EHS compliance and the modern data center

ehs intelligence

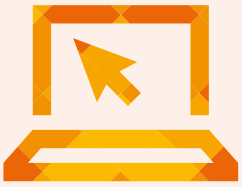
Compliance challenges for high-tech and other industries reliant on global data centers

Use case summary: **EHS compliance in high-tech**

With the number of data centers across the globe counting in the thousands — and growing — managing EHS risks at each of those sites is creating a tremendous amount of work for corporate EHS teams at high-tech companies.

For some, these data centers bring with them a unique set of risks that are not directly within the company's control.

Enhesa Expert Services has hands-on experience working with the world's leading global high-tech firms to support their efforts internationally to address EHS management risks. From fast-tracking set up, implementation, and training to special projects to scale up adoption, ongoing compliance, auditing, and support, our teams partner with industry to help them improve compliance management with a combination of content, technology, and services.



This use case will explore our team's learnings, including:

- The challenges of data center EHS management
- The risk factors to prioritize when considering next steps
- The characteristics of an effective solution

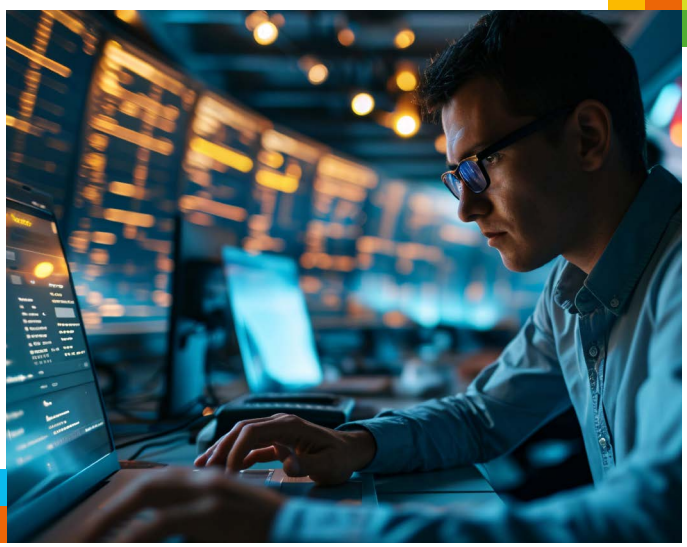
Common challenges of data center EHS management

Realities of globalization: High tech companies are increasingly global, with sites all over the world. This brings with it a unique set of challenges for EHS management, including:

- **Different regulatory regimes:** governing legislation they must comply with, requiring full visibility across the globe
- **Language barriers** that can complicate the implementation processes of EHS programs, requiring not just plain-language understanding of often complex legal requirements but also translation for local teams
- **Local culture's** affect on how each region or site keeps track of the risks and compliance assessments done for these risks, which can result in non-standardized and inconsistent data formats for reporting
- **Continuous management** for data centers spread across many different countries, transforming the idea of compliance from a report at a single point in time to an ongoing, dynamic status for use in reporting and visibility anytime it's needed at the corporate level

A lack of visibility into risks: These challenges can result in non-standardized reporting methodologies that differ site-by-site, leading to non-comparable data and impairing the company's visibility into EHS risk management from the corporate level.

Smaller EHS teams that may lack local expertise: Unlike heavy manufacturing and other industries, data centers are often managed by smaller EHS teams, and may not have resident EHS experts or subject matter experts on site. The explosive growth of data centers often outpaces the capacity of internal EHS expertise and resources. This type of imbalance could lead to gaps in compliance and increased risk exposure.



Understanding risk factors

As a result of these unique challenges, data centers also face unique risks.

Colocation: Many data centers operate as "colocation facilities", where multiple companies share space. In these scenarios, direct control over EHS compliance can be limited, imposing challenges for corporate oversight and enforcement of EHS standards. Colocation translates into challenges of shared responsibility across all the companies that are colocated in a single data center. In short, companies need to work together to share a high-level view, determining who's responsible for what — including knowledge of local laws, which differ based on location, **compounding the challenges and complexity** of data center compliance management.

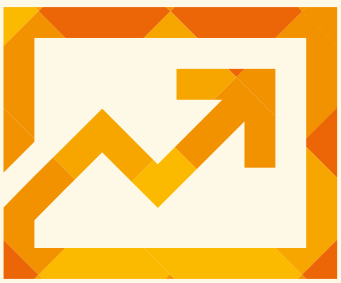
These challenges could add compliance uncertainty and unforeseeable risks for data center management, especially when the implementation of risk prevention and elimination measures require collaboration among multiple employers. Failing to manage such risks could results in unwanted safety consequences and the community pushing back on data center operation and expansion. For further reading on the challenges of colocation, see **High Tech's Top 5 FAQs for our Expert Services team**.

