

Carbon Related Information Management

Taipei and Hong Kong, April 2010

Christopher Hazen, Director (Asia)

WSP Environment & Energy





WSP Group plc

Outstanding global supplier of specialist and integrated services to the built and natural environment

Thousands of specialists in all key aspects of carbon management:

**Environment & Energy
Transport & Infrastructure
Buildings
Management Consulting
IT & Outsourcing**

9,500

Global presence with over 9,500 staff in 100 offices across 24 countries

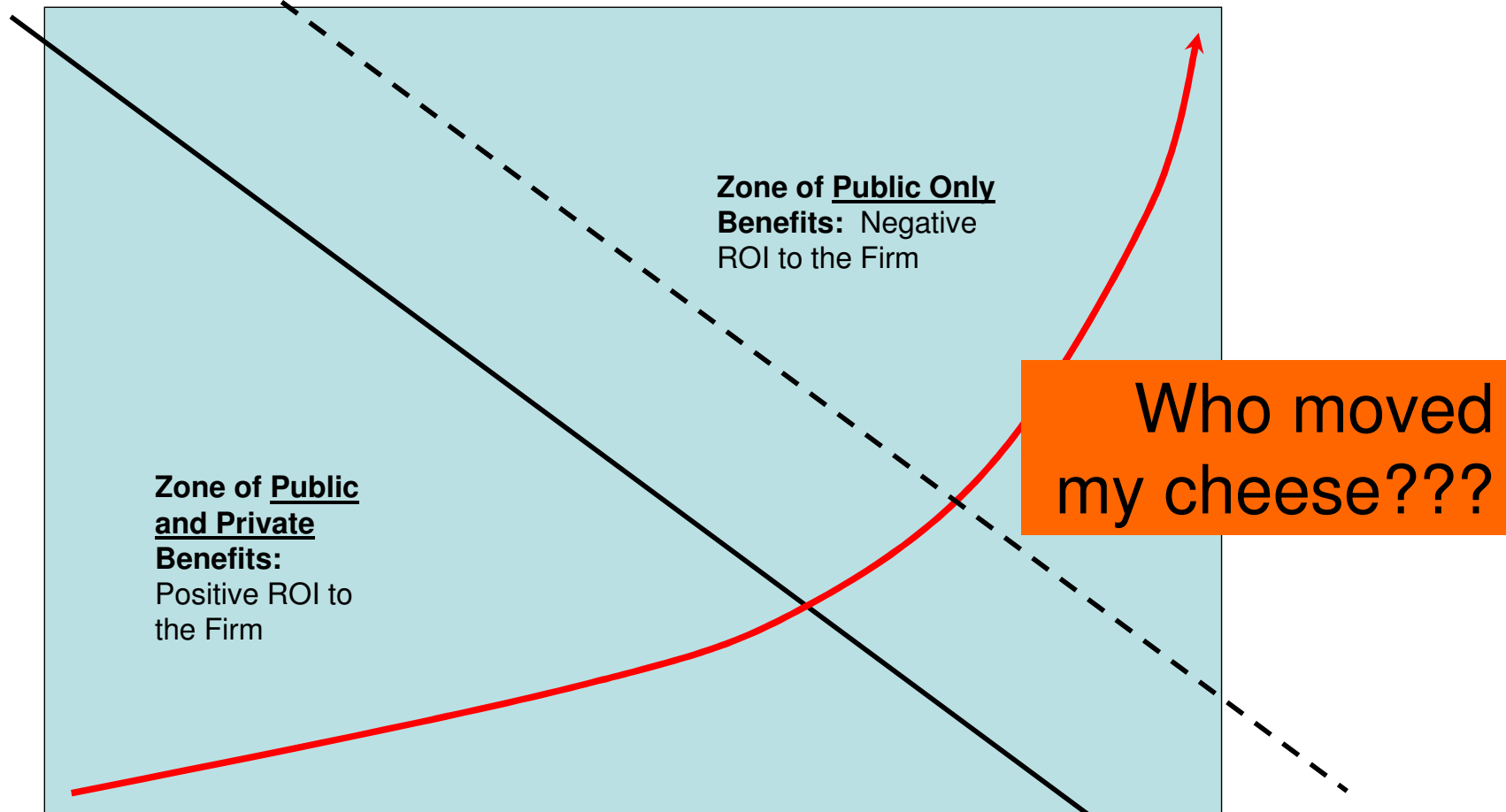
HQ: London, UK

WSP consultants include senior ex-environmental managers and advisors from: HP, Apple, Seagate, Motorola. Leading global clients include: HP, Apple, Seagate, Cisco, nVidia, GE, Rockwell

NEWS FLASH

- Harvard Business Review April 2010: Cover Storey “Leadership in the Age of Transparency” – response to market failure
- AMR 12 April 2010: Intel’s Eco-Technology Group @ Intel 2010 Supplier Day:
 - Automation
 - Substitution, and
 - Dematerialization.
- “These vectors of better sustainability imply a **need for major retooling of the infrastructure that supports our global supply chain.**”
 - Smarter
 - More connected
 - More sustainable physical infrastructure
 - More sustainable information infrastructure
- “This means **huge new business opportunities** for industrial manufacturers as well as new challenges for consumer and retail leaders who must master a very different global supply network.”
- Fortune Magazine, April 2010: Debunking Green Myths

Public agencies and NGOs will over time push policies that reward Low Carbon firm behavior in public interest, avert another “market failure”



Low carbon path... “economic benefit of \$2.5 trillion”



Carbon management software and services...

