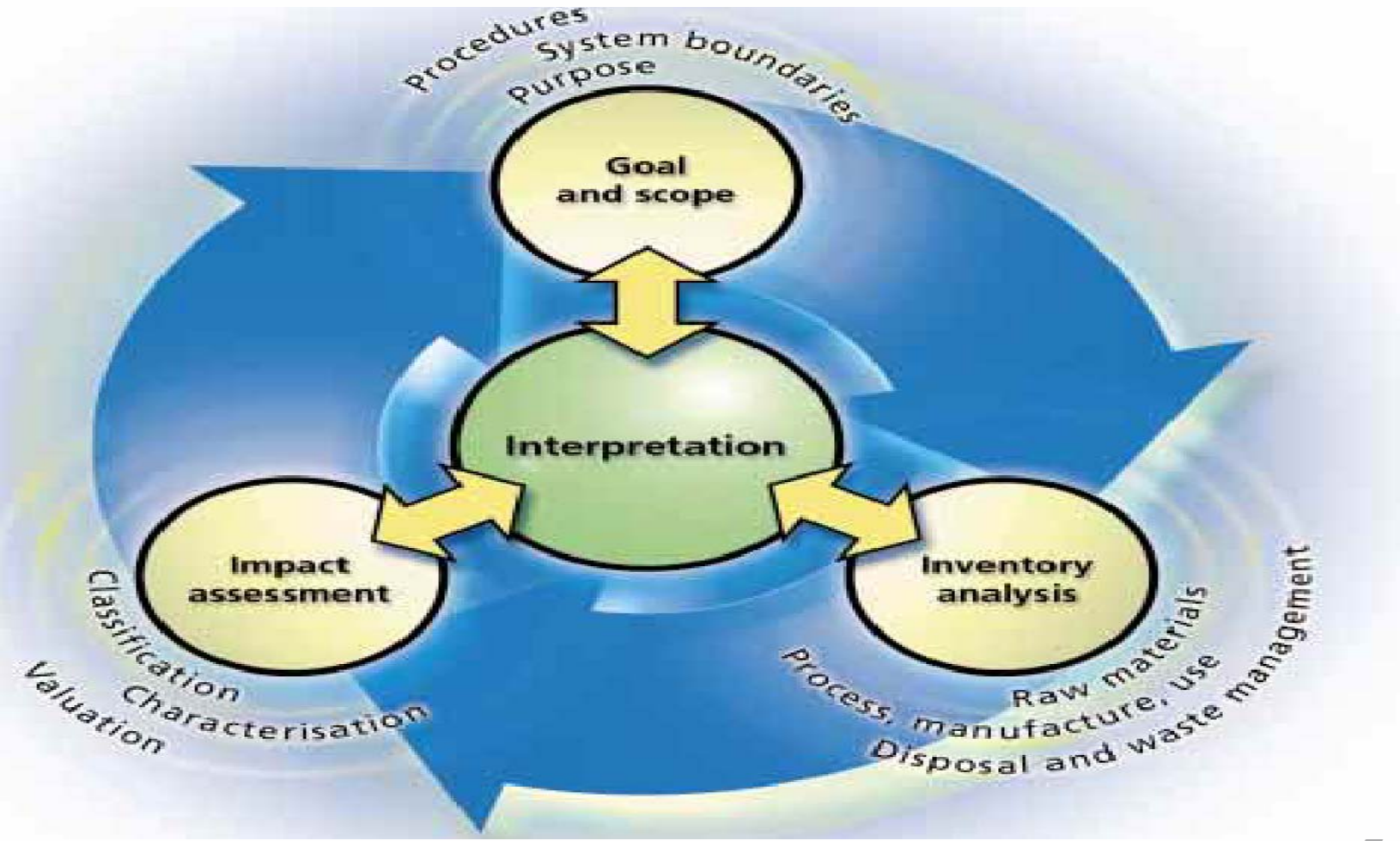




LIFE-CYCLE ASSESSMENT





What is LCA

Ecobalance of a product

- Interaction between product and environment
- Material, energy and waste flow from cradle to grave

How much;...

