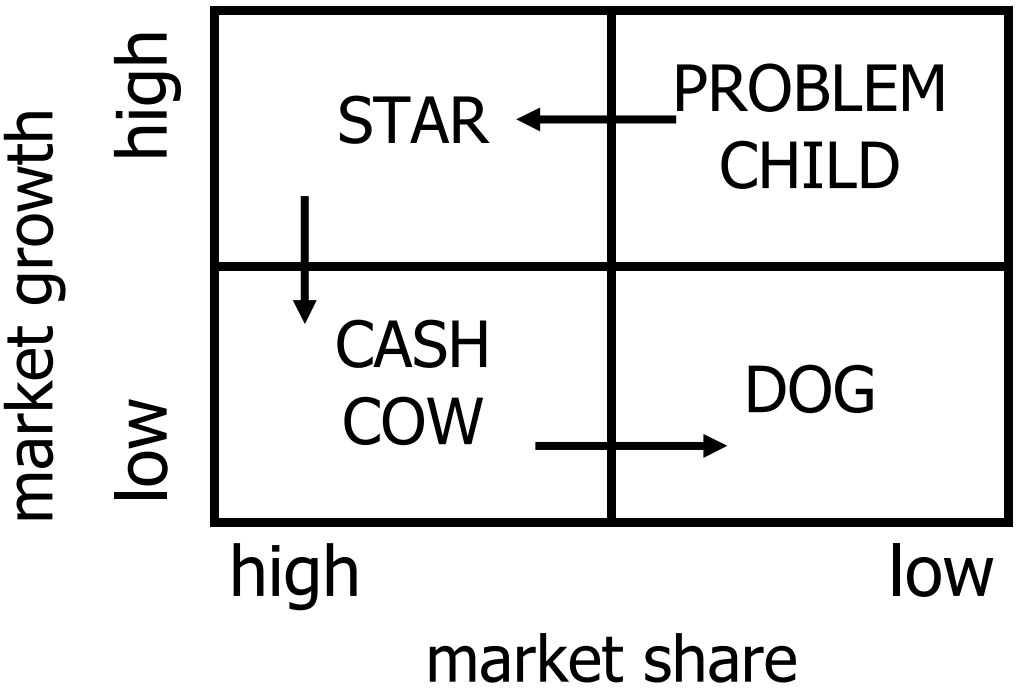
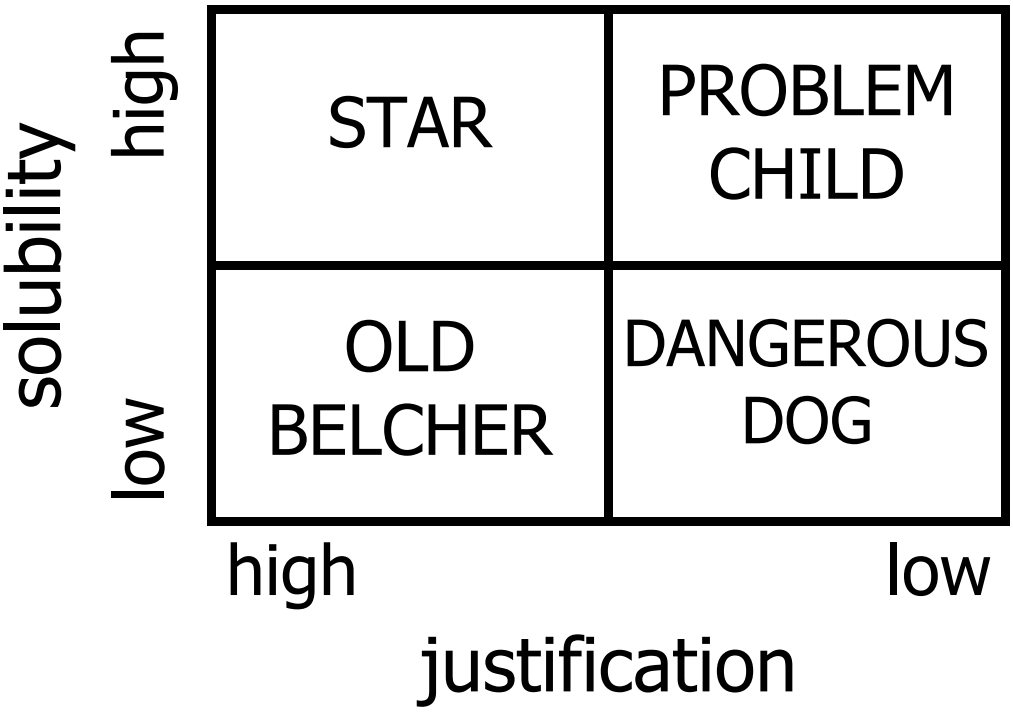
Issues Portfolio Tool – Rose's Four Acres Matrix

I developed this tool for a Unilever training exercise held at the company's Four Acres facility in Kingston, Surrey (UK) in July 2002. It is a way of categorizing possible environmental trajectories of businesses, brands, products or activities and optimal corporate responses, from an environmental point of view.

