



Michael Townsend

For those organisations and individuals seriously engaged in supporting the transition to a more sustainable world, one could be forgiven for feeling less than enthusiastic in the UK. The Sustainable Development Commission has gone. The Green Investment Bank is sluggish. The latest government vision for mainstreaming sustainable development does not inspire much confidence that sustainability is anywhere near a real priority.

For those concerned with energy, it is also a turbulent time. Feed-in tariffs have been slashed for schemes above 50kW. Although the rationale is the protection of incentives for householders and SMEs, it doesn't make sense to undermine even modest moves to harvesting this important source of energy, let alone to further erode confidence in ever reaching a stable policy environment. The level of uncertainty is a major factor in the reduction of investment in renewable energies in UK, down 70% last year, according to Bloomberg. We have now dropped from third to 13th place in the league of countries developing green energy technology.

There is also little comfort for those who lean towards more conventional sources of energy. The reality of peak oil is taking hold with oil executives, with Shell's *Signals & Signposts* report suggesting we are entering a "zone of uncertainty". The energy gap between increasing global demand and decreasing supply is looming larger than ever.

What this means for business is, in the short term, an end to cheap energy. We are experiencing the direct impacts with running costs of facilities and transport increasing. There are also indirect impacts on availability and affordability of resources; just about everything is linked to the cost of energy.

The energy gap is a reality – and it's time to start developing a response



Major reductions in greenhouse gas emissions are possible today

We also have to be mindful of the strategic risk to security of energy supply. Some commentators suggest the energy gap could lead to radical changes in the foundations of our economy, perhaps within the next five years. But business doesn't need to wait for the Government to set the right policies as the solutions are already available and the business case works. As we have found on our Global Research Project, there are some great pioneers.

Major reductions in energy use and greenhouse gas emission of 30-40% are possible today. Gazeley, a global logistics facility provider, has achieved 39% reduction in the operational carbon

footprint of its facilities through integrating a combination of solutions, including solar thermal hot water systems, optimising roof-lights, energy efficient lighting, super airtight & insulated building envelope, biomass, solar PV and wind turbines. A prime example is the John Lewis facility at Magna Park where £238,000 is saved each year on operational costs. The business case demonstrates 88% return on investment and payback within four years.

InterfaceFLOR, a producer of modular floor coverings, has reduced global emissions by 44% by integrating a range of solutions. Energy efficiency is promoted at manufacturing sites, including motion sensor lighting, passive cooling and the use of reflectors to reduce active bulbs by 50%. In Europe all factories use 100% renewable electricity, produced by wind farms, small-scale hydro and biomass.

Both companies apply energy hierarchy thinking. Gazeley applies a three-tier approach, firstly improving the energy efficiency of its buildings, then seeking to use energy efficient plant and equipment, followed by an optimal mix of renewable energy solutions. The key principle is to

reduce the energy requirement as far as possible before looking at alternative sources of energy.

InterfaceFLOR applies a similar hierarchy with energy initiatives focused in four main areas: Reduction of demand; energy efficiency at manufacturing sites; appropriate application of renewables; and principled carbon offsets where carbon neutral status is considered important.

Many companies are confident of achieving 30-40% energy reduction, but are still working out how they will deliver the ultimate target of 80% reduction in absolute terms and to do so in an affordable way.

Businesses looking to go beyond 'quick wins' will benefit from develop their plans now. Taking the first step is important; by acknowledging the reality of the energy gap, the impending impact on the business, building this factor into the strategic business risk plan and developing energy hierarchy responses. There is a real opportunity to close the energy gap, one business at a time.

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