

## Supply chain energy – a view of the future ...

*End to End supply chain Sustainability...*

*Delivers energy reductions  
AND significant financial and brand value*

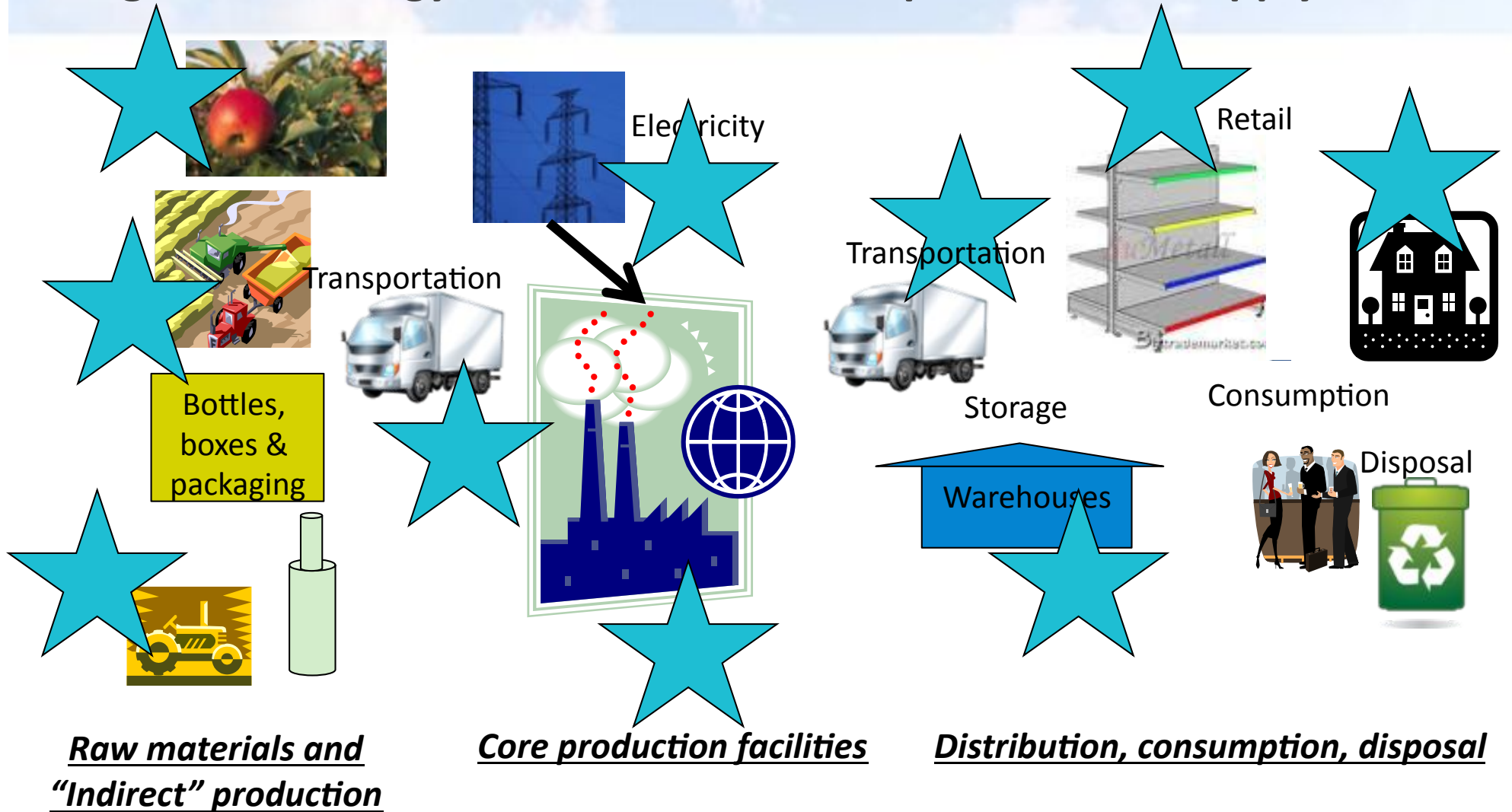
***Grimsby 8<sup>th</sup> June 2010***



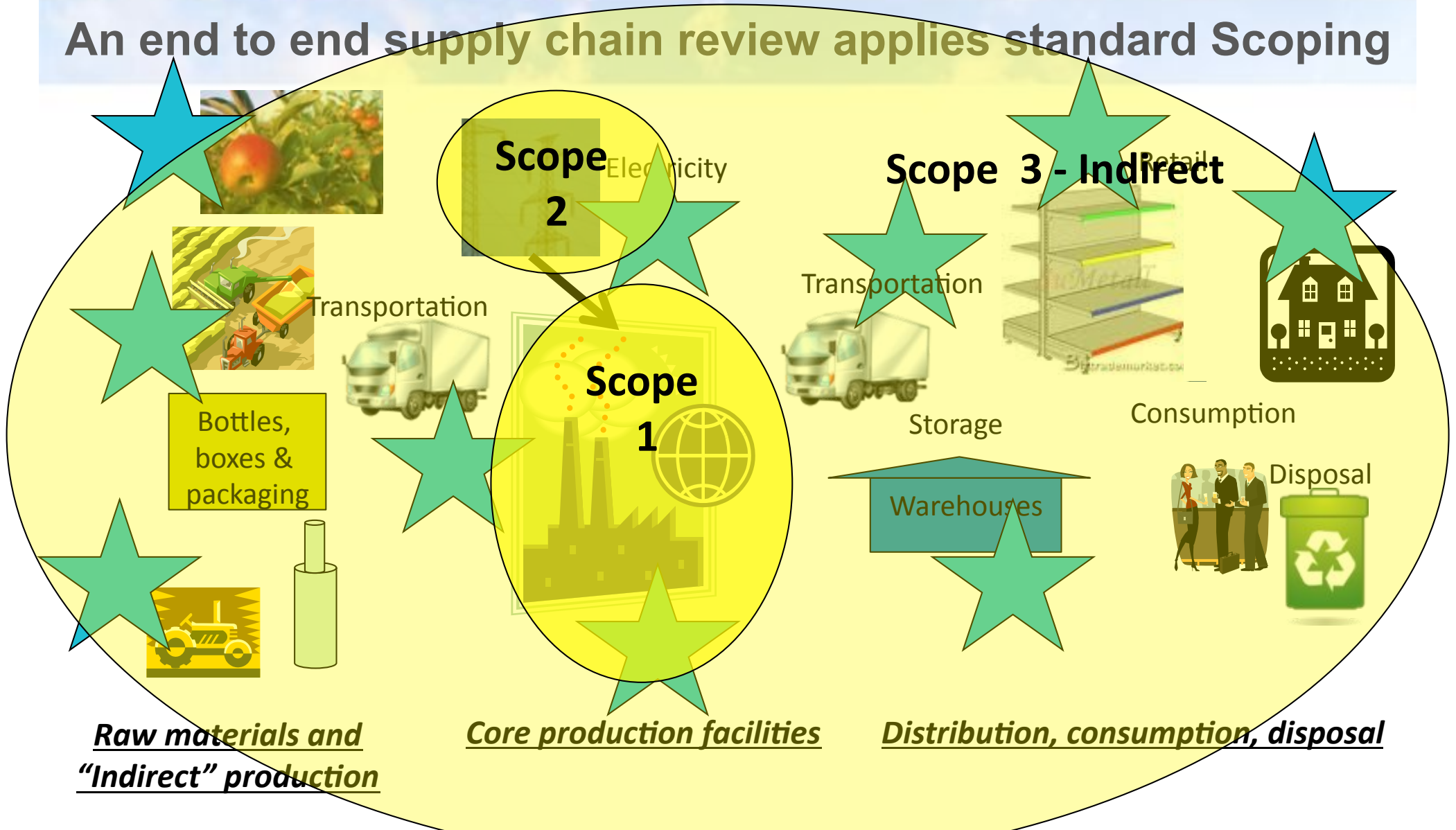
## Energy consumption is a major factor in rising global CO2 levels

