

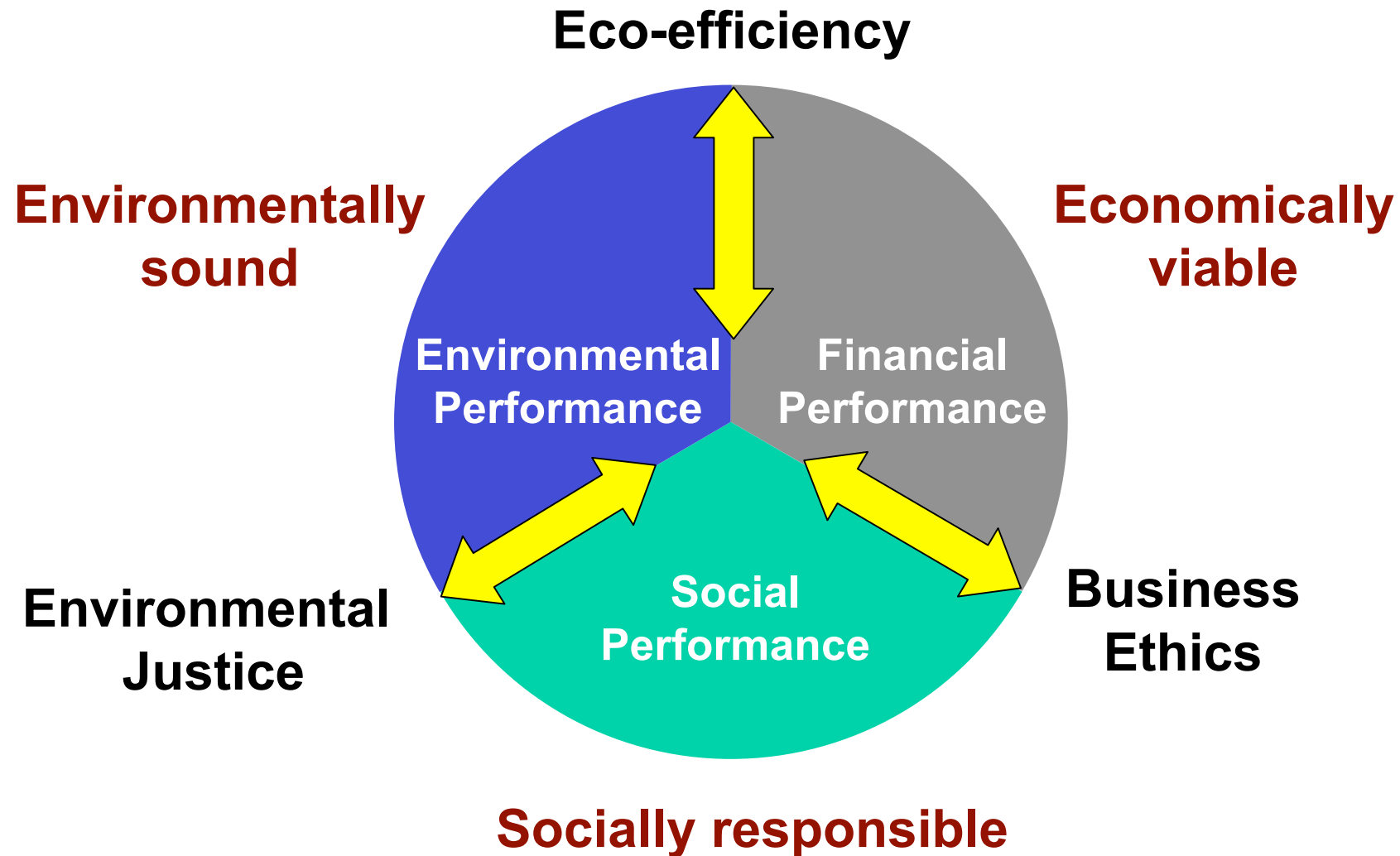
Developing a Sustainable World

Richard Miller
Miller-Klein Associates Ltd

25th January 2007



Triple bottom line



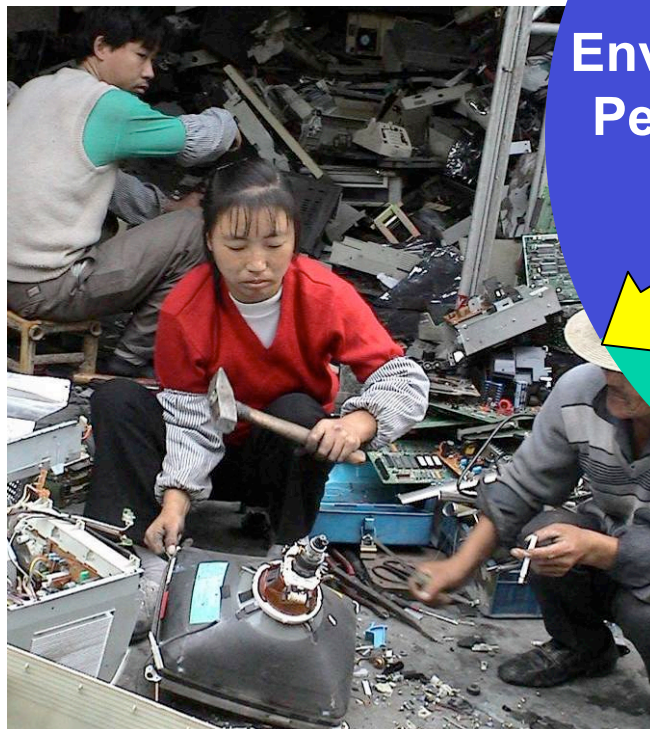
“Cannibals with Forks” – John Elkington



Bottom line

**Environmentally
sound**

**Economically
viable**



**Environmental
Performance**

**Financial
Performance**

**Social
Performance**



Socially responsible

“Cannibals with Forks” – John Elkington

Business benefits

- Compliance at lowest cost
- Lower production costs
- Increased product benefits
- Increased market share
- New market opportunities
- Improved customer relationships
- Potential for market leadership
- Better reputation

