



Greenhouse Gas Emissions Management

HSI's GHG solutions empowers organizations to **efficiently track and manage** their GHG emissions while supporting broader ESG goals.



INTRODUCTION TO Greenhouse Gas Emissions

Greenhouse gases (GHGs) are gases that trap heat in the Earth's atmosphere, causing the "greenhouse effect." As organizations aim to reduce their environmental impact and meet regulatory requirements, understanding and managing GHG emissions becomes essential. The **HSI GHG Management** module helps businesses track, manage, and report emissions across Scopes 1, 2, and 3—all while being fully integrated into the **HSI Platform**, which includes **EHS, Learning & Development, Chemical Management,** and **ESG** solutions.

What Are GHG Emissions?

GHGs include **carbon dioxide (CO₂)**, **methane (CH₄)**, **nitrous oxide (N₂O)**, and **fluorinated gases**. These gases trap heat and contribute to global climate change. GHG emissions are categorized into three "scopes" that help businesses identify their sources and take targeted action.

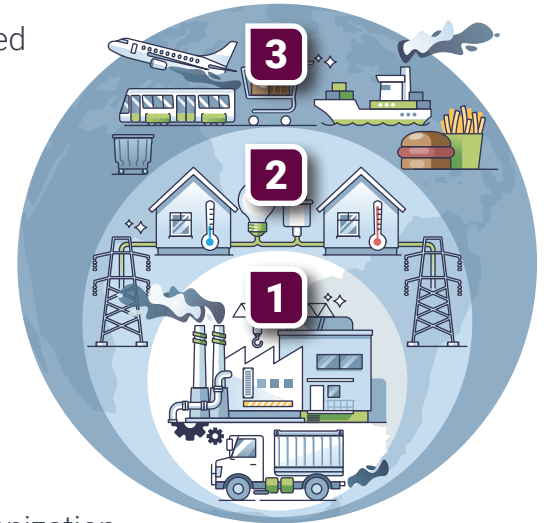


The Three Scopes of GHG Emissions

Scope 1: Direct Emissions

Scope 1 emissions come from sources owned or controlled by your organization. These include emissions from:

- **Stationary Combustion:** Emissions from fuel combustion in stationary sources like boilers and furnaces.
- **Mobile Sources:** Emissions from company-owned or leased vehicles and equipment.
- **Refrigeration/AC:** Emissions from refrigerants and air conditioning systems due to leakage.
- **Fire Suppression:** Emissions from fire suppression systems and devices.
- **Purchased Gases:** Industrial gases used in processes like manufacturing or testing.



Scope 2: Indirect Emissions from Purchased Energy

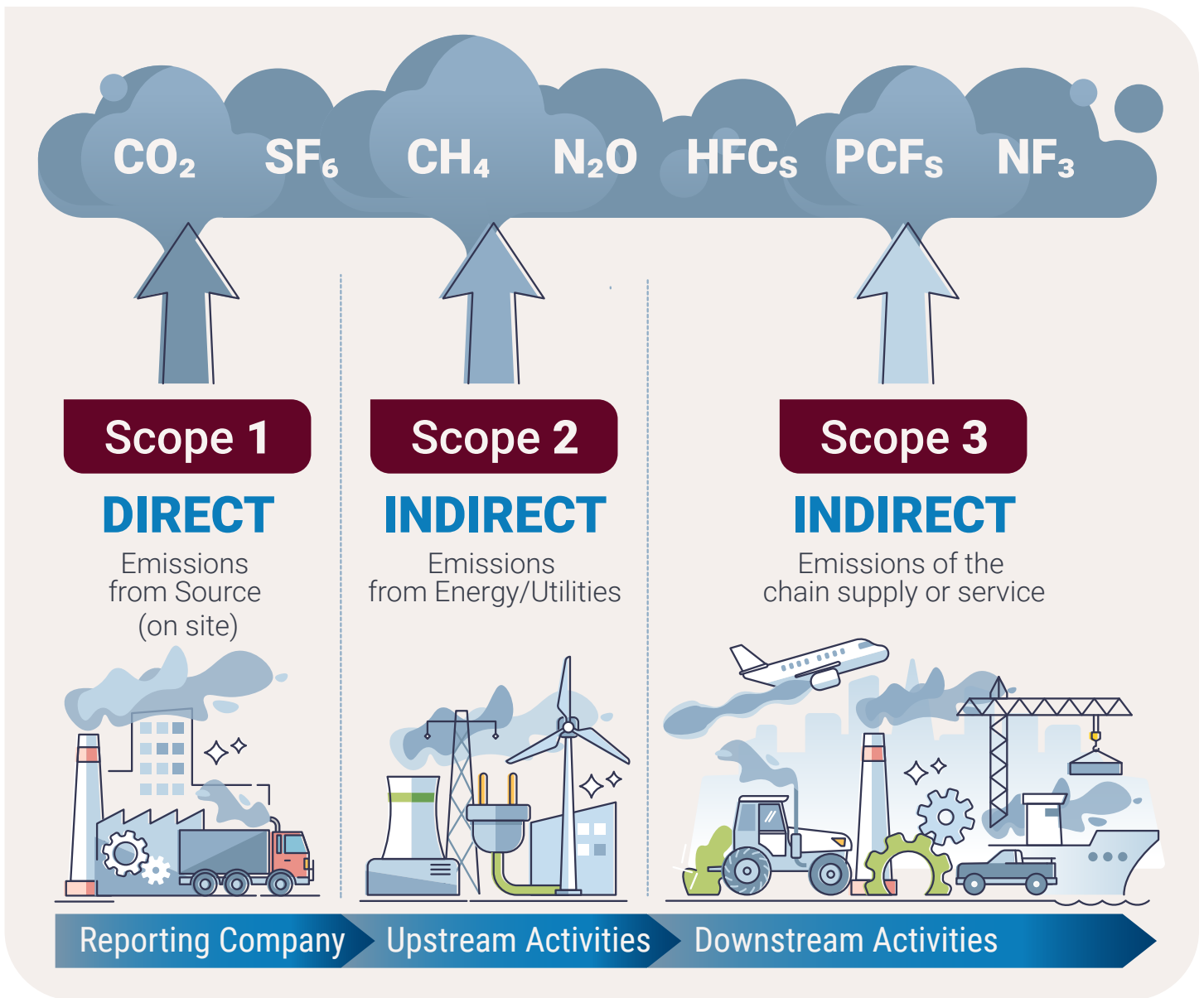
These emissions come from energy sources that your organization consumes but doesn't own or control:

