



SAS® Sustainability Reporting

Measure and manage the triple bottom line: environmental, social and economic

What does SAS® Sustainability Reporting do?

SAS Sustainability Reporting provides a single source of information for analysis and reporting on an organization's sustainability performance. Providing all necessary tools to capture, clean and transform data, it supports globally accepted sustainability KPIs. Embedded analytic routines help you forecast results and prove relationships between metrics.

Why is SAS® Sustainability Reporting important?

With increasing requests for sustainability data and reports (both voluntary and regulatory), organizations need to efficiently manage data, provide transparency and document performance. Organizations are spending money and resources to capitalize on upside revenue opportunities associated with a low-carbon economy; however, it is critical to *prioritize* sustainability investments that benefit the brand and the bank account.

For whom is SAS® Sustainability Reporting designed?

The solution is intended for organizations in all industry sectors that want to communicate and forecast progress toward social, economic and environmental commitments. Multiple users within an organization can use the solution, including the sustainability director, the corporate social responsibility team, corporate strategists, environmental managers, or financial and operational analysts.

Along with financial analysis, there is increasing scrutiny on performance related to social and environmental concerns such as community development, energy, waste, emissions and water.

But you need a source of information that you can trust, both for internal planning and external reporting. Manually gathering data from different silos of information in different formats will not keep pace with regulatory requirements, competitors' initiatives or customer expectations. By establishing a platform that is broad enough to handle multiple stakeholder demands, yet nimble enough to respond quickly, organizations are positioned for optimal analysis and reporting efficiency.

Performance benefits and transparency can only be gained through understanding current and projected performance based on "one version of the truth." If you cannot gain a reliable view of where your organization measures up on the triple bottom line, you may set arbitrary and haphazard strategies or take suboptimal initiatives based on faulty information. Knowing which initiatives and objectives will drive the success of your organization – and how they can influence outcomes – requires an informed, data-driven sustainability strategy.

SAS Sustainability Reporting is designed to access, integrate, analyze and manage data related to the three pillars of sustainability – social, economic and environmental – so your entire organization can focus on the most impactful metrics. The solution is designed to handle all of your current and future needs, such as consolidating data to measure greenhouse gas emissions, assessing the risk of your water-scarcity strategy, complying with expanding regulatory require-

ments and delivering timely, interactive reports to management and regulators.

Analysts recognize SAS' strengths in advanced analytical approaches, deeming SAS as a visionary in strategy management – a core component of SAS Sustainability Reporting. SAS exceeds traditional calculation functions to integrate solutions across an entire organization. Building on our strength in optimizing IT and supply chain practices, SAS can help you transform your sustainability performance throughout the organization.

A relationship with SAS is for long-term performance enhancement, brand preservation and competitive differentiation.

Key benefits

Standardize on a performance management framework for your organization. As a flexible user-driven solution, SAS Sustainability Reporting allows you to create your own set of performance indicators, or follow externally published standard frameworks. The solution makes it easy to add, adapt or create new performance indicators using its Web-based, point-and-click interface. The underlying performance management technology makes it easy to create hierarchical relationships, roll-ups, formula-driven metrics and specialized visualization techniques.

Capture a single source of trusted sustainability business knowledge.

You need a source of information that you can trust, both for internal planning and external reporting. By establishing a platform that is broad enough to handle multiple stakeholder demands, yet nimble enough to respond quickly, organizations are positioned for optimal



analysis and reporting efficiency. For internal problem investigation, navigate easily through hierarchical dashboards or strategy maps. Quickly focus on hidden anomalies through flags and alerts. Share knowledge and collaborate by using notes and discussion threads.

Simplify data collection, improve data quality and provide an audit-able record to support compliance needs. Automatically extract, transform and cleanse virtually any data, in any format, on any platform with ease. SAS provides complete transparency into the source of each data element for audit. Schedule the collection of data

to meet your needs – monthly, weekly or even daily. Powerful analytics identify suspect data so that you may address quality issues before data is added to reports. Web forms capture manual data and show prior-period results to help flag anomalies.

