**Is 'natural capital' the next generation of corporate social responsibility?**

Accounting for environmental impact by placing monetary value on the natural world could allow corporations to manage resources sustainably  
  
[The World Forum on Natural Capital takes place between 21 - 22 November](http://www.naturalcapitalforum.com/)

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If we are taking ecosystems to breaking point, they will stop providing the raw materials which those businesses are trading on. Photograph: David Cheskin/PA

Almost two years ago to the day, sports brand Puma published its [first environmental profit and loss account](http://about.puma.com/puma-completes-first-environmental-profit-and-loss-account-which-values-impacts-at-e-145-million/) (EP&L). This wasn't simply a new twist on a CSR report, this was a step change. Rather than only measuring emissions or energy use, this was an attempt to put a monetary figure on the '[natural capital](http://www.theguardian.com/sustainable-business/natural-capital)' used by Puma to run its business. The figure came to €145m(£121m), accounting for the environmental impact caused by greenhouse gas emissions, water use, land use, air pollution and waste in 2010. In other words, this was a company acknowledging the environmental debt that it owed.

Natural capital reporting and EP&L's have since picked up pace, thanks to pioneers such as Puma. The first [World Forum on Natural Capital](http://www.naturalcapitalforum.com/) is taking place in Edinburgh later this month (21-22 November) organised by the [Scottish Wildlife Trust](http://scottishwildlifetrust.org.uk/) in partnership with [United Nations Environment Programme](http://www.unep.org/), [IUCN](http://www.iucn.org), the [World Business Council for Sustainable Development](http://www.wbcsd.org) and the [TEEB for Business Coalition](http://www.teebforbusiness.org/). And according to Jonathan Hughes, forum director and deputy chief executive of the Scottish Wildlife Trust, natural capital is a concept whose time has come.

"What [natural capital reporting] does is make visible the value of the natural world that we have taken for granted for so long, and that has been completely invisible to economic decision-makers up until now", says Hughes. "The current crisis in natural capital is comparable to the financial bubble that burst in 2008. We're creating a natural capital debt bubble... If we continue to take resources from the planet at the rate we're taking them, then we will eventually reach a tipping point."

We are already perilously close. According to the Millennium Ecosystems Assessment, around [60% of the world's ecosystems are already degraded](http://www.unep.org/maweb/en/condition.aspx). Climate change and extreme weather events are a reality. The global species extinction rate is running at around [one thousand times](http://wwf.panda.org/about_our_earth/biodiversity/biodiversity/) the background rate recorded by the fossil record.

Rather than stand helplessly by as resources and [biodiversity](http://www.theguardian.com/sustainable-business/biodiversity) disappears, natural capital reporting could allow corporations and governments to measure and manage resources sustainably, argues Hughes. "People quite rightly say 'you can't put a pound sign on nature, it's priceless'. To which we would say, it is priceless but it's not valueless. We have to understand the value of nature in all aspects of our lives in order to convince the unconverted, the hard-nosed economists, to actually think of it as having a value as well."

If this sounds like wishful thinking, then consider the case of Chinese deforestation. [According to TEEB](http://www.unepfi.org/fileadmin/biodiversity/TEEBforBusiness_summary.pdf), from 1949 to 1981 China logged some 75m hectares, 92% of which was primary forest. The resultant loss of ecosystem, watershed protection and soil conservation caused severe droughts and flash flooding – in 1997 the Yellow River ran dry for 267 days, affecting industry, agriculture and residents. Flash floods a year later took 4,150 lives and caused damage estimated at $30bn. The loss in ecosystem services was estimated at $12bn per year. The Chinese government, reports TEEB, "determined that deforestation and farming on steep slopes caused these tragic events" and changed its logging practices.

As an example of burgeoning natural capital debt, Chinese deforestation is not isolated. The TEEB April 2013 report [Natural Capital at Risk](http://www.teebforbusiness.org/how/natural-capital-risk.html) found cattle ranching in South America to incur a natural capital cost of $353.8bn a year for only $16.6bn in revenue (based on 2009 figures). Wheat farming in Southern Asia is taking $266.6bn from the region's resources for just $31.8bn revenue; cement manufacturing in Eastern Asia, $147bn for a $5.8bn return. As Hughes poignantly puts it, the unsustainable use of natural resources can result in an increase in a country's GDP while it actually becomes poorer.

There is an argument however that without a standardised methodology for natural capital reporting, such numbers do not stand up to close scrutiny. "Obviously there's different ways of trying to value nature, you're only ever going to get an approximation", admits Hughes. "That's one of the reasons why we [set up] the World Forum on Natural Capital, to bring together all the different practitioners and developers of all the key methodologies currently out there and say can we move, gradually, to a common standards approach to natural capital accounting... Rather like the traditional accountancy field eventually did with global standards."

It's a goal that Hughes hopes to see realised within a decade and there are already signs to suggest it is pragmatic rather than optimistic. At Rio+20, eight countries including the UK signed a Communiqué calling on governments to incorporate natural capital into national accounting frameworks by 2020. A Natural Capital Committee since set up by the UK has called for a standardised system for measuring and monitoring natural capital.

But it is business that is arguably leading the way. The route established by Puma has since been followed by others including Unilever, SABMiller and Coca Cola, informs Hughes. "They are doing this not because they are afraid that their brand will be tarnished if they don't, they're doing it because they feel this is becoming a long-term or even a medium-term profit issue. If we are taking ecosystems to breaking point, they are going to stop providing the raw materials which those businesses are trading on... Second generation CSR is about getting these things on your balance sheet."

It also forces companies to look beyond their own noses. Of Puma's reported natural capital costs, only 6% came from direct business operations such as offices and warehouses. The remainder came from its supply chain, including the production of raw materials (57% or £152m) and negative impacts on biodiversity and ecosystems caused by suppliers (26% or £31m).

"It's in the primary industries, in the manufacturers, in the secondary suppliers, that's where the impact is often generated", says Hughes. "And that's the difference between robust natural capital accounting and old-fashioned environmental management systems looking at light bulbs and heating systems."

Natural capital reporting is still in its early stages, he says. "But the momentum is building quickly, and it's because environmental P&L accounting makes good business sense."

[*The World Forum on Natural Capital*](http://www.naturalcapitalforum.com/) *will take place from the 21 - 22 November in Edinburgh.* [*Guardian Sustainable Business*](http://www.theguardian.com/sustainable-business) *is a media partner.*

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