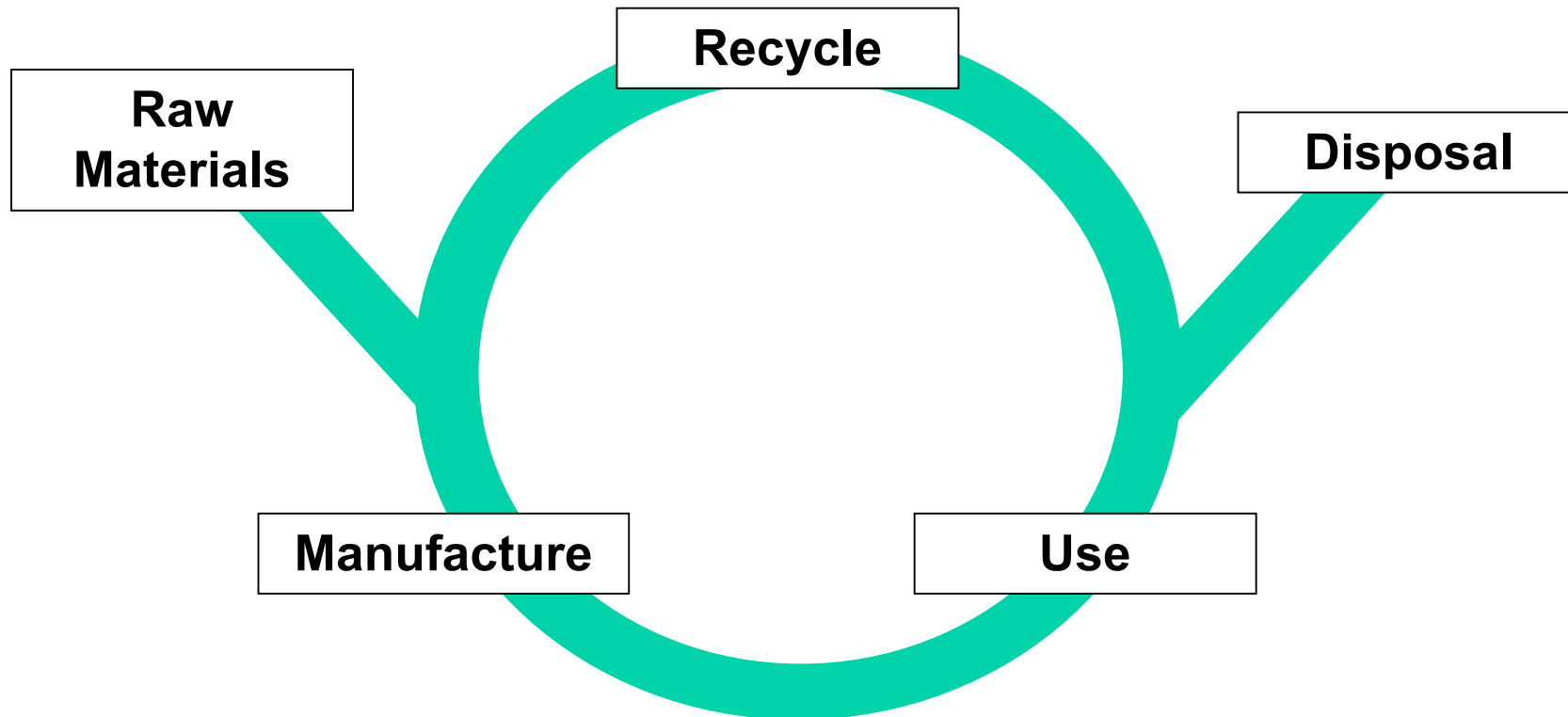
Overcoming barriers

- Environmental is not overhead
- Don't *fix* the problem
- There is *no* waste
- Reduced impact *and* higher value

