



*EEMS HIGH LEVEL MARKET  
ASSESSMENT  
PRESENTATION TO LEADERSHIP TEAM*

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# Introduction

Enterprise Energy Management Systems (EEMS) software use focuses on three main use patterns:

## 1. Analyze and report

- Monitoring, analyzing, and reporting energy consumption and carbon emissions.

## 2. Govern and act

- Incorporates “analyze and report” and extends to the additional tracking of waste and water, expanded interfaces with purchasing analysis
- Map enterprise-wide energy and sustainability solution.

## 3. Anticipate and align

- Convergence of business performance management and sustainability management capabilities
- Solutions provide integrated management and reporting of financial and sustainability key performance indicators (KPIs)
- Integrated product portfolio management capabilities in order to align strategy and investment priorities from a dual financial and sustainability perspective.

Note: Sustainability management includes tracking of non-energy based emissions of refrigerants, solid waste, waste water, vehicle fleets.



# Key Market Targets



# Evolution of EEMS Market Place

		2008 to 2010	2011 to 2013
Vendor	Dominant supplier type	GRC/EHS Startups	Enterprise software companies
	Number of enterprise implementations	100s	1,000s
	IT supplier value proposition	Operating cost reduction	Company and product differentiation
	Principal buyer	Facilities GRC and CSR	IT
Purchaser	Functionality requirement	Aggregation	Analysis
	Scope	Single facility	Enterprisewide
	Data source	Spreadsheets	Asset instrumentation
	Leading industries	Energy Public sector	Retail Consumer packaged goods



# Four Key Trends in EEMS Development

## **Expansion of consumption tracking**

- From carbon reporting to energy spend and a broader scope of pollution and natural resources management.

## **Expansion of viewpoint**

- Software is moving from individual facilities to encompass the entire enterprise and the entire purchasing value chain measurement.

## **From descriptive to predictive analyses.**

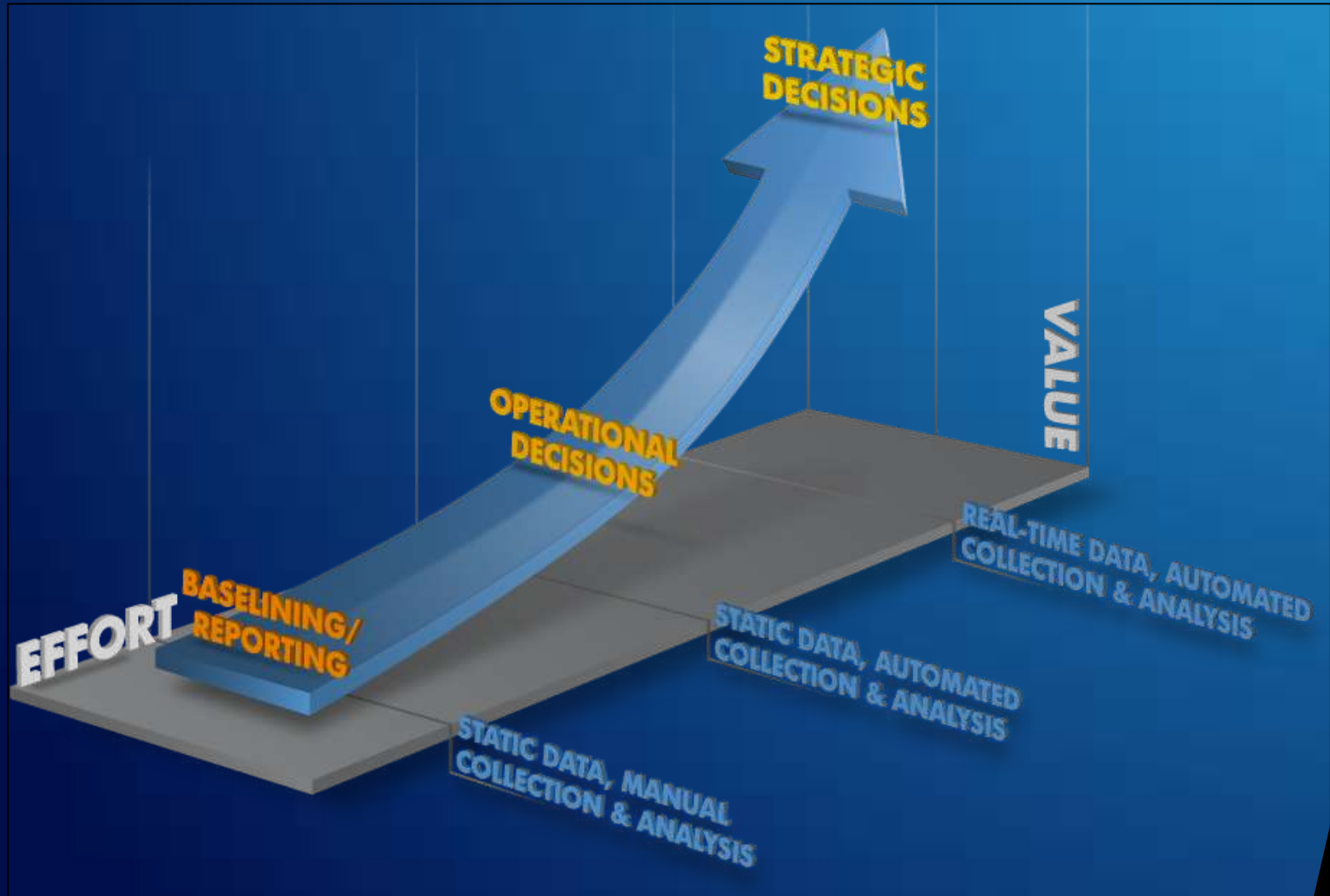
- Sophisticated capabilities for automatically identifying anomalies in the data and initiating alerts for faster response to incidents resulting in financial savings and the avoidance of associated risks.