- The 3 key areas for focus in reducing your Environmental and Cost impact are
  - Communication between retail buyers and producers
  - Supply chain optimisation leading to reduction of the total inventory
  - Reducing the number of days of cold storage required
- Leading organisations are already tackling these issues through an “End to End supply chain approach” as illustrated by the following case studies

# Refrigeration Energy / Carbon exists at all points of the supply chain.....



# An end to end supply chain review applies standard Scoping



**Raw materials and "Indirect" production**

**Core production facilities**

**Distribution, consumption, disposal**



# The Walmart Challenge – respond and gain valuable ground...



1-800-321-3001 [www.walmart.com](http://www.walmart.com)

## Sustainability Product Index: 15 Questions for Suppliers

### Energy and Climate: Reducing Energy Costs and Greenhouse Gas Emissions

1. Have you measured your corporate greenhouse gas emissions?
2. Have you opted to report your greenhouse gas emissions to the Carbon Disclosure Project (CDP)?
3. What is your total annual greenhouse gas emissions reported in the most recent year measured?
4. Have you set publicly available greenhouse gas reduction targets? If yes, what are those targets?

### Material Efficiency: Reducing Waste and Enhancing Quality

1. If measured, please report the total amount of solid waste generated from the facilities that produce your product(s) for Walmart for the most recent year measured.
2. Have you set publicly available solid waste reduction targets? If yes, what are those targets?
3. If measured, please report total water use from facilities that produce your product(s) for Walmart for the most recent year measured.
4. Have you set publicly available water use reduction targets? If yes, what are those targets?

### Natural Resources: Producing High Quality, Responsibly Sourced Raw Materials

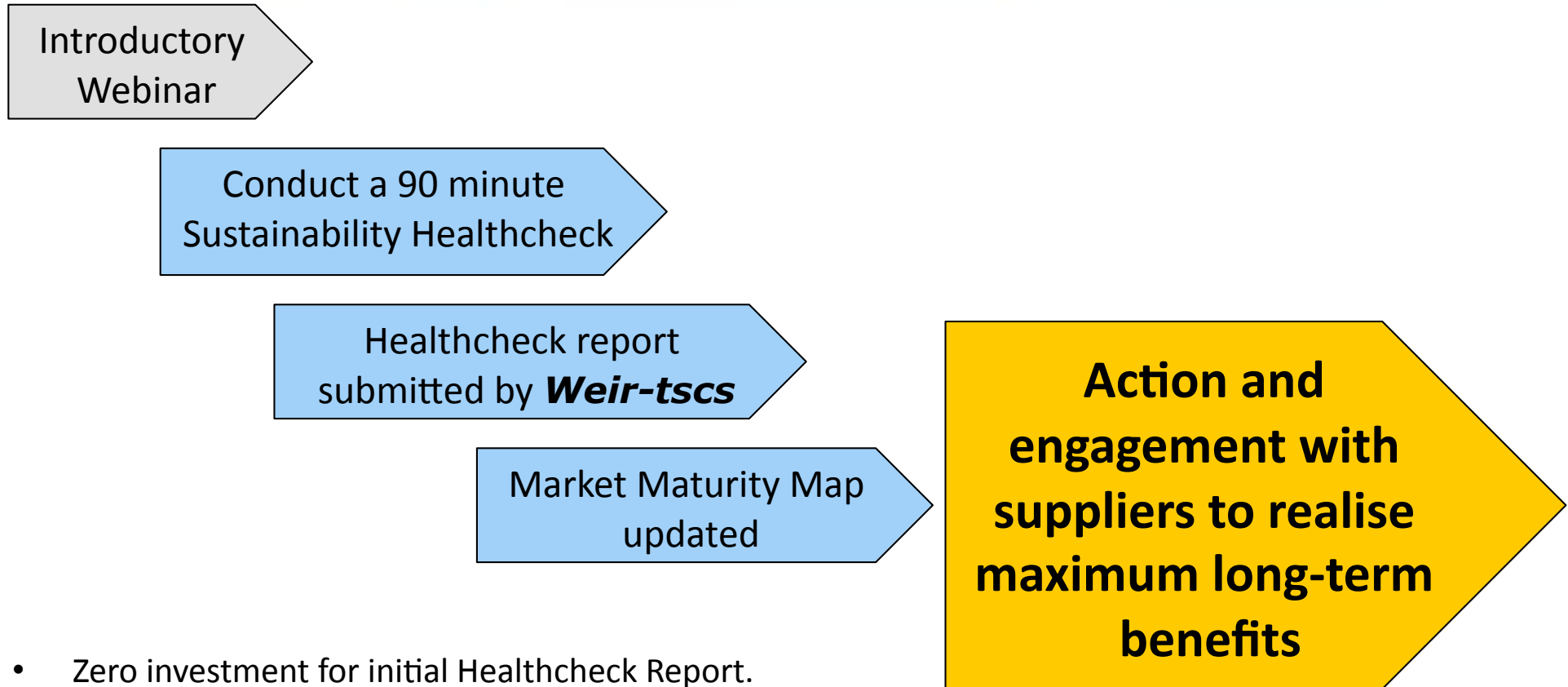
1. Have you established publicly available sustainability purchasing guidelines for your direct suppliers that address issues such as environmental compliance, employment practices and product/ingredient safety?
2. Have you obtained 3<sup>rd</sup> party certifications for any of the products that you sell to Walmart?