It is inspired by the Boston Matrix (see www.marketingteacher.com), which categorizes products, brands or business activities within a portfolio into stars (high growth and high market share), dogs (low growth and low market share), problem child (high growth, low market share), and cash cow (low growth but high market share). This supposedly represents a life cycle/fate (arrows).



My matrix is roughly based around the two parameters of solubility – which problems are soluble or avoidable – and justification (need). As such it interacts with the scandal equation (below) – because the less something is needed, the less reason there is to accept any risk, loss or damage associated with or caused by it. Various 'sustainability' authors (eg www.sustainability.co.uk) have proposed 'need' as a criterion. It can be used to segment a portfolio of brands or products to look for vulnerabilities and areas that need attention, and to inform scenarios of how issues might develop.



FOUR ACRES ENVIRONMENTAL ISSUES MATRIX

This typology may help identify probable courses of issues around an activity or product, possibly, optimal corporate responses. It builds on the conditions of TNS or The Natural Step, which in my view is the most useful 'version' of sustainable development. I would welcome feedback at info@campaignstrategy.org on these ideas. TNS conditions are only fulfilled by a seriously effective environmental 'solution'.

Risk politics – and the contested frameworks for risk – is particularly relevant in the 'dangerous dogs' category. Here we see the interaction of the way people perceive a company – essentially the same way as they look at an individual (see Brent Spar scale) – and risk politics.

Risk politics, inspired by German sociologist Ulrich Beck (author of *Risk Society*), is about the creation and distribution of risk (cf wealth). An important study of risk in politics and decision-making is 'On Science And Precaution in The Management Of Risk' by Andrew Stirling (and co-workers from Stuttgart, Twente, and Helsinki) for the European Commission – contact Andy Stirling at a.c.stirling@sussex.ac.uk A recent related book is The Precautionary Principle in the 20th Century Late Lessons from Early Warnings Editor : Poul Harremoës, David Gee, Malcolm MacGarvin, Andy Stirling, Jane Keys, Brian Wynne, Sofia Guedes Vaz (www.earthscan.co.uk)

The Brent Spar scale is my personal assessment of how the public saw issues of corporate responsibility in the debate over dumping the redundant oil installation. The worst factors are at the top. Shell was saying 'this is legal', and Greenpeace was saying 'this is gross'. Arguably both were right – but Greenpeace won because, for various reasons, simply being legal carries little weight. (Due to lobbying by industry standards are set low, and so on – most importantly though, corporate responsibility is about ethics rather than mechanical compliance with the letter of the law, just as ethics are in 'real life'). Companies fail to spot 'dangerous dog' situations of the throwback type by focussing on the bottom of the Brent Spar scale rather than the top.

Another type of dangerous dog is where the potential consequences of the risk are very high or unknowable, and the justification is very low (cf Stirling's paper). In this case, for example in conditions of ignorance, resorting to quantitative probabalistic risk analysis and then declaring a hazard or risk non-existent because there is 'no evidence' (ie no data means no risk), is tantamount to saying any level of risk or hazard, applied to anyone, is acceptable. Not surprisingly, this is rejected by the 'public'.

THE BRENT SPAR SCALE

Gross Acts ***worst***
Deceitful Acts
Complacent Acts
Incompetent Acts
Output Failure
Relative Failure
Illegal Acts ***least worst***

Summary of my Four Acres matrix on corporate issues of the environment.

Probable trajectories of problems/businesses and optimal corporate responses

Breakthrough technologies. Solutions in themselves. Eg renewables, green hydrogen, economy of Iceland. Fulfil TNS conditions. Solutions which can be promoted as/in/by alliances. And/or practices / values revolutions (organic farming plus ?). Almost always brand distinguishing. NGOs will, barring dogmatic objections to business, support sales maximisation.

Major conflicts. Battle royal. Soluble problems not being solved due, principally and typically to conflict of interest. Long term battles eg over energy policy and practices/ climate change/ chlorine industry. Scandal equation applies but less dramatic than dangerous dogs. Divides entire industries one from another. The biggest corporate signal of change is to shift from here to 'stars' – the big innovation opportunity/ challenge. Counts for much more than eco-efficiency and good housekeeping. Can distinguish brands. Attracts heavy campaign groups, 'progressive' governments.

STAR	PROBLEM CHILD
OLD BELCHER	DANGEROUS DOG

Typically established routine problems of known magnitude, large volumes and justifiable processes eg transport, food production. Risks usually known. Susceptible to mitigation and eco-efficiency gains, regulation and management but TNS conditions hard to reach without step change in technology and or values. Local ngo campaigns and 'sustainable development' and compliance agendas significant. Scope for leading regulation, setting best practice. Standards, certification, custody chain work. Drama not likely but performance expected. Not likely/easy to distinguish brands. Close relations with management agencies possible here. Scope for FSC/ MSC type arrangements. Consumer visible.

