

**Submission for Environmental Award.
Carbon reduction category.**

Tarmac Quarry Materials N. Ireland operations have a determined strategy to reduce our carbon footprint across all production units and materials being produced.

Our starting point was to capture energy consumption data and record accurate information that could confidently be used as a baseline and then to maintain that data on a monthly basis. (See charts and data sheet)

Stage 2 was to look at quick wins and to do this we set up Project Save which looked at switching off equipment at night, turning down thermostats, and “just in time” production techniques. All employees are involved and Project Save is driven by Energy champions.

We were and are however struggling to reduce our emissions further as the current economic climate has reduced our outputs and this has led to less efficient production with increased stop/starts, and we needed to do some lateral thinking on emission reduction. We have approached this in two ways.

1. At Northern Ireland Area level.

We looked at our electricity usage and spoke to power suppliers over several months on switching to renewable energy for all our electricity consumption. Discussions focussed on Airtricity as they were able to offer a 100% guarantee that we would have access to renewable energy at all times, and they have confirmed that if wind turbines are not in operation our demand will be drawn down from hydro power in Scotland, as Airtricity as a subsidiary of Scottish Power.

We expect this contract with Airtricity to start on the 1st. October 2009. and we expect to reduce our CO2 emissions at Craigtantlet quarry for example by up to 0.67kg/kwh, which with an average monthly electricity consumption of 121.78MWh, will give an estimated CO2 reduction of 979 tonnes per year.

2. At Plant Level.

The current recession has affected the way we operate our production plants and has given us cause for concern that CO2 emissions will rise in some cases, such as in asphalt plants, as sales demand is not steady and this has meant “cleaning out” aggregates that may not have been at the required temperature as they had sat in the hot stone bins for some length of time. Following a survey of clean outs we determined that by fitting high level indicators and temperature probes into the hot stone bins we would be able to reduce clean outs and consequently avoid having to heat more aggregates. At Craigtantlet we set up a capital project costing £8,000 to install level indicators and temperature probes and this was completed in August 2009. We expect immediate savings to show up in our month end savings in September and a payback period of less than nine months.

**Pat Lyons
General Manager.**

NB. QPANI have not published the company data associated with this entry.