- **Purchased Electricity:** GHGs emitted during electricity generation that you purchase from a utility.
- **Purchased Steam:** GHGs emitted when steam, heating, or cooling is purchased from an external provider.

Scope 3: Other Indirect Emissions

Scope 3 emissions occur along your value chain, including upstream and downstream activities:

- **Business Travel:** Emissions from business travel in vehicles not owned or leased by the organization (e.g., commercial air travel).
- **Employee Commuting:** Emissions from employees traveling to and from work in personal vehicles or public transport.
- **Upstream Transportation & Distribution:** Emissions from transporting goods, raw materials, or finished products using third-party carriers.
- **Downstream Transportation & Distribution:** Emissions from transporting goods or products to customers, using third-party carriers as part of your sales or distribution operations.
- **Waste Disposal:** Emissions from the disposal and treatment of waste generated during your business operations.



The Role of Digital Software in Sustainability

Digital tools play a crucial role in advancing decarbonization and sustainable practices across industries. Effective GHG management relies on the accuracy, efficiency, and transparency digital software provides. Leveraging real-time data collection, automated reporting, and predictive insights, companies can measure their progress towards sustainability goals more precisely. According to recent research, industries adopting digital solutions for emissions tracking experience a 30% improvement in data accuracy and a 25% increase in operational efficiency. In the context of decarbonization, these tools enable organizations to optimize resource use and reduce emissions, supporting a more sustainable future.

HSI's GHG Management Module: An Integrated Approach

HSI's GHG Management module is part of the **HSI Platform**, a fully integrated solution that connects **EHS, Learning & Development, Chemical Management,** and **ESG** solutions. This enables you to streamline your sustainability efforts, ensuring that your GHG management activities are seamlessly aligned with other compliance and safety functions across your organization.

Why Choose HSI for GHG Management?

1. Automated Data Collection and Aggregation

The capability enables you to input data across Scopes 1, 2, and 3, ensuring accuracy and simplifying the management of complex emissions data. This eliminates the need for manual data aggregation and helps reduce errors.

2. Advanced Calculation Engine

HSI's platform includes a range of customizable and pre-sourced emissions factors, such as those from the EPA, allowing you to calculate GHG emissions accurately. These built-in factors are especially useful for organizations without specific emissions data, offering reliable averages for reporting. The system supports both location-based and market-based methods, ensuring compliance with global standards like CDP, TCFD, IFRS, and future regulations like CSRD and US-SEC.

3. Dashboards

Gain valuable insights into your GHG performance through comprehensive, ready-made dashboards and the ability to export your data to create your own reports. Dashboards are updated in real-time and with user permission setting, you can rest assured that the data we provide is both verifiable and valid.

4. Compliance and Corrective Actions

HSI's GHG Management Module sends compliance notifications, alerting you when emissions approach thresholds. You can link these alerts to corrective actions to prevent breaches before they occur.



