

# PUTTING A PRICE ON NATURE

Natural capital is a term resonating more and more in political, environmental and economic circles – but what does it mean and how might it impact retail? Richard Hands, CEO of ACE UK reports



## A retail priority

Retail, as an industry which is heavily reliant on natural assets for food products, packaging, refrigeration and transport, has an obvious vested interest in this debate. In fact, if ranking industries where natural capital accounting might drive change most significantly, particularly as global population growth continues to put pressure on finite natural resources, retail must come near the top.

Reflecting the importance placed on the idea of natural capital, the 2012 White Paper 'The Natural Choice: securing the value of nature' announced the creation of the UK's first Natural Capital Committee, to ensure that government has a better informed understanding of the value of natural capital.

Chaired by economist and Oxford University Professor, Dieter Helm, and reporting to the Economic Affairs Committee (chaired by the Chancellor of the Exchequer), the Natural Capital Committee has the opportunity to genuinely influence the economic policy of the UK for the good of the natural environment.

## Business case

But there's also a business imperative. Our environment provides us with \$72 trillion worth of 'free' goods and services each year, but its degradation costs us roughly the equivalent of 8% GDP. With our natural resources being subject to a range of pressures, such as climate change and biodiversity loss, advocates of natural capital accounting argue that preserving these assets must become an explicit, accountable, and implemented element of policy to protect our future wealth and wellbeing. This means that the concept of natural capital is of significant interest to all businesses – and placing a monetary value on these resources can help us understand the true worth of our economic sustainability.

The growing importance of natural capital accounting is evident by its discussion at last year's Rio+20 summit, and the UK Government's subsequent promise to reform its national accounts to reflect natural wealth by 2020. Even the World Bank, hardly known as an environmental champion, acknowledged in a report that current growth patterns are unsustainable because of the accompanying environmental degradation,

Natural capital refers to the indispensable resources which occur naturally in our ecosystem. They are the elements of nature that produce value (directly and indirectly) to people, and fall into four basic generally recognised categories: air, water, land (including soil, space and landscape) and habitats (including ecosystems, flora and fauna).

From this concept the natural capital accounting model has developed, which places a monetary value on our environmental resources. As an alternative to the traditional production-focused GDP, natural capital accounting values natural resources as accurately as possible, so that the costs and benefits of conserving or destroying them can be included in national accounts.

This system of accounting acknowledges the value natural assets bring to people and the adverse effect when these assets are reduced, damaged or lost. For example degraded soils result in decreased crop yields, and when fish stocks are over exploited falling catches are inevitable. This is why natural capital accounting recognises that the pursuit of economic growth must not come at the expense of future growth potential.

and advocated placing a monetary value on ecosystems.

The report also highlighted efforts by the Thai Government to place a value on its mangrove swamps. It found that although removing the mangrove to create a shrimp farm might generate nearly \$10,000 per hectare, if the mangrove swamps are retained, and their importance as a barrier against floods is taken into account, they could be valued at more than \$16,000 per hectare.

## Sustainable packaging

But how does this argument play out with grocery retailers and food manufacturers, as an already competitive market faces even greater competitive pressures? In the case of packaging, natural resources do not have to be sacrificed in order for retailers to make sustainable decisions. Natural renewable materials, such as wood fibre from responsibly managed forests, offer a sustainable way of benefiting from natural assets while at the same time maintaining them – and they can even contribute to biodiversity protection.

A recent study by the Royal Society for the Protection of Birds (RSPB), commissioned by the Alliance of Beverage Cartons and the Environment (ACE) UK, showed that certified, well-managed forestry can help support a range of biodiversity which, if forests were planted as large monocultures and not managed appropriately, wouldn't be present.

For example, the study found that clearfell and replant as a forest cycle increases biodiversity in forests through the provision of temporary open space, with either an increase in number of species, or abundance after clearfelling. Coppicing, although undertaken on a shorter cycle, and with the cut covering a smaller area, was also found to be effective in providing temporary open spaces, again creating a positive impact on plants and birds.

In short, the presence of small open spaces within forests has a positive effect on all groups of biodiversity except mosses and woodland plants. The main factor influencing the size of this effect is the amount of light reaching the ground within these small open spaces, so wider roads and rides, as well as larger glades are recommended to maximise biodiversity gains.

In Nordic countries, where the vast majority of wood fibre for ACE UK members' (Tetra Pak, Elopak and SIG Combibloc) beverage cartons originates, foresters take a number of measures to maintain biodiversity:



- Planning logging routes and preparing the ground with dead and harvested branches to avoid unnecessary damage to the soil from machinery;
- Leaving buffer zones around water courses to ensure soil and debris from the banks do not fall into streams;
- Leaving dead wood, a number of high tree stumps (approximately three three metre stumps per hectare are required for FSC certification) and retention trees to benefit wildlife;
- Leaving forest set-asides (5% is required for FSC certification);
- Maintaining and enhancing the mixture of tree species; and,
- Using GPS to help manage planning and 'site-adapted forestry' techniques with far greater precision.

## Traceability

In addition to these measures, ACE UK members and their paperboard suppliers have put rigorous traceability systems in place so that they can trace fibre back to the forest area it came from. These systems are independently verified and certified annually according to 'Chain of Custody' (CoC) standards set by the Forest Stewardship Council (FSC).

ACE UK members have also initiated a global voluntary sector commitment on wood traceability to have 100% chain-of-custody certification; against which they are progressing well with a target of 2015 for all liquid packaging board purchased worldwide for the manufacture of beverage cartons and by 2018 for all their own packaging material manufacturing plants worldwide

As the concept of natural capital spreads more widely in economic and business circles, the grocery sector has the opportunity to get one step ahead by prioritising certified wood fibre and other natural renewable materials

within its supply chains. However, as important as natural capital



and responsible sourcing are, it is equally important to use what is sourced in a sensible way, and for packaging this means obtaining maximum value from resources by extending the lifetime through recycling.

## Recycling

All of the materials used in the manufacture of beverage cartons are fully recyclable. After significant commitment from ACE UK's members and years of working closely with stakeholders, almost 90% of UK local authorities now offer a carton recycling service – either from the kerbside or through the industry's own bring bank system.

A further boost to recycling rates is expected later this year with the opening of the UK's first dedicated beverage carton reprocessing facility at the Sonoco Alcore paper mill near Halifax, West Yorkshire. Capable of recycling 25,000 tonnes of cartons sorted from household and commercial waste streams, we anticipate many more councils will choose to collect cartons, making it easier for consumers to recycle them, thereby increasing recycling rates.

The reprocessed fibres will be made into recyclable coreboard for products such as cling film and textile tubes. This means the green credentials of beverage

cartons are improved further still and this value is passed along the supply chain.

What results is a dedicated recycling route with a very short chain of custody.

By carefully examining its own value chain, the beverage carton industry helps retailers and manufacturers assure consumers that paper-based packaging using sustainably-sourced wood fibre is a responsible choice. This means that forests and the species that depend on them will thrive, and through recycling, the material value is extended.

