

ENERGY REDUCTION

# thinking about energy

Go-Ahead is working to reduce the carbon footprint of its public transport operations through a combination of measures that harness new technology and help employees operate trains and buses more efficiently. In the process it is saving money and improving business efficiency

From a climate change perspective, no form of transport that relies on fossil fuels is a good idea. In the UK, one third of greenhouse gas emissions derive from the transport sector alone. The bulk of these come from the 31 million cars on the nation's roads.

In that sense, a public transport company such as Go Ahead finds itself in the vanguard. The FTSE250 company operates eight bus companies and four rail operators across the UK. Every year, it shuffles one billion passengers from A to B.

Samantha Hodder, group communications director, is clear as to where the company can make the biggest difference. 'We can help reduce UK emissions simply by encouraging people to use our buses and trains instead of taking their car,' she says.

Go Ahead is doing that. Working with industry peers, for example, it has backed a nationwide marketing campaign to give away one million free bus tickets. It also has the ear of government. Proactive lobbying saw the fuel duty for buses only minimally reduced during the recent comprehensive spending review, rather than scrapped altogether as some had feared.

Increased use of public transport is of course welcome, not only from an environmental perspective, but for Go Ahead's shareholders too. But that is not the whole picture.

Go Ahead's trains and buses are not without their climate change impacts. Tackling its own carbon footprint is the subject of a

new group-wide drive, initiated a couple of years ago. To kick off the process, the company devoted an afternoon of its annual senior management conference to brainstorming ways of cutting energy use.

Hodder admits that it can be 'quite challenging' to pull together the company's various business units, all of which intentionally operate at arms length from the corporate centre. But Go Ahead's management made two things clear from the outset: first, that improving the organization's environmental impact would only work with collective action, and second, that any strategy it developed would fail if it was not locally owned.

'Because of our devolved management style, this isn't something we can do from the level of group headquarters. It's very much about getting people interested and involved at a local level,' Hodder insists.

Go Ahead emerged from the 2008 conference with

## the company

Go-Ahead is a UK-based business that operates train and bus services under several franchises and brand names, including Oxford Bus and Gatwick Express. It has a turnover of £630million (\$1billion, €740m), employs around 22,000 people, and carries more than one billion passengers on its buses and trains each year. It:

- reduced bus accidents by six per cent in 2009/10
- has achieved 'gold standard' in Business in the Community's Responsibility Index for four years consecutively
- has fitted 92 per cent of its bus fleet and 78 per cent of its trains with CCTV cameras as part of a nationwide strategy to reassure passengers and staff – and to minimise crime
- handed over £250,000 to charities and community groups in 2009/10.

two main accomplishments. First and foremost was the buy-in of management from across the various businesses. The event was, as Hodder puts it, a 'light bulb moment'. The second outcome centred on moving forward. By creating an Energy Forum, Go Ahead established a senior management group that cut across various units. Meeting every quarter, it now acts as a 'hub' for developing environmental strategy.

But it's not all talk. Go Ahead has set itself an exacting target: to reduce its carbon emissions by 20 per cent by 2015, taking 2007/08 as its base year. The last two years have seen the company set about achieving those reduction objectives on multiple fronts. Some of the biggest gains have come from its train business. Around 60 per cent of the company's emissions derive from traction electricity used to power its fleet of electric trains. Working closely with Network Rail, the entity responsible for the UK's rail infrastructure, the company has developed an innovative new 'regenerative braking' system. 'It was quite a complex technical challenge that no-one had tried before. Now other rail companies are following our lead', says Hodder.

They are doing so with good reason. The regenerative braking system has resulted in savings of eight per cent in the amount of electric current used for traction. In business terms, that has shaved off a similar proportion of Go Ahead's substantial annual electricity bill.

As for its fleet of 3700 buses, the company has introduced a smart new technology that measures key determinants of fuel use. Thanks to the £3million RIBAS system, Go Ahead now has a detailed record of the revving, idling, braking, acceleration, and speed of every bus journey.

**the company devoted an afternoon of its senior management conference to talking about energy use**



■ Go Ahead chief executive Keith Ludeman in front of one of the company's ground-breaking regenerative braking trains

At the same time, all of the company's 8000 bus drivers have gone through extensive training in fuel-efficient driving. The information from RIBAS helps identify where further training is needed. Again, the deliverables are quick and obvious. Fleet miles per gallon are up by 3.5 per cent, delivering automatic cost savings at the pump. As for the environment, emissions per passenger journey have dropped by five per cent since the introduction of RIBAS. Go Ahead's other major inroad has concentrated on its stock of depots and stations. A motion-sensitive lighting system, installed in all its sites at a cost of £3.5m, has contributed to a 60 per cent reduction in electricity use in some cases.

'Much of it is fairly obvious', Hodder admits, 'but it can make a huge difference'. In the first 12 months, the company's efforts resulted in a nine per cent reduction in carbon emissions per passenger journey – putting Go Ahead nearly half way to its target.

Hodder insists the company isn't going to slip into cruise control, however. Many of the early gains represent 'easy wins', she acknowledges, and there is much more to be done. Under a detailed five-year plan, the years ahead will see the company build on its early advances in areas such as traction electricity and site energy. The regenerative braking system, for example, will be rolled out from its Southern train business to its Southeastern brand. The plan includes new challenges too. By 2012, for instance, the company will be replacing its gas oil with ultra low sulphur diesel.

Not all issues on the to-do list are linked to climate change. Water is a case in point. By cutting the volume of water it uses to wash its buses and trains to less than a third of present levels, it calculates that 80 million litres can be saved per year.

The company has emerged from its journey to date not only greener but savvier too. One vital lesson it has taken away from its experience to date is the importance of engaging staff. Training has helped in that respect. Go Ahead calculates that refining its training on fuel-efficient driving can help improve bus efficiency by

another ten per cent. Incentive schemes have also managed to catch employees' imaginations. Several staff award schemes have branched out from a traditional customer service focus to incorporate an individual's environmental performance.

Above all, though, Go Ahead has learned the importance of working in partnership with others. Hybrid fuel bus technology will also need a similar approach, requiring a positive working alliance between bus operators, suppliers and policy makers if such technology is to be more financially viable. And the prospect of diesel buses becoming lighter and more carbon efficient depends on a cross-sectoral approach.

Go Ahead's macro climate change strategy – namely, getting people out of their cars and onto public transport – rests on the same joined-up thinking. Only an integrated public transport system that works for consumers will get them out of their cars for good. It all makes sense on paper. But with public budgets heading for lean times, winning the UK government's ear will not be without its challenges.

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## ibe comment GO-AHEAD

Business action on energy efficiency is becoming common, but what makes Go-Ahead stand out is its innovative strategies, which are pushing boundaries. The regenerative braking system is an example of this. Support at senior management level, plus employee engagement, strongly indicates that Go-Ahead will be successful in its plans.

### Points of interest:

- partnerships are likely to generate long term changes through an integrated approach
- the Energy Forum provides a 'hub' for senior management to take responsibility and be directly involved in decision-making on energy
- training improves employee awareness, allowing staff to become more engaged.