.

These responses show that respondents recognize sustainable chemistry as a foundation for more than just regulatory compliance. They view investment in sustainable chemistry as a strategy to ensure safety, enhance reputation, and drive growth.

7. Blocker: The technology & resources gap

Companies may recognize the value of sustainable chemistry, so what is preventing them from implementing these practices in their businesses? Our survey identified issues around resources, time and tools.

Lack of resources

- 50% of respondents identified **resource constraints** as a pain point. For an additional third (29%), it is a strong pain point.
- Furthermore, the **provision of more support and resources to teams** was identified as a key way to improve their company's inter-departmental view of chemicals.
- For 23% of respondents, **limited resources and staff** hinder their supplier engagement efforts, even though it's a crucial part of their business practices. Only 7% indicated that supplier engagement is not a priority.

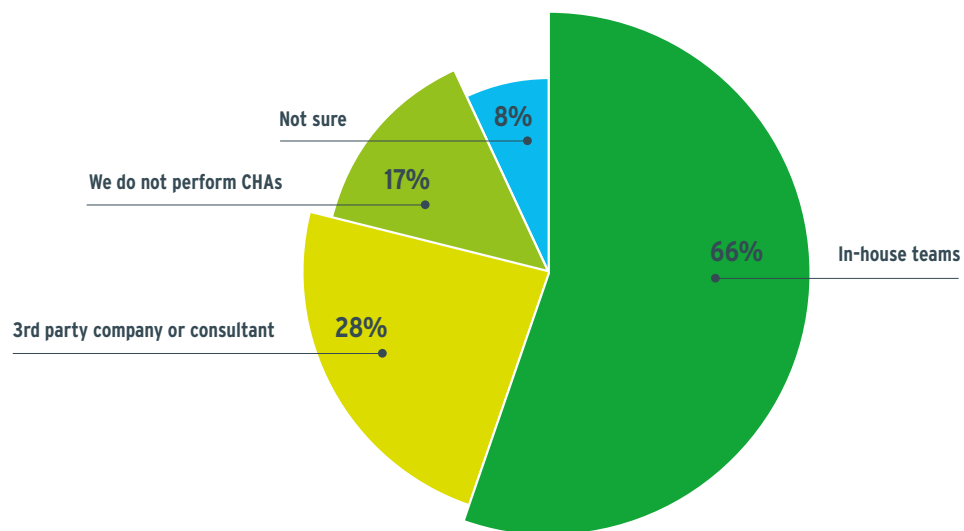
Pain point: Limited resources and staff to deal with all of our suppliers



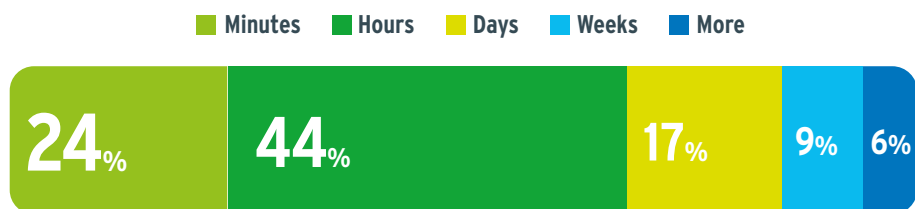
Time constraints

The amount of time it takes to carry out chemical research is also a blocker for companies, hampering efforts to be efficient and meet key business goals.

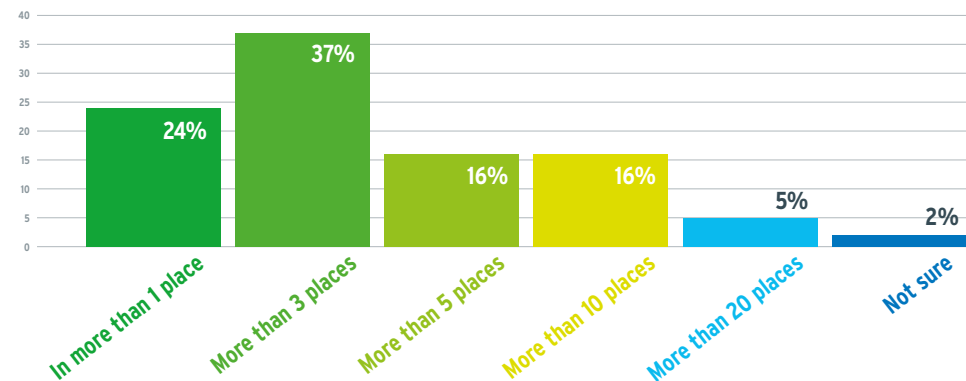
When carrying out chemical assessments, the majority of companies handle these **in-house** (66%), with just over a quarter (28%) using **external providers** such as third-party companies or consultants.