### People and Community: Ensuring Responsible and Ethical Production

1. Do you know the location of 100 percent of the facilities that produce your product(s)?
2. Before beginning a business relationship with a manufacturing facility, do you evaluate the quality of, and capacity for, production?
3. Do you have a process for managing social compliance at the manufacturing level?
4. Do you work with your supply base to resolve issues found during social compliance evaluations and also document specific corrections and improvements?
5. Do you invest in community development activities in the markets you source from and/or operate within?

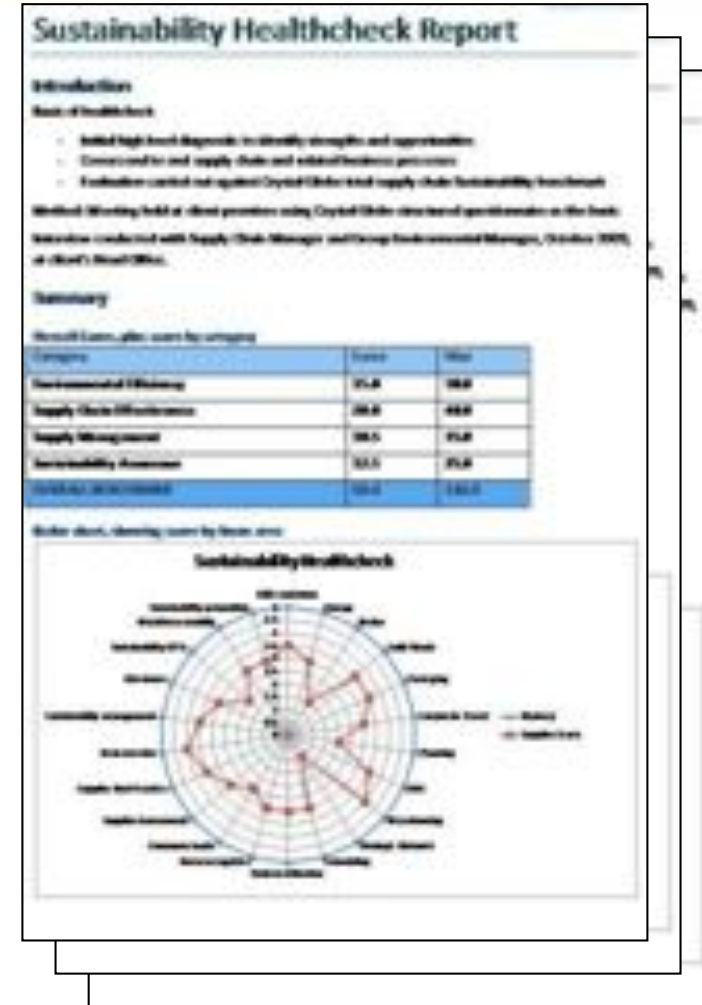
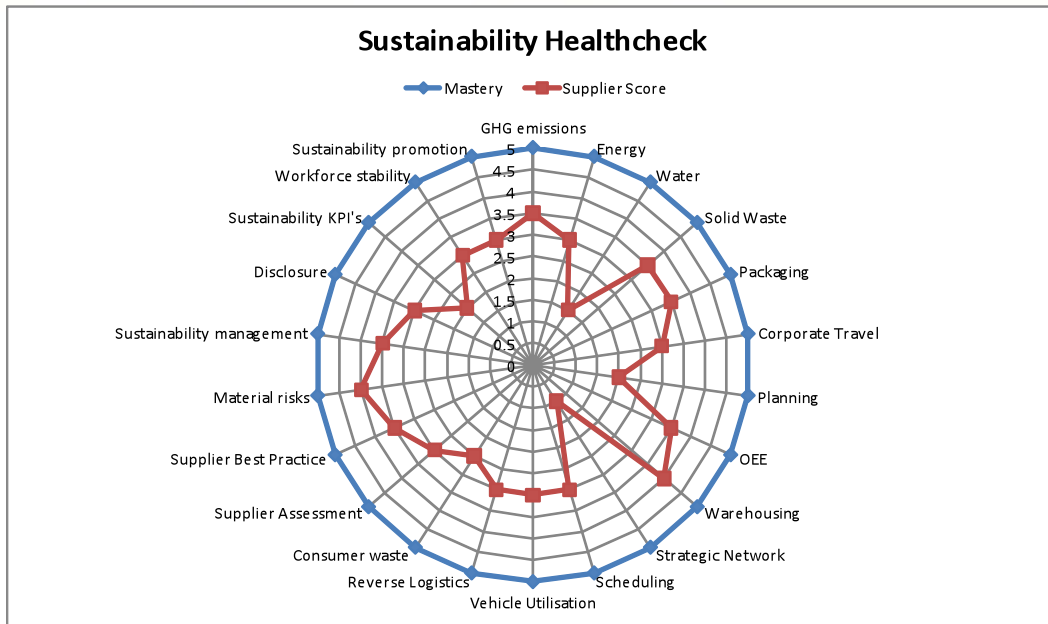


**ASDA are piloting a swift, effective process to unlock significant carbon and £ value from the end to end supply chain**