- Market grew 84% globally from 2008 to 2009, representing a total market of **US\$384 million (NT\$12 billion+)**
- Groom Energy predicts that ECA software purchases will increase **600 percent** within 2 more years

Drivers:

- Company image: protecting and enhancing
- Reporting: supply chain initiatives like Walmart

A vertical column of small, semi-transparent squares in various colors (red, blue, orange, green, teal, purple, brown) on the left side of the slide.

Groom Energy 2010

“Leaders”

- Enablon
- Enviance
- Hara
- IHS
- Johnson Controls
- PE International
- ProcessMAP
- SAP

Big global brands

- **IHS** –
 - 50 year old company
 - full suite of environmental and chemical management software and service solutions
- **Johnson Controls**
 - Buildings and automation systems specialist equipment and services
 - Energy and Emissions Management System is Web-based system
 - measures, manages and forecasts activities related to energy cost, consumption, energy efficiency projects, fleet emissions, and waste.
 - JC currently manage \$1 billion in annual energy spend.
- **SAP- Carbon Impact**
 - Reporting from a single repository to voluntary or mandatory registries
 - Conduct abatement analysis by using financial insight to find the optimal mix of reduction projects and offsets
 - Gain insight via pre-built dashboards for emissions trending analysis and visualization to help identify problem areas
 - Consolidate environmental impact data into a single repository, and organize emissions data by using flexible hierarchies that represent your facilities, departments, product lines and other operational entities.
 - Customers include Lockheed Martin, Autodesk, Sun Power, Jabil

Comprehensive EHS platforms

- **Enablon**

- Management and performance software solutions for corporate responsibility and QEHS management; risk management and internal control; and corporate governance and legal management.
- 200,000 users in 250 global companies and ten thousands SME's around the world.
- World's largest sustainability software provider,

- **Enviance**

- air, water and waste
- Cloud-based, on-demand platform
- Software Developers' Kit (SDK)
- 12,000 users from 45 countries that use the Enviance System.

- **ProcessMAP**

- environmental and carbon footprint
- Global Citizenship and Annual Sustainability Reports
- recognized as a leading provider of Carbon Management Software
- Customers: Allergan, Ingersoll Rand, ITT, John Deere, Shaw (Berkshire Hathaway), and Watson Pharmaceuticals

Specialized, start-ups

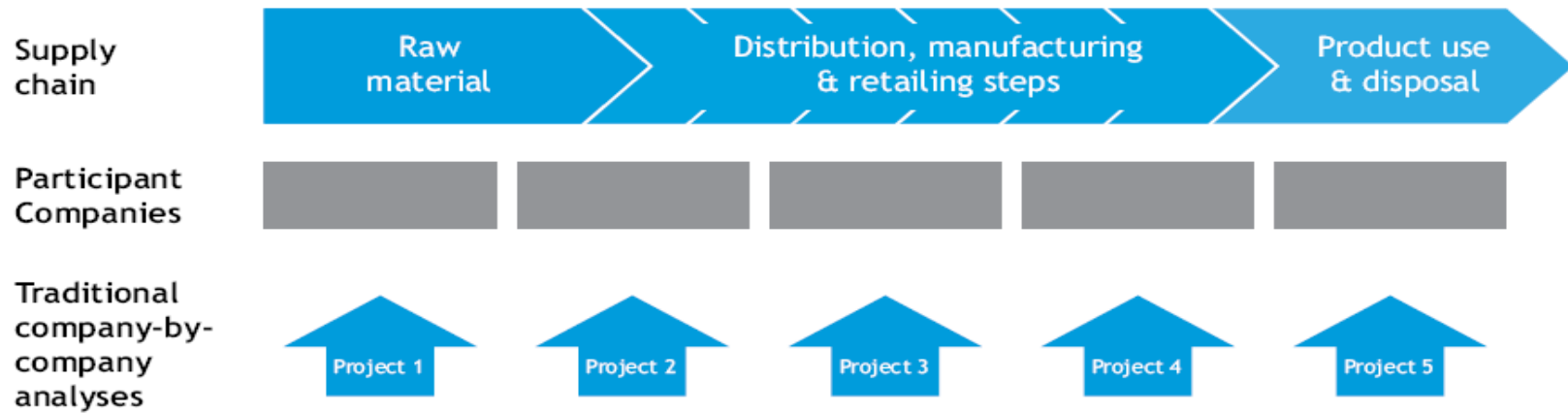
- **PE International**

- data collection supported by interfaces to ERP systems
- carbon footprint measurement in compliance with requirements of CDP and the ISO 14064 standard; performance tracking; and the ability to identify cost reduction opportunities.
- Integrates with Gabi Software to provide tools and databases for product and process sustainability analyses.