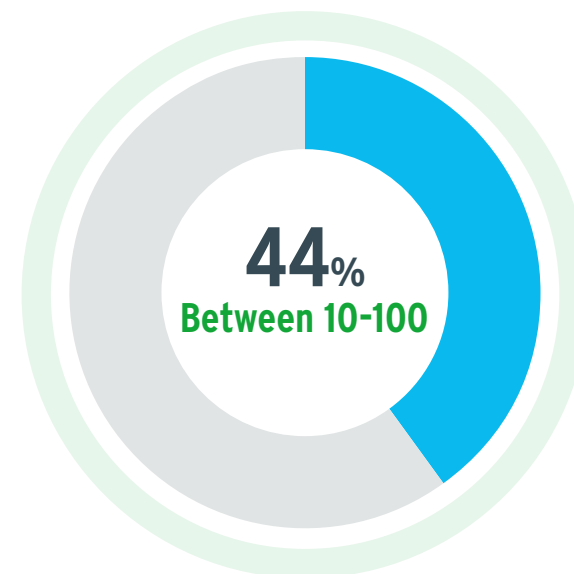
Time and effort are, therefore, important issues for companies. Even for the 44% of respondents who say it takes **'hours'** to screen one chemical against a priority list, this is significant, given the number of chemicals companies use and jurisdictional lists they track. Other respondents noted that it can take **days, weeks, or even longer** to complete each screening.



Around one-in-three respondents consult **more than three** sources when performing chemical assessments; and around one-in-six look in **more than five** places to obtain the information they need, while one-in-four utilize **more than 10** sources



Additionally, **44% of companies** conduct between **10 and 100 chemical hazard assessments annually**, and **10%** stated that they conduct more than 100.



How to bridge the technology and resources gap

How do companies believe they could improve their focus on sustainable chemistry?



These answers indicate that it would be a mistake for companies to focus on just one area alone. Respondents clearly recognize that change requires investment across people, processes and technology. There is a need to train people, but they also need to be given the right resources, tools, and technology to carry out their work most efficiently.

4 expert tips to bridging the technology and resources gap

1. Implement faster, more effective list screening solutions

Advanced tools can significantly reduce the time and effort needed for screening by helping companies quickly identify if a chemical is on a regulatory or priority list. Automation streamlines the process, minimizing the need for manual checks across multiple databases and sources, and boosting efficiency. Real-time monitoring ensures businesses remain updated with changes in regulatory lists, helping them stay compliant and prepared for new developments.



Jillian Stacy,
VP, Enhesa Sustainable
Chemistry

List screening is often done manually looking at individual jurisdictions or with inconsistent tools, leading to inefficiencies. Faster, automated solutions streamline the process, enabling companies to focus on their broader sustainability goals.

2. Embrace proactive hazard assessment instead of list screening only

Go beyond compliance by conducting proactive hazard assessments. This involves analyzing the full hazard profile of chemicals, not just checking if they appear on a restricted list. Such assessments allow businesses to anticipate future regulatory changes and avoid risks before they become problematic. By evaluating multiple endpoints (e.g., carcinogenicity, toxicity, environmental impact), companies gain a clearer understanding of the risks associated with chemicals, enabling more informed and sustainable decisions.



Colleen McLoughlin,
Director, Toxicology,
Enhesa Sustainable
Chemistry

It's about knowing what's coming next, not just what's currently in place. Proactive assessments mean understanding the broader impact of chemicals, even those not yet restricted.