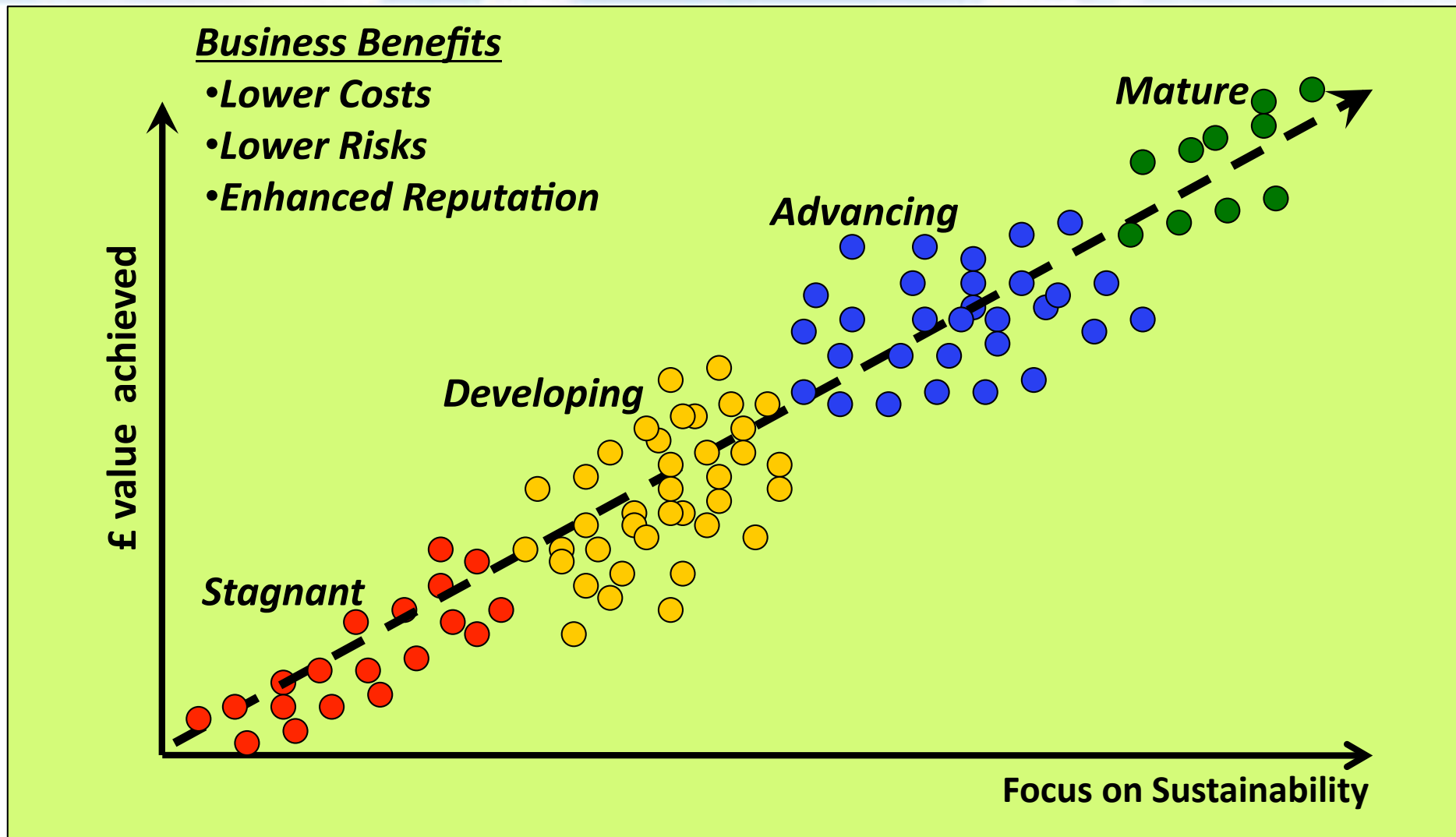
- Zero investment for initial Healthcheck Report.
- All engagement is on a value-driven basis
- Full confidentiality; supplier data can remain proprietary and undisclosed to ASDA

# The Sustainability Healthcheck provides valuable feedback and guidance to the supplier on the opportunities and benefits



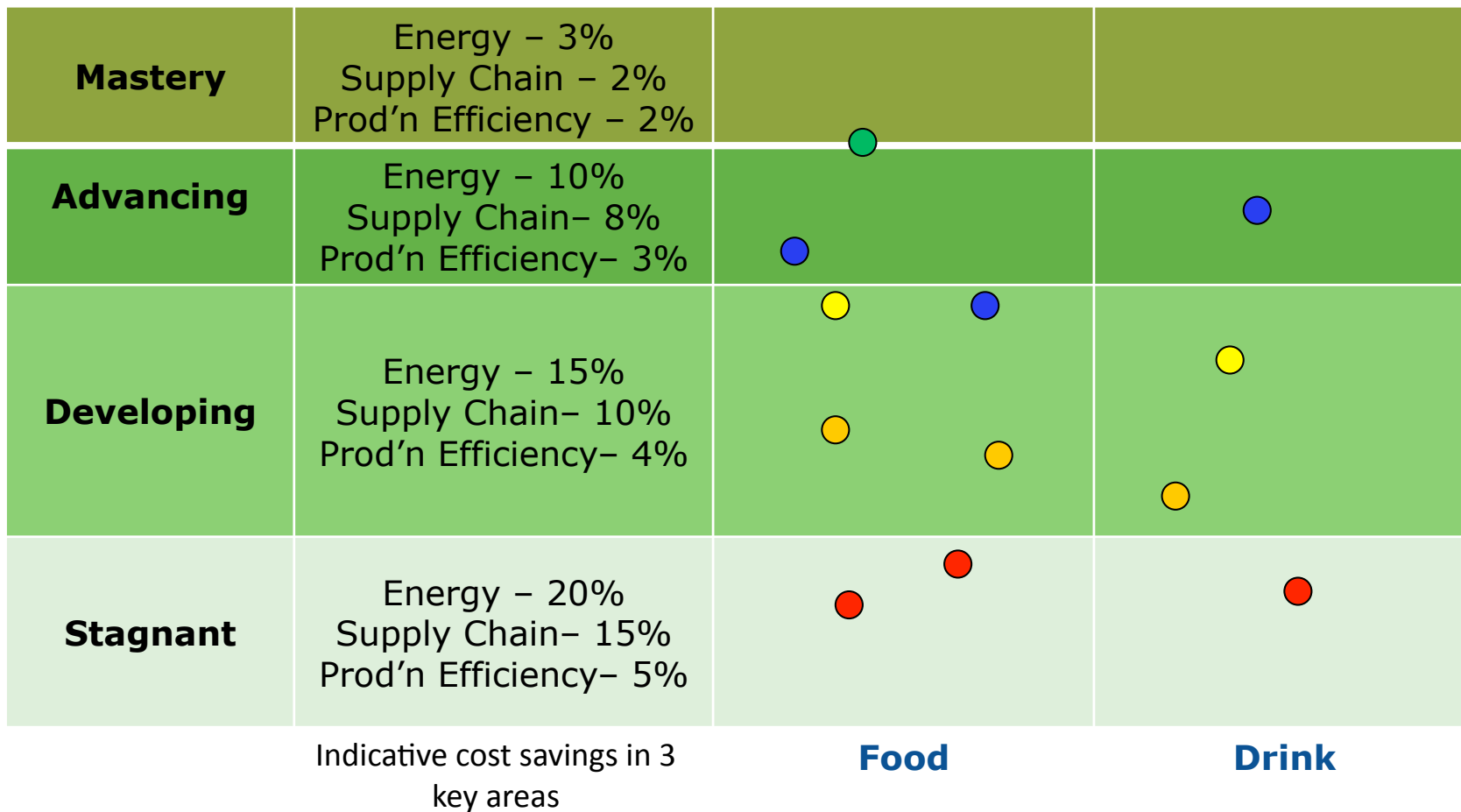
- A clear picture of performance against the Crystal Globe Sustainability Excellence standard
- A detailed report highlighting opportunities for focused action and the benefits achievable