## **Service and Software-as-a-Service.**

- Software and services are becoming much more integrated as customers seek out the most cost effective approaches to implementation and on-going energy management.



# Integration of Systems Key to Strategic Value



# Roles Involved in Purchasing and Implementing EEMS

- **CFO, Budget and Audit Departments**
  - ✓ Manage CAPEX and OPEX, verification of results, impact on General Fund expenditures
- **Sustainability and Environment Staff**
  - ✓ Drive policy, reporting and energy efficiency goals
- **Facilities and Public Works**
  - ✓ Operate facilities and vehicles, implement efficiency projects
- **Information Technology (IT)**
  - ✓ Manage data flow, oversee Data Centers



# Review of EEMS Vendors

- Review of 26 vendors
- Revenue, employees and venture funding
- Basic capabilities
- Primary clients and verticals
- Business model





# Example Briefing on EEMS Vendors

## Global Carbon Systems

Australian-based Global Carbon Systems focuses on energy and sustainability solutions with a strong base of municipalities, education and property management clients. Well established in Australian market but new to US Market. Recent big win at Microsoft highlighted the firm's capabilities.

URL	www.globalcarbonsystems.com
Headquarters	Sydney, AU
Tagline	Powering Business Sustainability
Financing events in last 3 years	Privately funded
Sales channel	Direct and Partners
Product names	Enterprise Sustainability Platform
Pricing /business model	SaaS license
Sell proprietary hardware?	No
Estimated number of customers	110
Target customers	Organizations that are reporting under compliance or voluntary carbon programs and large energy users.
Target customers applications	Energy management, carbon management, environmental management, sustainable supply chain collaboration, CSR reporting
Top verticals	Banking and finance, corporate property management, education, government, fast-moving goods distribution, health, information technology, manufacturing
Geographic strengths	Market leader in Australia. Offices now established in North America, Europe, and Asia.
Sample customers	City of Sydney, City of Brisbane, Southern Sydney Region of Councils, University of Adelaide, Akzo Nobel, Balfour Beatty, Canon, Colliers International, Deloitte, Fuji Xerox, GPT Group, Metcash Trading, Ramsay Health,
Notable case studies on corporate website	Colliers International, Metcash, CSIRO, Ramsay Health, St John of God Healthcare
Customers announced in 2011 in press releases	Microsoft, Ramsay Health, Tenix
Data Input	Data can be input from utility operated electricity, gas and water meters, Building Management Systems, SCADA systems, Manufacturing and Production systems and enterprise resource programs (SAP and Peoplesoft)

## Software Summary

Global Carbon Systems Enterprise Sustainability Platform (ESP) is a web-based platform providing real-time tracking and reporting of carbon, water, gas and electricity use based on data sourced from utility providers, supplier reports and internal business systems. City governments are able to benchmark performance on standard asset categories such as offices, data centers, libraries, pools, schools, sports fields and community centers. ESP focuses on automated Metered Energy Monitoring, Energy Management Tools, Building Energy Ratings, Bill & Tariff Analysis, and Measurement & Verification.