Typically throwback outrages eg Brent Spar, NY waste barge etc or, hazardous disregard of the values or interests of others with new technologies (eg GM). Ie abrogation of responsibility in risk politics – clear failures of CSR. Likely to fall foul of the scandal equation and in some cases to be 'gross'. Maximum scope for NGO<>company conflict as in risk cases government will be reluctant to act unless on the precautionary principle (a divide among governments). Massive scope for brand damage. Companies on their own here. Scientistic thinking (see Stirling) a corporate vulnerability here. Practice is not reformable/soluble.

Scandal = awfulness x <u>what can be done</u> x immoral profit
what is being done

The Natural Step (see http://www.naturalstep.org.uk/origins.html)

two preconditions:

Basic science principles:

matter and energy cannot be created or destroyed;

matter and energy tend to disperse;

net increase in material quality on Earth can be produced only by sun-driven processes;

we never consume energy or matter - only its purity and structure.

The precondition of our lives:

Humanity cannot tolerate continual degradation of the environment.

leads to the cyclic (systems) principle which says that,

"reconstitution of material quality must be

at least as large as its dissipation"

The movement from linear to cyclic processes is the essence of the Natural Step theory

The Natural Step System Conditions

1: Materials from the earth's crust must not be allowed to systematically increase in nature. (Examples of violation of this condition are mining and the use of fossil fuels.)

2: Persistent substances produced by society must not systematically increase in nature. (Nature cannot withstand systematic increase in substances such as CFCs, DDT, and plastics and POPs and modified genes and EDCs.)

3: The physical basis for the earth's productive natural cycles and biological diversity must not be systematically deteriorated. (Examples of violation of this condition include overfishing and habitat destruction and modified genes.)

4: There must be fair and efficient use of resources with respect to meeting human needs.

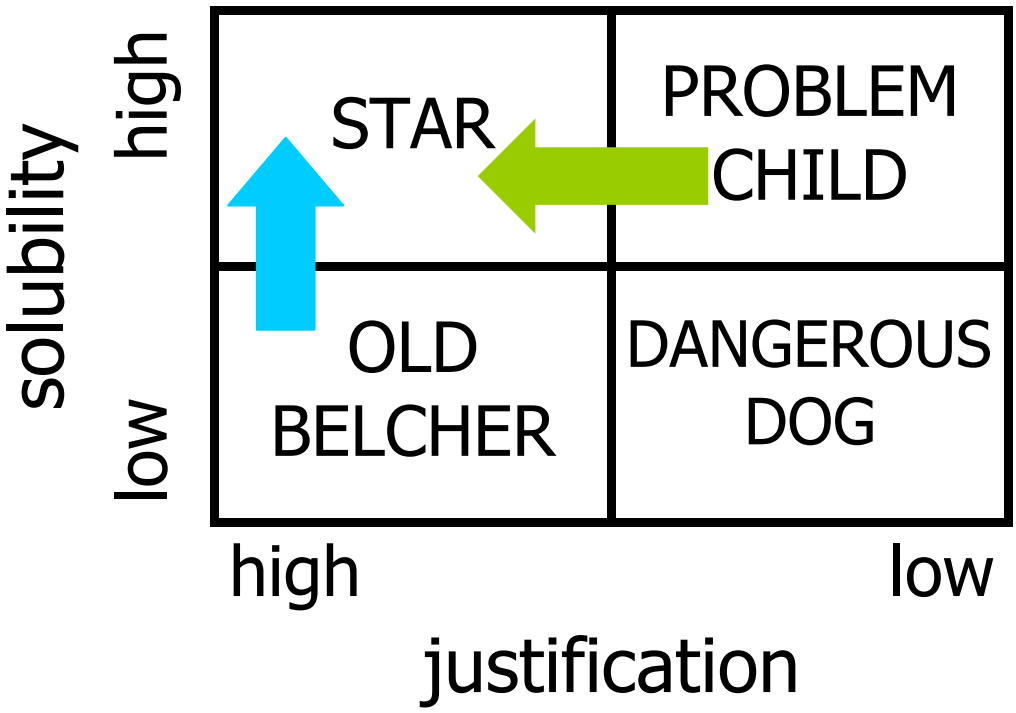
Positive uses of the matrix:

There are many possible uses of the Four Acres Matrix. Here are some possibilities.

Green arrow indicates strategic innovation. Eg from supplying fossil fuel energy to supply ambient (renewable) energy. Typically involves major innovation and a break with others in a sector.

A *precautionary strategy* would involve staying on the left side of the matrix – eg not moving into frivolous or un-necessary activities or products.

A blue arrow indicates moving a hard-to-solve probably complex process into a TNS quality solution. This is hard to do – an example might be organic farming in place of conventional farming. Typically involves many separate social, process and technical changes.



Dr Andrew Stirling's research is available on the web at
<ftp://ftp.jrc.es/pub/EURdoc/eur19056en.pdf> (for 'science and precaution')
and
<http://reports.eea.eu.int/environmental_issue_report_2001_22/en/issue-22-part-00.pdf>
(for the EEA report).