Know which metrics are related and which initiatives will have the greatest impact. Reporting on historical numbers is only half the story. Use SAS software's embedded analytics to understand relationships between metrics, run time-series forecasts and perform simple what-if scenarios. In return, you'll get inval-

uable insights into the future and defensible statistics to support your strategy and commitments.

Communicate strategy, goals and objectives to facilitate effective execution. Engagement of internal stakeholders is a key factor in successful strategy execution. Employees at every level of the organization must have a clear sense of how their actions contribute to overall goal achievement. SAS software's visual strategy diagrams create compelling illustrations of the relationship between performance objectives established for various business units.

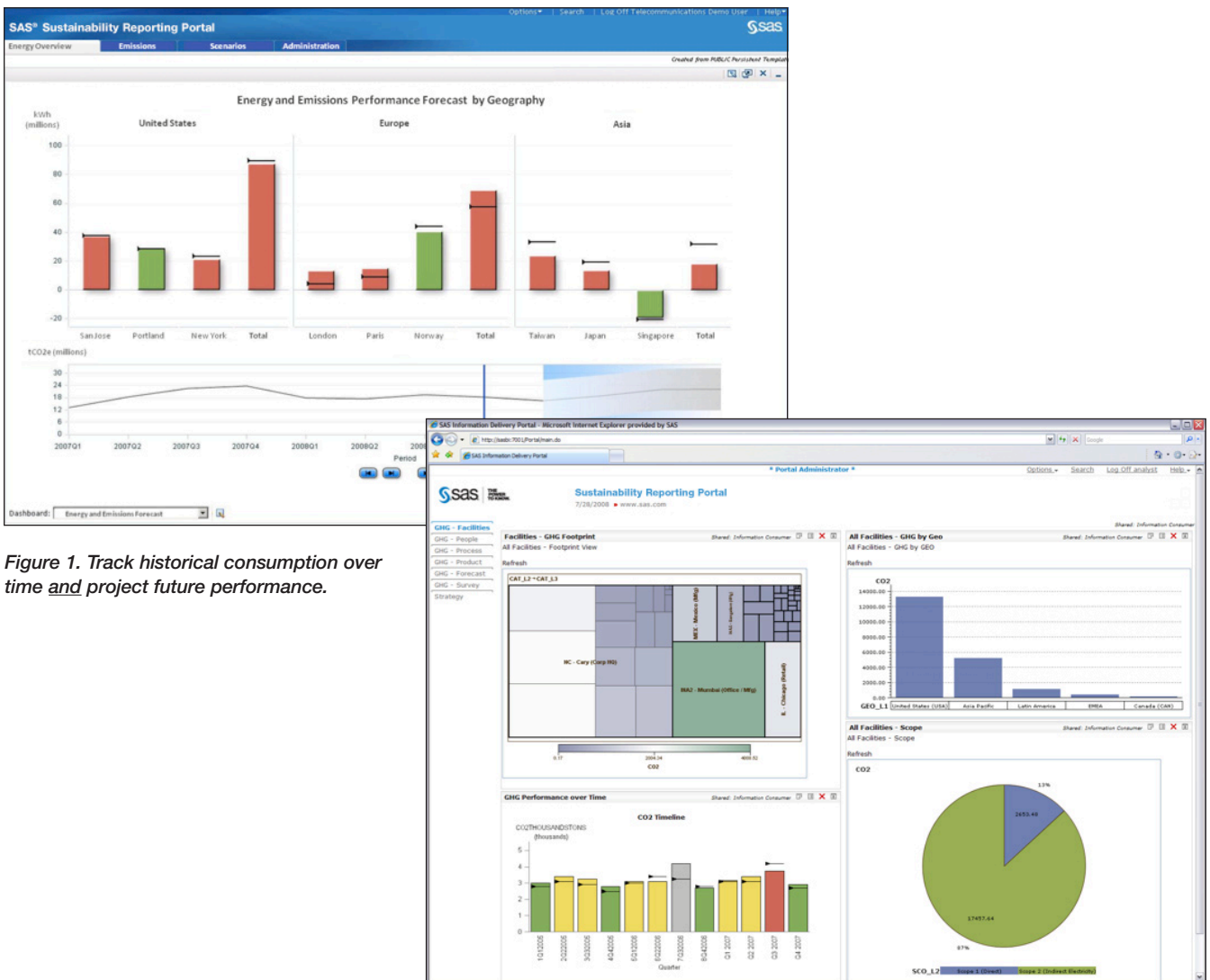


Figure 1. Track historical consumption over time and project future performance.

Figure 2. Interactive visual diagrams provide performance information in a simple format.

Solution overview

Business Intelligence Integrated with Advanced Analytics

It is nearly impossible to manually manage greenhouse gas emissions and sustainability data when the scopes of reporting are rapidly expanding, creating multiple parameters for evaluation. SAS Sustainability Reporting provides robust reporting, analysis and deployment through an easy-to-use Web-based interface, complete with available forecasting, statistical correlation procedures and predictive analytics. Users can easily include, exclude or adjust scope and analysis variables. The SAS solution integrates with SAS Energy and Emissions Management for enhanced modeling and analysis, and with ESRI applications to display sustainability information geographically.*

Dynamic Performance Management from Global Standards

If your performance measures are not based on consistent definitions of metrics or gathered with rigorous quality processes, you may not be using a single, trustworthy version of data. Not all operating units are measuring performance against specific indicators in the same way, or in a timely fashion. With SAS, you can establish a common measurement framework using global standards, industry-specific guidelines or organization-specific performance indicators. Dashboard speedometers and other customized images signal KPI status with multiple thresholds or range values. Users design or select existing dashboards through a simple Web interface and display any time period for any metric type. Create strategy maps and process flows using a diagram editor that reads from and writes to the underlying database dynamically to establish clear, consistent performance targets.