Opening up opportunities

- Think service *not* product
- Think lifecycle
- Look downstream

Life-cycle thinking

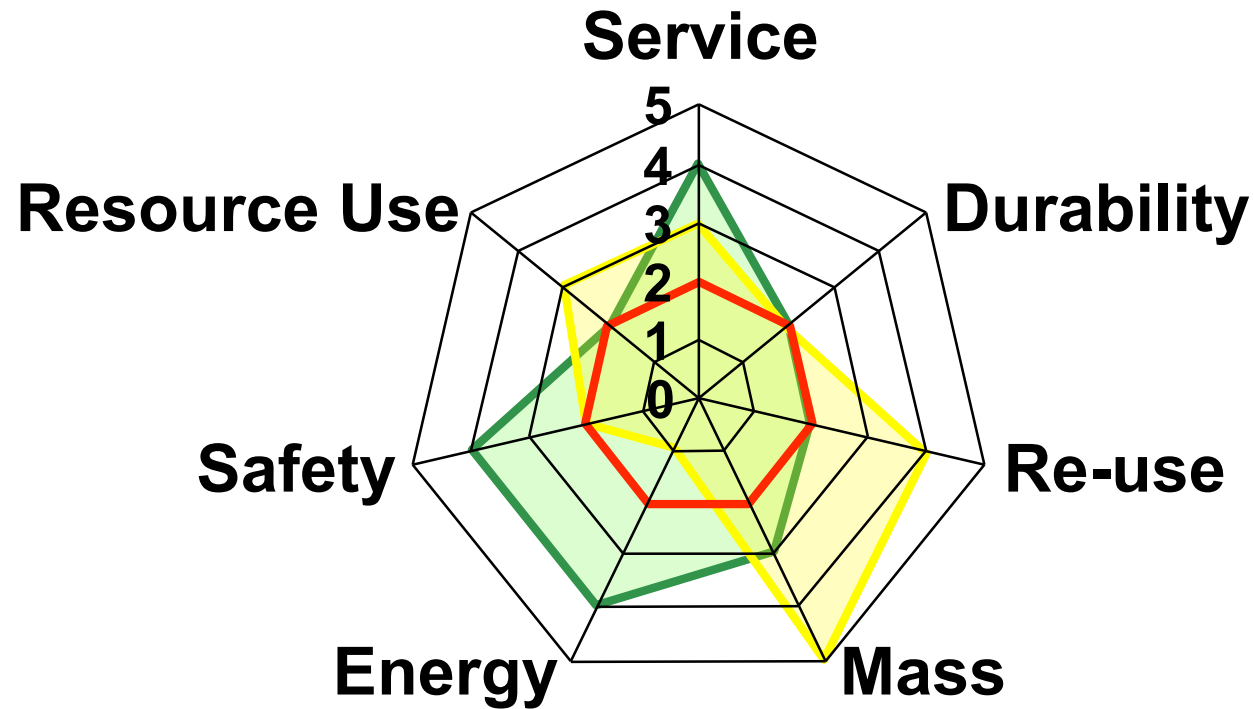


“Cradle to Grave” or “Cradle to Cradle”