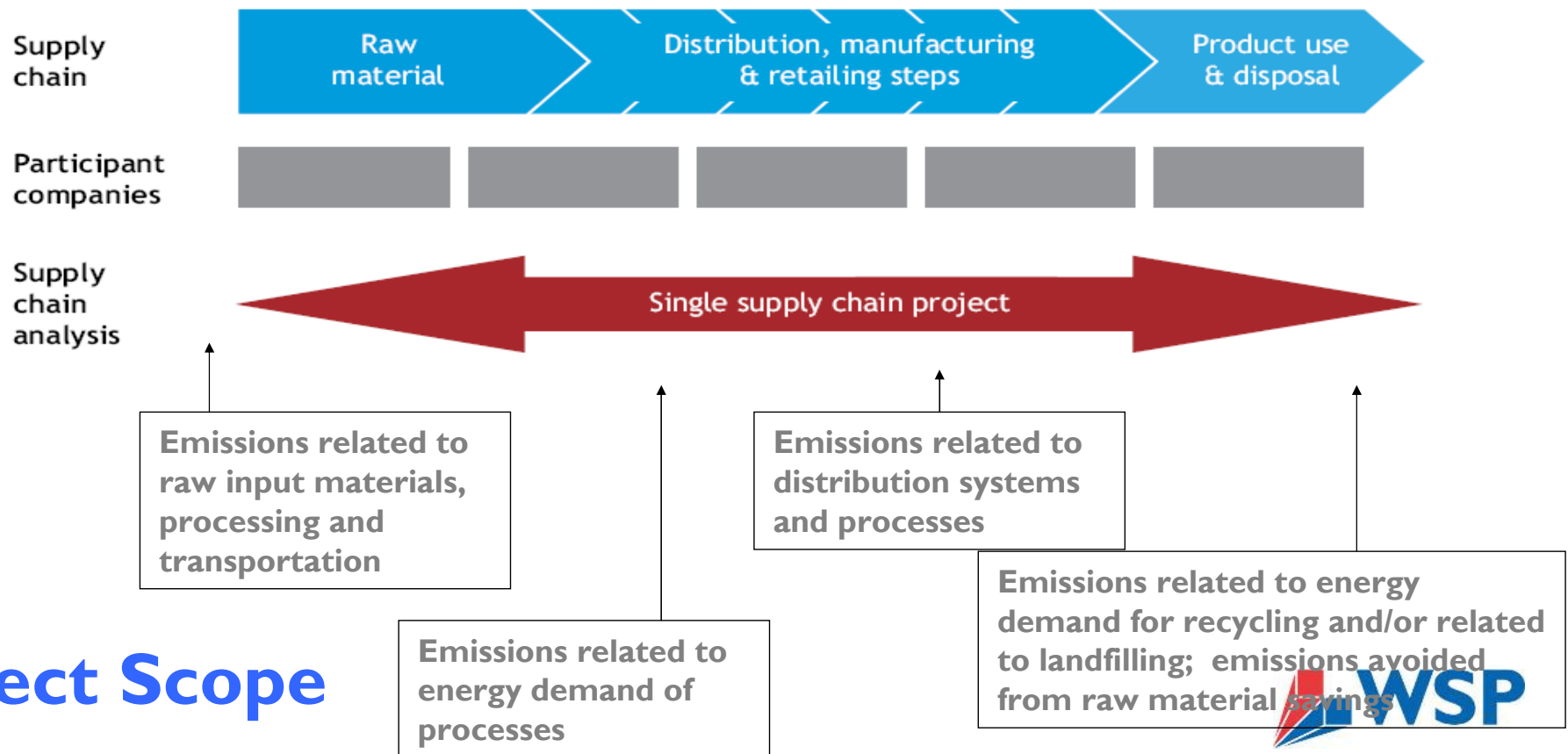
- **Hara –**

- US\$20 million in funding from Kleiner Perkins Caufield & Byers, JAFCO Ventures, and Nth Power.
- Closed deals in 2009 with Coca-Cola, News Corporation, the City of Palo Alto and the City of San Jose.

Traditional carbon management



Carbon management across the supply chain



Project Scope



Question...

Can you use a spreadsheet to...

Drive bottom line savings

Drive innovation

Drive branding/differentiation

OR

Decide when to invest in...

Shift from products to services

Decouple your business model from the fossil fuel market and avoid rise of trade barriers

Marketizing carbon as an asset (or liability)

Software enable better carbon-related business decisions

- Not all companies need software today
 - Do you need a new application? Or...
 - Do you need a new architecture?
- Software enables and sustains mature and complex business processes across large organizations.
 - Are you responsible for a large organization?
 - Do you need to enable and sustain a mature and complex business process?
- *For details of case studies following, please e-mail me...*



謝謝各位!

For more information

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2009 Climate Change Business Journal Project Merit Award: Carbon Footprinting - for Microsoft & Accenture

2010 Environmental Adviser of the Year - Acquisitions Monthly

2009 EBI Award for New Practice Area - Product & Supply Chain