* Separate license required for SAS Energy and Emissions Management and ESRI products.

Key Features

Business intelligence with integrated advanced analytics

- Web-based reporting, analysis and deployment.
- Forecasting, statistical correlation procedures and predictive analytics.
- Integration with SAS Energy and Emissions Management*.
- Integration with ESRI* applications.
- Scope and analysis variable inclusion and adjustment.

Dynamic performance management from global standards

- Measurement frameworks; industry-specific or your specific organization's KPIs.
- Web interface to design or select dashboards.
- Dashboard speedometers signal KPI status with multiple thresholds or range values.
- Drill-down to investigate problems or link to reports and spreadsheets.
- User-customizable alerts and user subscription to alerts based on personal thresholds.
- Display of any time period for any metric type (actual, target, status).
- Display values, colors, range icons or descriptive text.
- Strategy/process diagram editor reads from and writes to underlying database dynamically.

Data integration

- Read/write data on any technology platform in batch and real time (including Excel, Oracle, DB2, SAP and legacy systems).
- Web interface for manual data collection.
- Embedded data quality processes.
- Data warehousing or data mart capability.

Security and role-based authorization

- Security for specific elements or rows, templates, projects and scorecards.
- Assignable user roles on user action permissions.

Interactive dashboards, collaboration and alerts

- Dials, sliders, meters or traffic lights on results lead to notes, trend charts or custom reports.
- Quick navigation to scorecards, strategy maps, diagrams or reports; children can be compared in a single view.
- User-defined organizational or personal thresholds and alerts that create flags, notes and e-mails.
- Identification of children failing to meet thresholds, even if the parent is showing strong progress.
- Searchable comments on metrics and objectives.

* Separate license required.

Streamlined Environmental Data Management Processes

Gathering and managing accurate data manually with spreadsheets was yesterday's approach. Enormous amounts of data can reside in multiple operational systems or rudimentary accounting files – not to mention different data owners. With SAS, you gain the ability to access nearly any data on any technology platform in batch and real time. SAS provides embedded data quality processes and data warehousing or data mart capabilities.