Energy use

Raw materials

Water use

Emissions

Effluents

Land use

Impacts from products and services

Re-use/recycling/incineration/landfilling

Human health/child labour

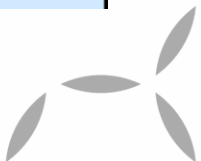
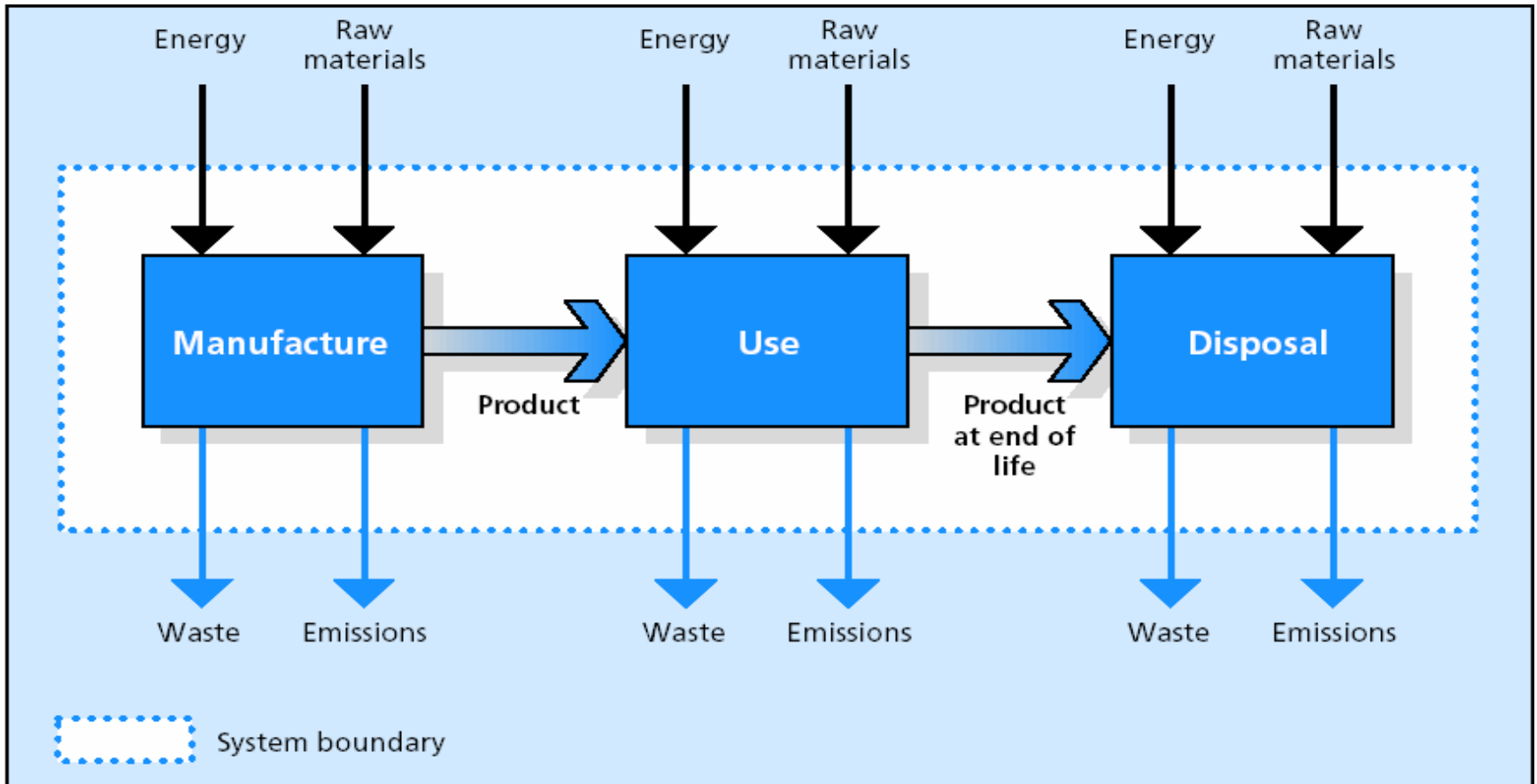
... For **1 kg of final fish product** for example