Life-cycle thinking

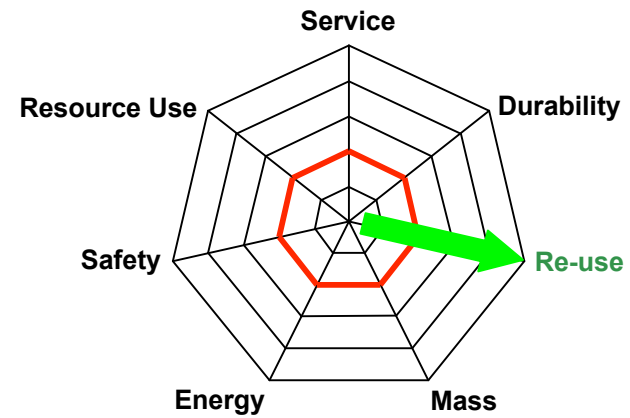


Eco-Innovation Compass



Eco-innovation compass – WBCSD and Dow

Re-use and re-cycle



UV-curable, one-component, low-VOC refinish primer

Urethane acrylate oligomer

>50% less VOC

Cures with UV-A lamps or sunlight

No bake ovens

Cuts primer use by >60%

Waste reduced from 20% to near zero

Improved adhesion, corrosion and abrasion resistance

Eliminates most PPE



Metalworking fluids

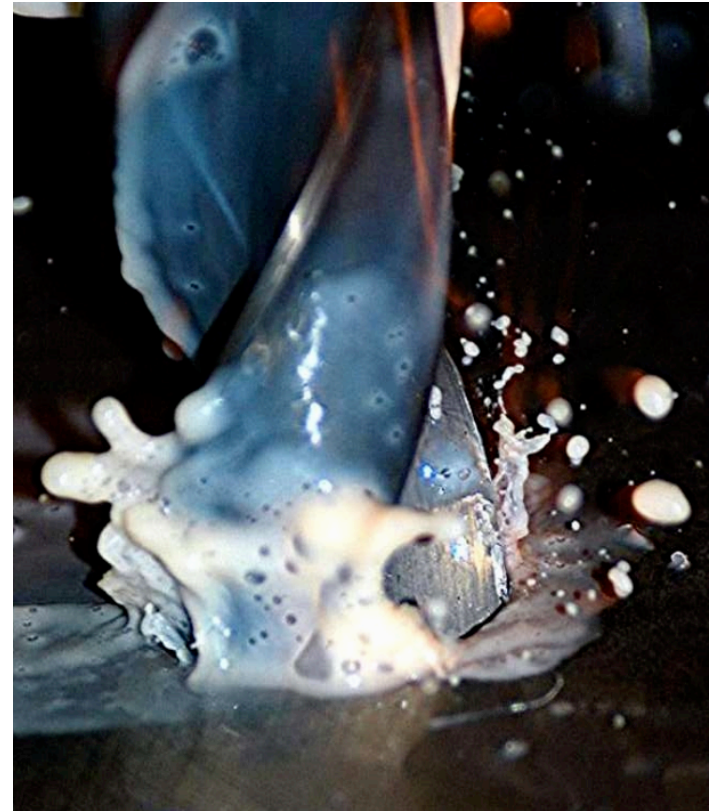
Hydraulic and metalworking oils from renewable vegetable sources

Higher price per litre – *but:*

Dagenham Engine Plant

- 2 million litres less effluent each year
- fewer grades and greater compatibility
- superior metalworking performance
- 20% cost reduction at Dagenham
- 40% expected at Bridgend

...



Challenges

- Packaging
 - Renewable and biodegradable
 - Lightweight
 - Barrier properties
- Construction
 - Insulation
 - Recyclable construction materials
 - Low energy systems