Sustainability Strategy Development and Communication

Organizations often lack evidence of the cause-and-effect linkage between metrics and overall goal attainment. This gap, combined with common silo mentalities, means that business units may focus on the wrong initiatives or take actions that have unintended consequences. SAS Sustainability Reporting provides a comprehensive set of features to solidify your strategy and communicate it to all stakeholders. Create dials, sliders, meters or traffic lights to quickly highlight results. Navigate from key performance indicators

to trend charts, custom reports and detailed notes. Graphically depict relationships between metrics and objectives. Define organizational or personal thresholds and alerts that create flags, notes and e-mails.

Security and Role-Based Authorization

To protect the security of data you gather and information you disseminate through reporting, SAS allows you to set security permissions for specific elements or rows, as well as templates, projects and scorecards. Assigned user roles determine which actions any single user can take.

Technical Requirements

Client environment

Operating systems

- Windows XP Professional (Service Pack 2 or later)
- Windows Vista – Business, Enterprise and Ultimate (32-bit and x64-bit)

Additional software

- A Web browser with cookies and JavaScript enabled is required.
- Supported browsers include: Microsoft Internet Explorer Version 6 and 7.

Minimum hardware: Intel/AMD x86 or x64 1.8GHz processor with 500MB of RAM

Server environment

Operating systems

- Windows Server 2003, Enterprise Edition
- Windows Server 2003, Standard x64 Edition, Service Pack 2

Minimum hardware: Intel/AMD x86 or x64 with four cores and 16GB of RAM

Data tier

Operating systems

- Windows Server 2003, Enterprise Edition
- Windows Server 2003, Standard x64 Edition, Service Pack 2

Database server

- MySQL Pro 5.0.80 for Windows 32-bit and Windows 64-bit
- MySQL Connector/J 5.0.8, commercial version

If SAS does not provide MySQL Pro for you, obtain a copy of the Connector/J jar and MySQL database from your MySQL representative.

Minimum hardware: Intel/AMD x86 or x64 with four cores and 16GB of RAM

Required/optional software

- JRE 5 Update 12 (Sun)
- Oracle WebLogic 10.3
- Optional: Microsoft Office 2000 (Service Pack 3 or later), 2003, 2007 for using the included Excel Add-Ins

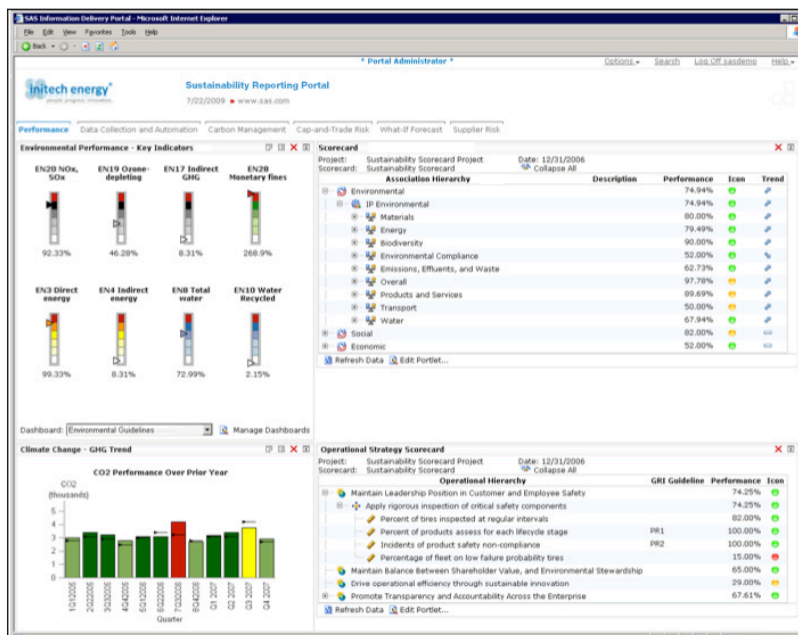


Figure 3. Information delivery portal provides dashboard view of data.