Oracle Environmental Accounting and Reporting enables organizations to track their greenhouse gas (GHG) emissions and other environmental data against reduction targets, and facilitates environmental reporting for both voluntary and legislated emissions reporting schemes. The solution manages this function from within the existing ERP system and utilizes Oracle Business Intelligence to provide immediate insight into an organization’s environmental data to identify and manage CO2 and cost reduction opportunities—providing rapid ROI.


**Key Features**

- Capture energy usage and environmental data in Oracle E-Business Suite ERP transactions
- Track asset-based fuel usage and other consumables as they are issued
- Capture and report data at both facility and asset level
- Calculate greenhouse gas emissions in accordance with the Greenhouse Gas Protocol
- Classify Scope 1, 2 and 3 emissions
- Store date effective emission factors for recalculation usage
- Easily change and update emission factors
- Automatically determine the correct transformation factors
- Set up environmental sources or item specific unit of measure conversion
- Aggregate data through data warehouse
- Analyze data through pre-built analytics and dashboards
- Create flexible reporting structures
- Define key performance indicators

**Introduction**

Across the globe, companies are facing increasing pressure to improve the efficiency and reduce waste in their operations, and this is increasingly associated with legislation regarding the impact of their operations on the environment. These pressures—both internally and externally—drive a requirement to provide sustainability related data that is comprehensive, auditable, and timely. Global mandatory as well as voluntary reporting schemes require companies to undergo extensive and expensive data audits, maintain a ledger of up-to-date emissions factors, and compare figures on an annual basis. Existing “ad hoc” approaches utilizing manual or niche solutions have a high operational cost and weak data security and audit-ability. The ideal solution is to embed environmental related data acquisition and reporting into the mainstream of business operations and associated IT infrastructure. This is precisely what Oracle Environmental Accounting and Reporting is designed to do.

Oracle Environmental Accounting and Reporting enables organizations to capture environmental data either electronically or manually; convert that to greenhouse gas emissions; comply with mandatory and voluntary greenhouse gas reporting schemes; and to identify opportunities for CO2 emissions and energy cost reductions. As an add-on module to Oracle E-Business Suite Financials which seamlessly integrates with existing Accounts Payable business flows, Oracle Environmental Accounting and Reporting delivers these capabilities without the duplication or double handling of transactions and data, which is intrinsic in other approaches.

**Automate Environmental Data Collection**

Oracle Environmental Accounting and Reporting extends the invoice, purchasing and inventory processes to enable the capture of the necessary data, automatically matching this with the associated transactions. This can be augmented with additional data from smart meters, fleet management systems or from any other sources that
KEY BENEFITS

• Reduce environmental data management and audit costs
• Comply with regulatory mandates for GHG reporting
• Rapidly produce environmental reports for internal and external stakeholders, including for the Carbon Disclosure Project (CDP)
• Reduce CO2 and operational costs
• Leverage existing IT investments
• Minimize organizational impact
• Maintain data integrity and security
• Guarantee consistent user experience

capture the transactions, including spreadsheets. This approach presents users with a familiar and consistent experience while ensuring data security, accuracy, and consistency. The solution supports all of the flexible organizational structures native to the ERP application, including separate facilities, combined facilities, by legal structure, or by management structure. The integration with Oracle Property Manager enables importing of entities such as region, property, building, floor and office—along with area, disposition, and headcount data—to create a default hierarchy in the Environmental Accounting and Reporting module and to maintain its integrity over time through ongoing synchronization. This allows an organization to view and report environmental data as needed. Similarly the data can also be associated with a particular asset to enable more detailed analysis of usage patterns.

Figure 1. Data capture for emissions calculations during invoice processing (Oracle E-Business Suite).

Comply with Mandatory and Voluntary Schemes for Greenhouse Gas Reporting

Oracle Environmental Accounting and Reporting provides the built-in mechanisms for calculating emissions and classifying them as scope 1, 2, or 3 using the Greenhouse Gas Protocol guidelines published by the World Resources Institute, the most widely adopted methodology for calculating greenhouse gas emissions.

Emission transformation factors are stored and can readily be updated over time with date effectiveness to manage the change of emissions factors and for recalculation purposes. When the transactions are entered, the system automatically determines what additional data needs to be captured to perform the emissions calculations and associates the transaction with the appropriate default emission factor. If a more accurate emissions factor is available for a specific transaction the end user can override the default as needed.
Identify and Drive Opportunities for CO2 Emissions, Energy, and Other Reductions

Measuring performance and setting targets is a critical component for organizations to become more productive, more profitable, and more sustainable. Monitoring key metrics such as energy, waste, and water leads to greenhouse gas emissions reductions hand-in-hand with operational efficiency improvements and cost savings. When armed with factual data, organizations can benchmark and affect behavioral change to reduce environmental impacts.

Pre-built Oracle Business Intelligence Enterprise Edition (OBIEE) dashboards enable the dynamic generation of reports providing emissions summaries and trends at the touch of a button—including for the Carbon Disclosure Project. Users can drill down into additional levels of detail and they can also perform ad hoc analyses to investigate specific data trends and anomalies—rapidly identifying issues and opportunities alike.

Oracle Environmental Accounting and Reporting enables organizations to establish a baseline of its greenhouse gas emissions, energy usage, water footprint and other key environmental indicators and set reduction targets. Graphical indicators illustrate on a timely basis whether the organization is performing above, below, or in-line with the targets so that corrective actions can be taken as needed to successfully execute on sustainability initiatives. The data also serves as the basis for forecasting and planning.
Figure 3. Energy, emissions, and usage performance targets by organization.

Product Requirements

Oracle Environmental Accounting and Reporting is available for Oracle E-Business Suite version 12.1 and higher. It has been developed using the native technology of Oracle E-Business Suite, backed by a common business analytics layer developed in Oracle Business Intelligence Suite Enterprise Edition Plus and Oracle Data Integrator Enterprise Edition, which are the required technology components.