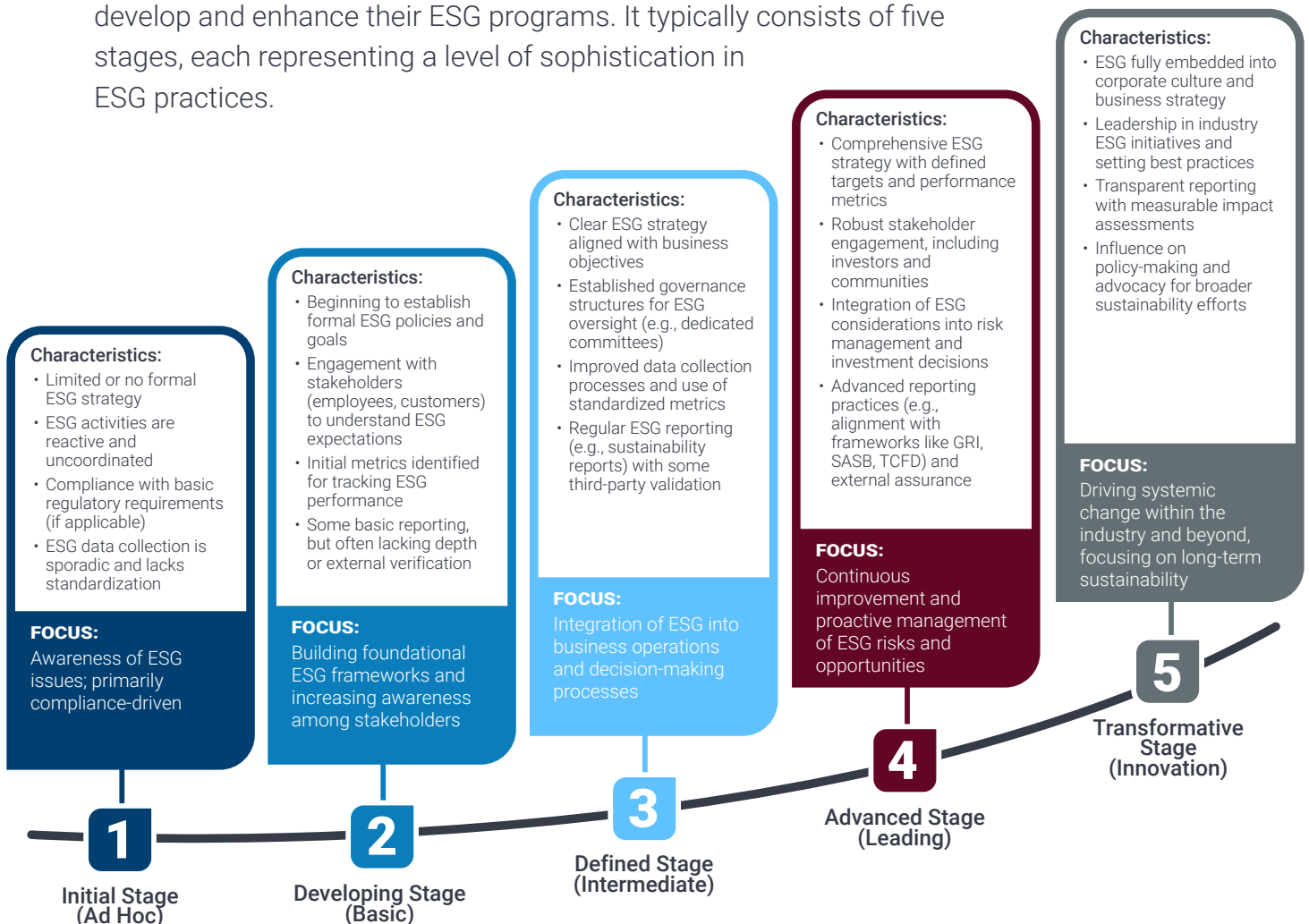
Advancing ESG Through Greenhouse Gas (GHG) Management

Managing GHG emissions is a crucial part of any organization’s sustainability efforts. As organizations embark on or continue their journey towards better environmental outcomes, understanding where they fall on the **ESG Maturity Curve** can help them prioritize actions and improve overall sustainability.

The **ESG Maturity Curve** offers a clear path for growth, from reactive and uncoordinated efforts in the initial stages to a transformative role where ESG is fully embedded into corporate strategy and operations. As companies progress through the five stages of maturity, their ability to manage GHG emissions—whether through tracking Scope 1, 2, or 3 emissions—becomes more sophisticated and aligned with global sustainability goals.

ESG Maturity Curve

The ESG Maturity Curve outlines the progression of companies as they develop and enhance their ESG programs. It typically consists of five stages, each representing a level of sophistication in ESG practices.



Take Control of Your GHG Emissions Today

Start your sustainability journey with the **HSI GHG Management** module. As part of the **HSI Platform**, this solution empowers organizations to efficiently track, manage, and report on all their GHG emissions while supporting broader ESG goals. Contact us today to schedule a demo and learn how we can help your organization meet its environmental targets.



About HSI



HSI is your single-source partner for EHS, Compliance, and Professional Development solutions. HSI provides integrated e-learning content, training solutions, and cloud-based software designed to enable your business to improve safety, operations, and employee development. Across all industries, HSI helps safety managers, and technical employees, human resources, first responders, and operational leaders train and develop their workforce, keep workers safe, and meet regulatory and operational compliance requirements. HSI's focus is on training, software, and services for safety and compliance, workforce development, industrial skills, and emergency care. HSI is a unique partner that offers a suite of cloud-based software solutions including learning management, safety management, chemical SDS management, and more, integrated with content and training so businesses can not only monitor and manage multiple workflows in one system, but train employees via one partner.

For more information, visit [hsi.com](https://www.hsi.com)