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**Cartonboard packaging is positively responding to today's
environmental demands**

Retailers and product manufacturers are now asking packaging manufacturers for environmental information such as the sustainability of raw materials or energy use.

The carton industry has a positive story to tell on both of these important issues.

Cartons and other paper-based packaging, have one thing in common – cellulose or wood fibre from trees as its raw material. Cellulose fibre makes up 40% - 45% of wood and managing the forests sustainably, benefits both the environment and industry. As a living material, the forest thrives from care and attention from the forester, which requires a regular harvesting of the smaller trees in order to allow the stronger ones to develop. This tidying up process, together with off-cuts from the saw mills supplies the raw material for the paper and board industry.

The European paper and board industry does not use trees from tropical forests. But if half of the tropical forests have disappeared within the last 50 years, it is rarely, if ever, by reason of felling for the board industry, but rather to clear the land for short term agricultural gain; perhaps cattle ranching or soya bean production. This contrasts with the managed forests in developed countries, where the forestry industry, working closely with the paper packaging sector, has seen the development of sustainable practices. The volume of wood in the established forests is increasing, as the volume of annual new growth exceeds the volume harvested by around 45%. Growing trees also absorb and fix CO² which is in the air. Thus well maintained forests, with many newly-planted trees, help to combat the greenhouse effect by absorbing carbon which helps to stabilise the climate. Cellulose fibre is the building block which can be reused to make new paper and board products. Through recycling, too, the fibre keeps both its energy and the carbon dioxide that it has absorbed in the forest.

The recycling process for paper and board needs an injection of new fibres, due to the loss and degeneration of fibres during use and the industrial process. These losses, without any addition of new fibres, would, in the short term, rapidly escalate the price of paper and board

and would quickly disincentivise the use of the most sustainable of packaging raw material media.

A large proportion of the paper and board packaging industry's production is now made from recovered paper. The industry reached an impressive 77% recycling rate by 2005 in Europe, according to the Paper Packaging Coordination Group based in Brussels. This is well beyond the 60% target set for paper in the European Packaging Directive, which had to be achieved by 2008.

On the issue of energy use, the paper and board industry including cartonboard, is Europe's largest industrial producer and consumer of renewable energy. In integrated mills, where pulp and paper or board is made at the same site, the wood by-products provide energy in the form of electricity and steam for the manufacturing process. This renewable, sustainable energy source accounts for around 50% of the energy consumed in pulp, paper and cartonboard production.

The paper and board industry is amongst the best examples of a sustainable economic model. The traditional model is linear: extraction of resources, production of goods, consumption and then disposal or destruction. This old way of doing things can only lead to the disappearance of natural resources and increase in waste. However the paper and board industry's closed loop is sustainable and allows for minimal use of non renewable resources, the facility to recover and reuse large amounts and less waste.