## Focus on Sustainability unlocks value in the supply chain

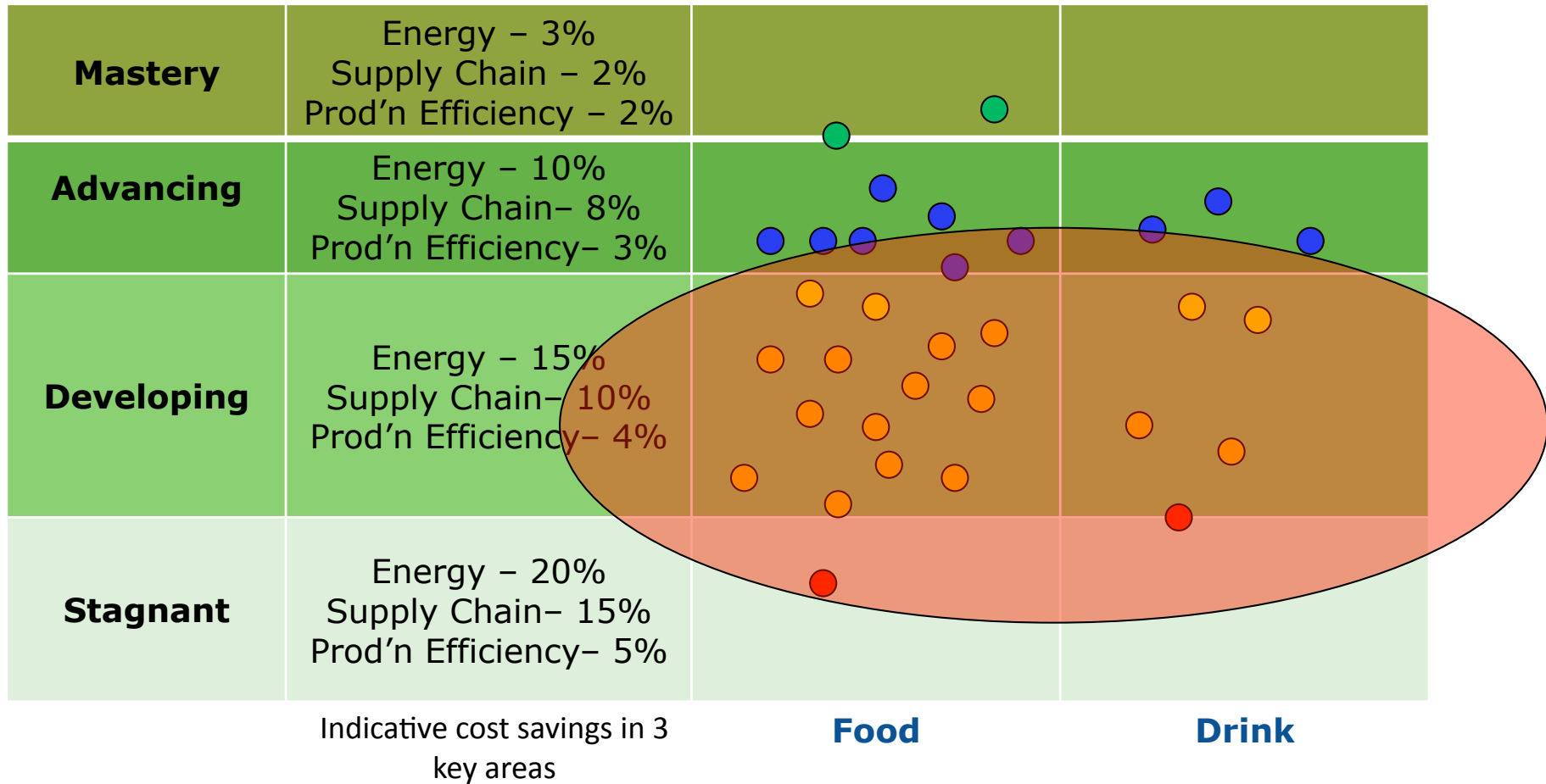




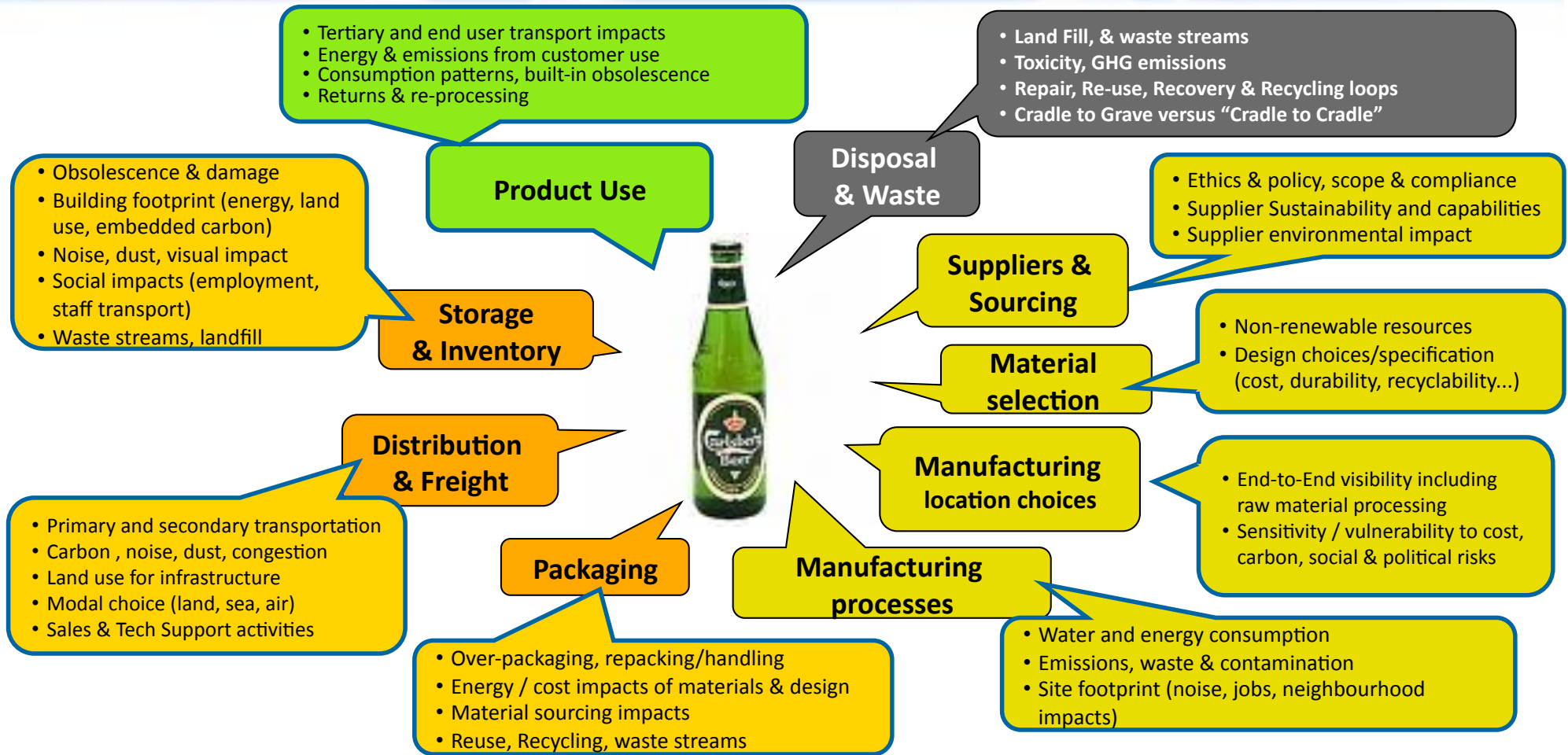
# The initial test case for Asda supplier Healthchecks confirmed the global picture – low average Sustainability performance