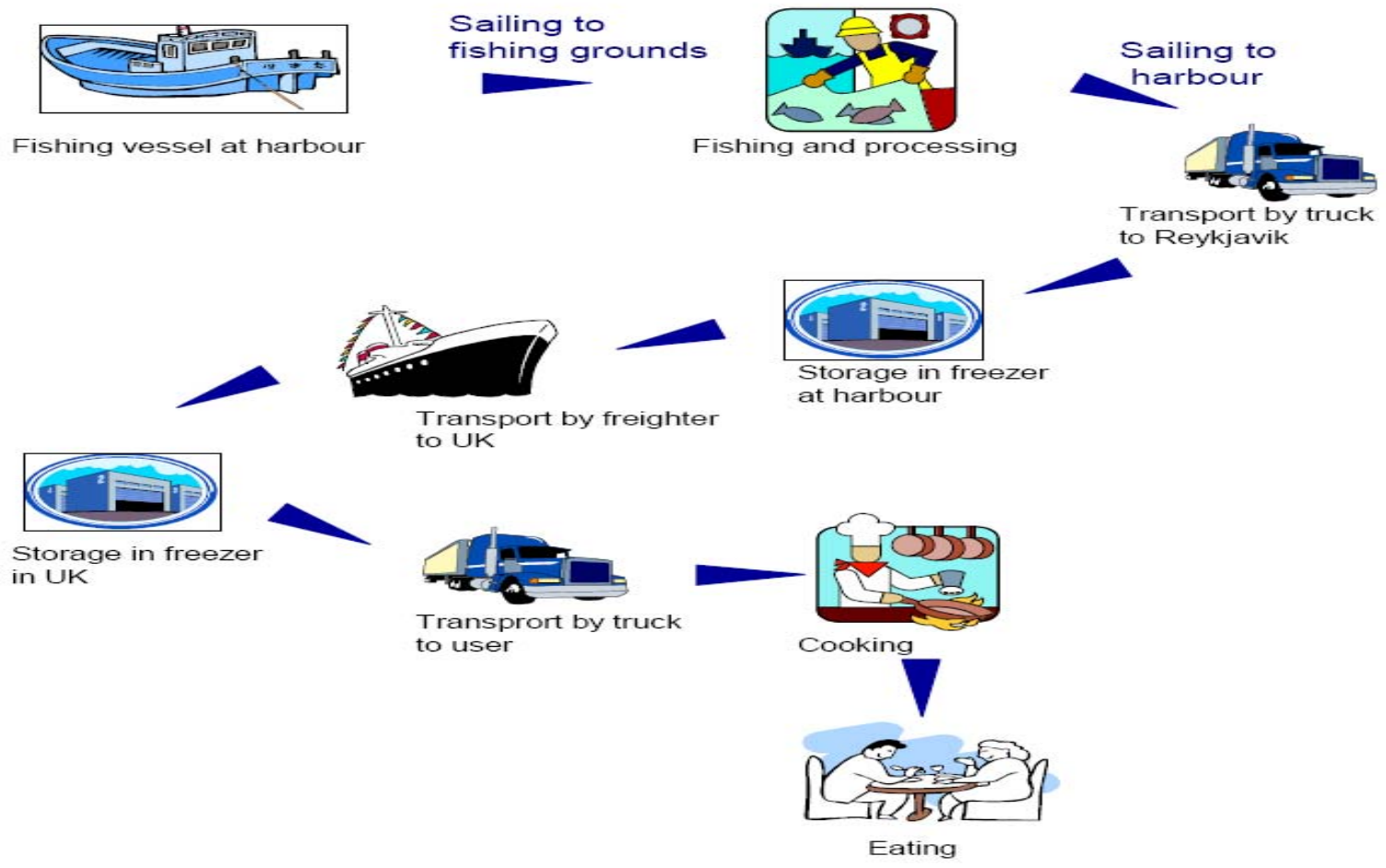
What is LCA?

Environmental impacts in the product chain





LCA





Why LCA

LCA is for smart companies

Reducing the use of resources – **cost savings**

- Procter and Gamble: 50 million GBP savings in material costs and waste disposal
- Smithkline Beecham: 30.000 tonnes/year in package reductions

Governmental regulations; Kyoto protocol, EuP (ecolabels)

Consumers and marketing; Comparison of products due to their environmental impact

Consumers and producers; Transparency

Environmental certification ISO 14000, *green markets*

Database for public, universities and governments



References: Uk Environmental Agency
European Parliament





LCA Goals

- *All products have environmental impacts, we can make them more environmentally friendly*
- *Environmental considerations and economics are not separated issues*
- *Consumers are demanding greener and cleaner markets –Tesco-*
- *Work with the market - Turn green or shut down - !!*