3. Adopt a strategic approach to identify problematic substances and prioritize phase-out

Implementing prioritization frameworks enables companies to focus on the most hazardous or potentially problematic chemicals, helping them decide which substances to phase out first. This ensures efforts are targeted effectively and aligns with broader sustainability goals. Additionally, phase-out planning should be strategic and phased, allowing companies to transition to safer alternatives without disrupting production processes.



Betsy Murry,
Director, Product and
Programs, Enhesa
Sustainable Chemistry

“A lot of companies are only doing assessments when there’s a push to find alternatives. Establishing a prioritization framework can make it easier to identify which chemicals should be phased out, even if they are not currently under scrutiny.”

4. Streamline chemical research with centralized and efficient tools

A centralized database like [Chemical Research with ToxPlanet](#) consolidates information from multiple sources and can greatly simplify chemical research, reducing the time and effort needed.

This approach ensures research is consistent, thorough, and easily accessible across teams. Additionally, advanced tools that aggregate data from various regulatory and scientific databases provide comprehensive and up-to-date insights.



Colleen McLoughlin,
Director, Toxicology,
Enhesa Sustainable
Chemistry

“A centralized database like [Chemical Research with ToxPlanet](#) takes the vast amount of chemical data and simplifies it into a single, reliable hub, streamlining research. It’s key to saving time, ensuring accuracy, and empowering teams with comprehensive, up-to-date insights.”

Can companies overcome the challenges of implementing sustainable chemistry practices?

The challenges are substantial. As our survey indicates, these are primarily due to limited resources, time constraints, and inconsistent information.

However, adopting faster, more automated screening solutions, conducting proactive hazard assessments, implementing strategic approaches to phase out harmful chemicals, and streamlining chemical research can help.

At [Enhesa Sustainable Chemistry](#), we believe that when companies do overcome the barriers, not only can they comply with current regulations but also innovate, differentiate, and lead in sustainability.

Solutions:

[Chemical Assess](#)



[Supply Chain Connect](#)



[Chemical Research with ToxPlanet](#)





The long view

Sustainable chemistry is the cornerstone of compliance and sustainability, yet is underprioritized in many companies, leaving them vulnerable to risks and missed opportunities. By integrating the sustainable chemistry practices of proactively assessing chemicals and building transparency throughout the supply chain, companies can better meet their chemicals management and sustainability goals. Investing in sustainable chemistry is a path to safer products and processes and the protection of people, the environment, and your business's future success.

9. Appendix - Related resources

Articles

[Staying ahead of chemical regulations: Overcoming 3 common challenges](#)

[Leveraging green chemicals to meet sustainability goals](#)

Webcasts

[Streamlining chemical assessment: Faster, more informed results](#)

[Increasing supplier engagement for chemical supply chain transparency](#)

[Simplifying and organizing your chemical research in one place](#)

[Identifying and prioritizing chemicals to phase out of your business](#)

[Closing the gap: How to prepare for and predict new chemicals regulations](#)

[Fulfilling sustainability requirements with green chemicals](#)

[Streamline your chemical research with ToxPlanet](#)

[Whitepaper - Understanding and managing PFAS](#)

[Glossary - Must-know supply chain terms](#)

[Report - Supplier engagement for business protection](#)

Enhesa solutions for your business

[Sustainable Chemistry](#) for safer, greener chemicals

[Chemical Assess](#): Quickly identify chemical hazards with on-demand screening

[Supply Chain Connect](#): Identify hidden hazards in your supply chain and drive supply chain transparency

[Chemical Research with ToxPlanet](#): Drive efficiency in your research with one powerful tool

[Product Intelligence](#) for safer, more sustainable products

[EHS Intelligence](#) for safer, more sustainable operations

[Corporate Sustainability](#) for managing risks and staying compliant





Act today and prepare for tomorrow to create a more sustainable future with 360° intelligence for your operations, products, and chemicals management across the globe.



Take your next step to a more sustainable future.

Learn how our 360° intelligence encircles each step of your sustainability journey, empowering you to mitigate risk - and make a real difference.

Visit enhesa.com/sustainablechemistry

Empowering businesses
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