# The Phase 1 results continue to show a large number of suboptimal suppliers with excess cost

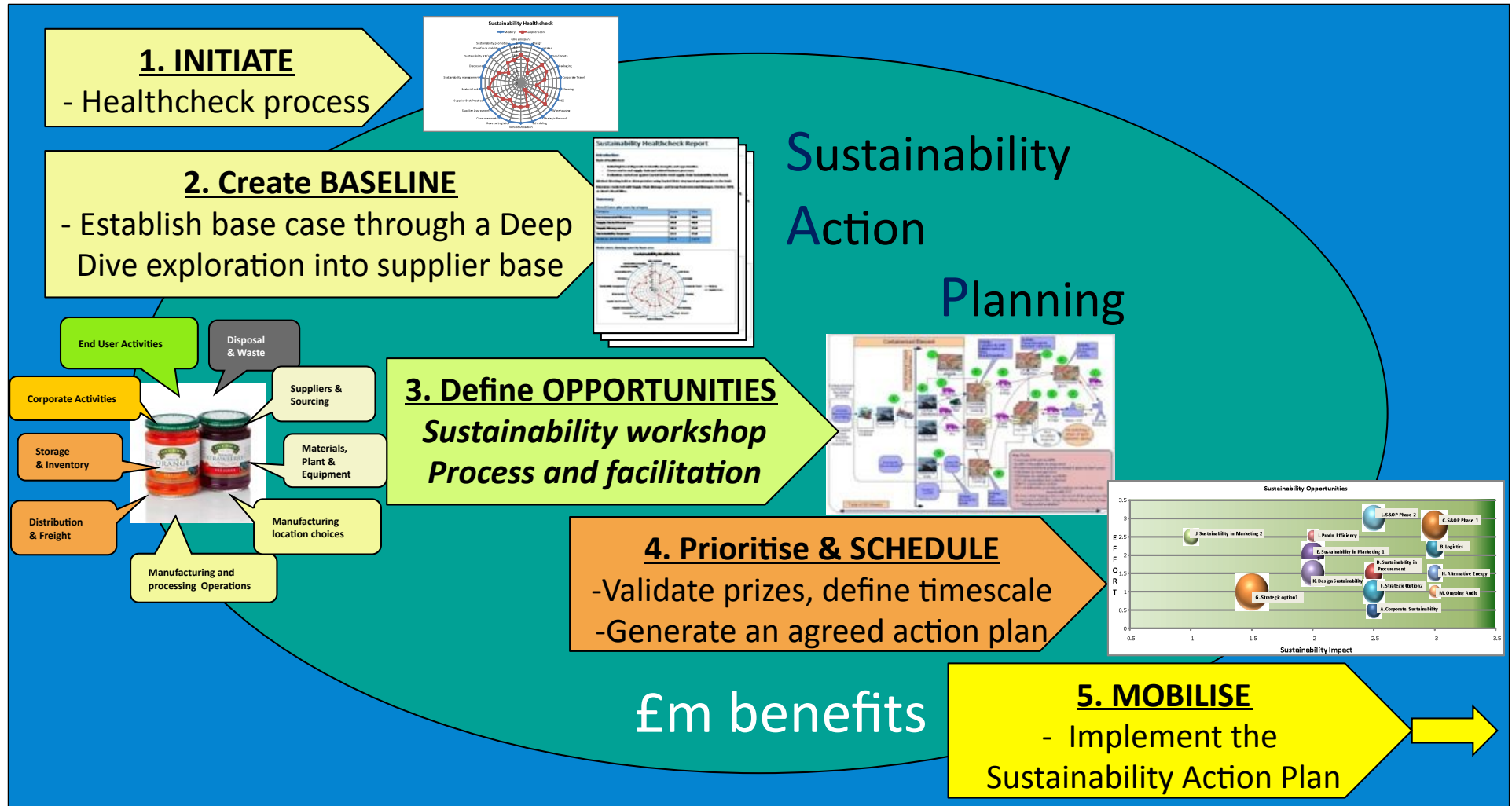


# Where to Start? Take a look at your end-to-end Supply Chain



***Where are your biggest risks and opportunities?***

# Sustainability Action Plan – engages and delivers new value





## Sustainability-focused companies achieve better results

Definition of Maturity Class	Mean Class Performance
<b>Best-in-Class:</b> <b>Top 20%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ 9% reduction in carbon footprint</li> <li>▪ 6% reduction in energy costs</li> <li>▪ 7% reduction in facilities costs</li> <li>▪ 10% reduction in paper costs</li> <li>▪ 7% reduction in transportation / logistics costs</li> <li>▪ 16% increase in customer retention</li> </ul>
<b>Industry Average:</b> <b>Middle 50%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ 6% reduction in carbon footprint</li> <li>▪ Increase in energy costs contained to 4%</li> <li>▪ 1% reduction in facilities costs</li> <li>▪ 5% reduction in paper costs</li> <li>▪ 1% reduction in transportation / logistics costs</li> <li>▪ 5% increase in customer retention</li> </ul>
<b>Laggard:</b> <b>Bottom 30%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ 5% increase in carbon footprint</li> <li>▪ 18% increase in energy costs</li> <li>▪ 18% increase in facilities costs</li> <li>▪ 12% increase in paper costs</li> <li>▪ 19% increase in transportation / logistics costs</li> <li>▪ 4% increase in customer retention</li> </ul>

Source: Aberdeen Group, May 2009

## The best performing companies have Sustainability at their core

1. They achieve 20-30% lower carbon footprint and energy costs than companies which do not focus on Sustainability
2. They achieve 20-30% better facilities and logistics costs
3. They achieve 20-30% better customer retention
4. Those that have Sustainability on the strategic Board agenda see share price growth that out-performs those which have no such focus
5. This share price performance is demonstrated in all key business sectors
6. An increasing number of investors are using the Dow Jones Sustainability Index and the Carbon Disclosure Project to guide their investment decisions

### Sources:

- 1, 2,3 – Aberdeen May 2009;
4. Economist Intelligence Unit 2008;
5. AT Kearney Mar 2009
- 6 GreenBiz June 2009