# Third Party Evaluations

Sources: Gardner, Forrester, Verdantix, and Groom Energy

Each system evaluated on 9 dimensions:

- Commercial building energy data capture
- IT and Data Center energy data capture
- Manufacturing plant energy data capture
- Primary energy data capture
- On-site energy generation data capture
- IT system integration (ability to interface with other IT systems)
- Energy market data capture
- Master enterprise data management
- Workflow and task management



# System Evaluation

Ranked on 0-3 scale

0= capability not present

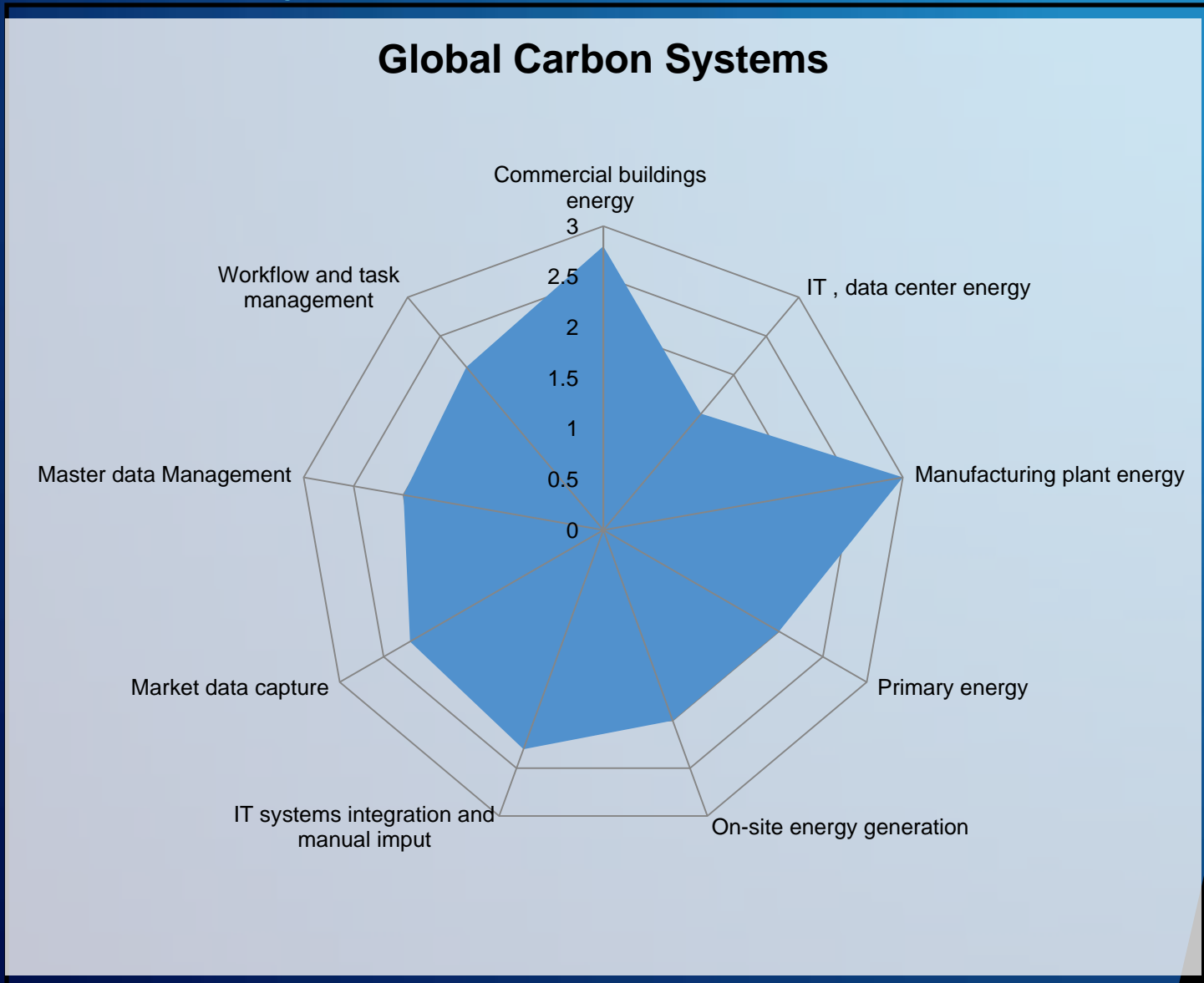
1= some basic functionality

2= strong functionality

3= industry leading functionality



# Example of Analysis



QUESTIONS?




# NEXT STEPS



# Project Activities and Schedule

## 6 Project Components

Project Activity	Due Date	Schedule				
		April	May	June	July	Aug
Energy Consumption Analysis	June 13, 2012					
Benchmarking Analysis	Completed May 16, 2012					
Market Assessment	June 1, 2012					
Business Case	June 22, 2012					
Functional Needs Assessment	July 27, 2012					
Energy Forum	August 24, 2012					

*THANK YOU*