Environmental impact: Due to the nature of the operation, data centers are also more dependent on natural resources in the areas they operate, as they consume significant amounts of energy and water. The operations could be curtailed if the localities are facing droughts or energy supply shortage. Thus, effective management of energy consumption, water usage, and greenhouse gas (GHG) emissions is crucial for these facilities to mitigate environmental impact and fulfill corporate commitment to carbon reduction.

Unmanaged risk: Activism against data centers is on the rise — threatening both new locations and expansion projects — as a result of their high levels of energy consumption, water use, and other local environmental and social impacts. And it's causing governments to increase scrutiny, requiring better transparency, closer regulation, and a higher commitment from tech companies to involve local stakeholders and proactively disclose their impact on local communities. Not doing so risks pitting companies against citizens — which can mar their brand reputation locally and internationally. Local issues like security, energy infrastructure, and risk of drought can also impact data center operation, creating negative impacts on worldwide customers.

As AI use and its draw on data centers ramp up, high tech companies will need a way to better understand the **new and emerging risks, regulations, and local impacts** their data centers could have — especially as it relates to how increased use and growing demands for scale could impact their future net zero goals.

The difference a single view makes: Gaining a comprehensive global and corporate overview of risks with a standardized and consistent methodology is crucial to managing risks for data centers. This includes understanding localized risks and keeping track of the emerging risks and compliance from a global perspective.



Global solution for effective EHS management

To address these challenges and mitigate their accompanying risks to businesses, employees, and the environment, a global solution should be implemented that leverages standardized taxonomies and thematic approaches to streamline EHS management across jurisdictions:

1. **Standardized taxonomy for regulatory compliance:** Applying a standardized taxonomy allows for easy navigation of regulatory requirements across different jurisdictions. This helps ensure that all sites, regardless of location and jurisdictional nuances, adhere to the necessary EHS standards.

   For example, a US-focused EHS expert can compare the set of regulatory obligations for air emission management in India with those under the US EPA. They can also easily compare the compliance status of air emission management in both countries side by side.

2. **Thematic approach to risk management:** A thematic approach based on risk areas helps cut through the noise and focus in on specific risk areas that are common to data centers. Instead of spending time reading through hundreds of local regulations to understand their relevance, the EHS team can create a risk profile based on these common risks and then develop targeted strategies for compliance and risk mitigation.

   For instance, instead of sifting through hundreds of regulations to determine relevance for each country and state/province, the corporate team can focus on the common risk themes for all of the data centers and build a risk profile based on these themes.

3. **Systematic strategy implementation across jurisdictions:** The risk profiles would further help EHS teams to understand the necessary actions across different regulatory regimes, such as identifying high-priority actionable items that need attention across various jurisdictions, allocating resources to support these actions, and implementing the compliance strategy in a systematic and consistent manner.

How do companies take advantage of these standardized approaches?

Start with a risk profile: It starts with knowing everything that's required of you — everywhere you operate. Enhesa solutions accelerate the process of determining the applicability of local laws everywhere companies operate, site-by-site.

Know your actionable requirements: Delivering complex legislation as straightforward, actionable requirements in teams' local languages — as plainly and simply as possible — helps communicate what needs to be done to the teams that need to do it. Full-text legislation is linked for EHS experts to research — while simple, straightforward summaries are accessible to all who need them.

Track a continuous compliance status: Tracking how you're meeting local requirements helps each facility see the gaps and fill them. And as regulations change and new ones launch, your teams are notified and can re-evaluate compliance — and take new actions.

Communicate for global visibility: Knowing how your company is managing EHS compliance everywhere you operate — even as local regulations are constantly changing — provides leadership, investors, and consumers with confidence in the company's overall compliance status.

Implement proactive strategies: The ability to compare performance globally helps companies see where risks are mounting and address them proactively. Understand regulatory trends and get ahead of them to reduce costly product and process changes and standardize requirements across facilities globally to achieve the highest level of compliance — and ethics — possible.

Conclusion

Managing EHS in the data center industry is a complex task, exacerbated by the global spread of facilities and the rapid pace of growth. By adopting a standardized and thematic approach to risk management, EHS teams can overcome these challenges. A global solution that provides clear regulatory visibility and focuses on high-priority risks will enable lean EHS teams to maintain compliance, safeguard the environment, and ensure the health and safety of personnel across all data center locations.

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Find out more about our solutions

To learn more about how Enhesa can help you maintain regulatory compliance across global facilities of any type, take a look at our EHS Intelligence solutions today.

See the solutions

Empowering businesses
to create a more
sustainable future.