## There is a strong correlation between share price and Sustainability

- Share price climbers\* put a greater emphasis on social and environmental considerations at board level.
- Share price losers are 2.5 times more likely to have nobody in charge of Sustainability
- Share price climbers place higher importance on social and environmental goals

The Economist Intelligence Unit 2008

\*Share price **climbers** had share price growth of 50% over period; Share price **losers** had share price decline of over 10%

## Simple day to day management issues have a significant impact





Transporting 1 tonne of goods by train has a 900% lower impact than moving 1 tonne of goods by airfreight in a coast to coast USA example.



**Making Sustainability part of Business As Usual**

## Returns and wastage in global supply chains offer major Sustainability improvement opportunities



## Supply chain cold storage : What are leading organisations doing?

### Transport

- More efficient engines
- Super efficient refrigeration
- Gas instead of compression cooling
- Streamlining of vehicles
- Double-deck trailers
- Vehicle management systems
- Driver training and monitoring
- Bio-fuels
- Advanced planning and routing
- Load sharing

### Warehousing

- Upgrade to improve performance of all refrigeration plant – technology and structure.
- Refit of heat, light, ventilation, power to reduce energy consumption
- Fitting of solar panels, even wind turbines
- New builds to the latest standards (e.g. Pineham)
- Waste recovery
- Consolidation centres

***Is that enough to meet the future challenges?***



## The world will change – Supply Chain operations will be affected

### The way we live now

- 3 car households
- Inefficient home heating & insulation
- Limited visibility of energy consumption
- No carbon accounting
- Out of town shopping centres
- Buying products from all over the world
- Everything packaged
- Use once, limited recycling
- Hidden cost of waste disposal

### Future living?

- Fewer cars, Electric cars, car shares
- Fully insulated homes, efficient heating
- Smart grid electricity, visible cost of consumption
- Personal /corporate Carbon allowances
- Return of local shops
- Local sourcing, Community supported agriculture, home grown products
- Minimal packaging
- Compulsory recycling
- Punitive cost of waste disposal



# The Crystal Globe tool offers a deeper understanding – and has a focus on energy and sub elements such as refrigeration

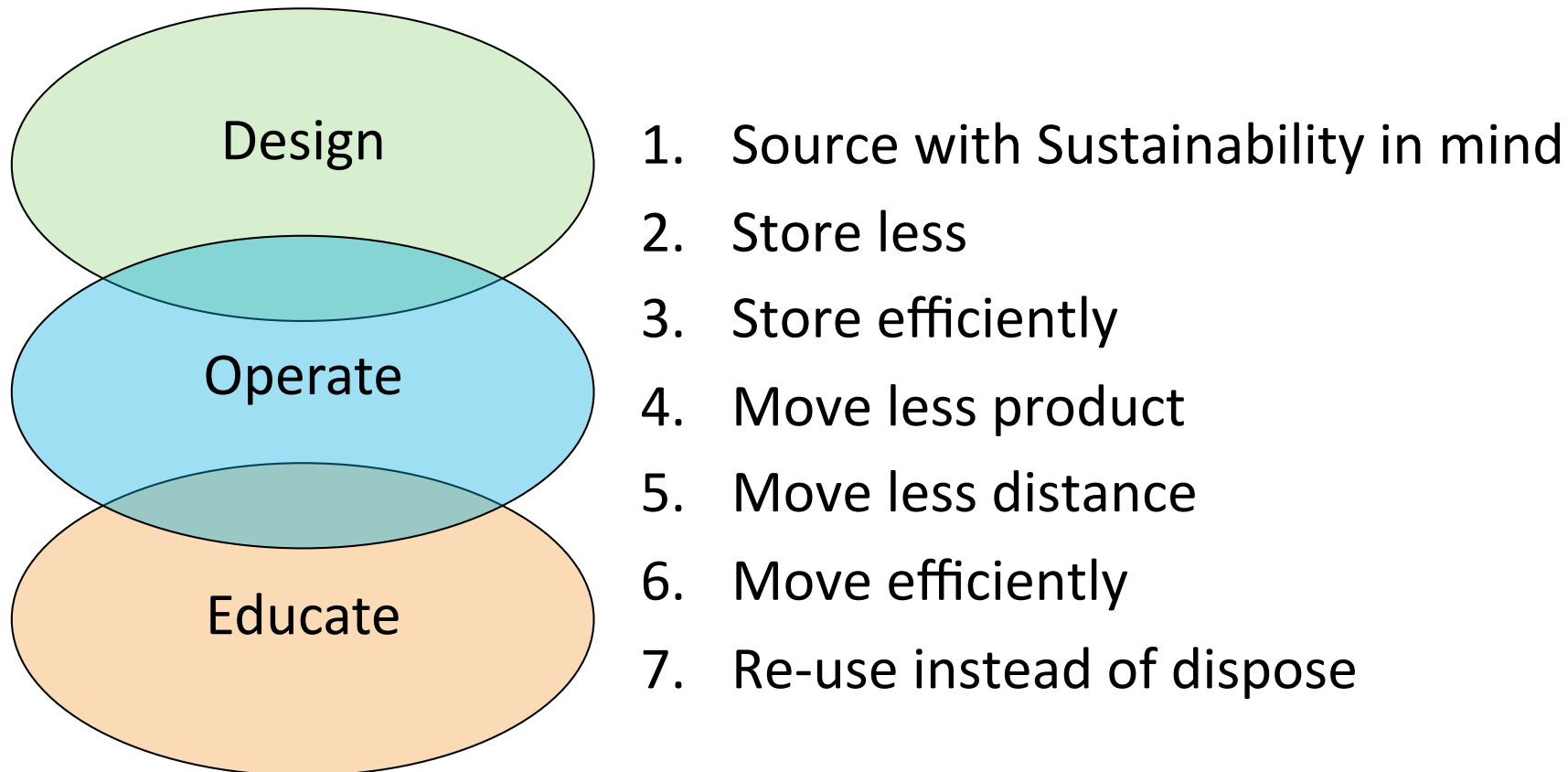
Category	Score	Best in Sector
Design for Sustainability	4	4
Sustainable Procurement	1	3
Raw materials	2	3
Packaging	2	4
Inventory & Planning	2	4
Manufacturing facilities	3	4
Manufacturing processes	3	4
Inbound & Outbound Distribution	2	4
Warehousing operations	3	4
Returns & Reverse Logistics	2	4
Office premises	3	4
Corporate travel	1	4
Strategy & Communications	2	3
Customer purchase & use	3	3
Sustainability Assurance	2	3



## Basic things every organisation needs to be doing to minimise its energy consumption include..

1. Ensure Sustainability in inventory – identify where can you carry less stock and turn it faster. And move stock less often. Work with your customers....
2. Carry out a Sustainability Healthcheck – identify your hotspots and opportunities to enhance your supply chain activities
3. Develop and implement a Sustainability Strategy and prioritised Sustainability Action Plan with a clear focus on energy
4. Model your overall Supply Chain network and explore the scenarios and solutions that will most affect your business
5. Work with your trading partners to identify opportunities to improve mutual Sustainability through collaboration

## Three Principles of Sustainability in your end to end supply chain



***For Sustainability in Logistics “Less” is the new “More”***

It is widely recognised that there are 4 key drivers for achieving  
“Total supply chain Sustainability” ....

Which Ace would you declare first.....

- ♠ - **Cost reduction** – *Achieve operational excellence and minimise costs*
- ♦ - **Risk reduction** – *Protect / enhance brand image*
- ♣ - **Customer Service** – *Retain market share and enhance revenue*
- ♥ - **Carbon, Energy, Water, waste...** – *Reduced environmental impact*



It is widely recognised that there are 4 key drivers for achieving  
“Total supply chain Sustainability” ....

1st	2 <sup>nd</sup>	3rd	4th
10	8	6	5
8	7	13	4
6	9	2	2
4	4	7	17

Which “Ace” would you declare first.....



- ***Cost reduction***



- ***Risk reduction***



- ***Customer Service***



- ***Carbon, Energy, Water, waste...***

## ***Sustainability is a value creation opportunity***

- **Supply chain Sustainability has tangible bottom line value. Payback within 12 months on any investment is easily achievable.**
- **Creating a Sustainability Action plan is simple, obvious business sense**
- **Benchmarking tools and external support will deepen and widen the benefits case.**
- **All businesses will be impacted by some / all aspects of the global challenges within a maximum of 2 years**

## Total Supply Chain Sustainability is an ongoing journey....

***An end to end business operation that is responsible, future proof and profitable:***

- Clear Board level understanding of the impact of Sustainability on the business and the extended supply chain
- A comprehensive and integrated Sustainability strategy and action plan
- Continuous improvement through benchmarking, audit and review

## Supply chain energy – a view of the future ...

### *Environmental balance & Financial value*

If not now, then when?

If not me, then Who?

This is Our responsibility, Our opportunity.

Take action now . . .



**weir**

total supply chain sustainability

Incorporating ProActive Logistics

**Thank You**



**Making Sustainability part of Business As Usual**



**For more information, case studies and  
cost reduction / carbon saving and other  
Sustainability downloads**

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