Corporate responsibility and biodiversity: How can you make a difference?! The Biodiversity Footprint Calculator

In recent years companies have significantly increased focus on their relation to sustainable use and conservation of biodiversity and natural capital. Many sectors, directly or indirectly, heavily depend on services that nature supplies, such as pollination, water storage, water treatment and soil fertility. Pressure on these services is increasing because biodiversity is deteriorating in many of these production areas.

A growing group of companies gives attention to biodiversity as part of socially responsible business. In addition, business economics plays an important role, for strengthening market position, boosting new markets and addressing environmentally related requests of investors.

But how does a company determine its impact on biodiversity?

With a growing attention to biodiversity, the question arises how a company can effectively take into account biodiversity. For example: What is the impact of the company on biodiversity? Is this a direct impact of your own business process or an indirect impact by your suppliers? How do you measure the impact of measures that aim to reduce this impact? In order to get satisfying answers, it is necessary to look at all stages of the production process and their impact on biodiversity. Current Life Cycle Assessment methods (LCA's) focus mainly on the quantification of GHG, and they are not location specific. Therefore Plansup has developed new methodology in collaboration with Wageningen Environmental Research to determine the biodiversity footprint of company's product: The Biodiversity Footprint methodology.

The Biodiversity footprint Methodology

This methodology, commissioned by the Dutch Platform Biodiversity, Ecosystems & Economy, is based on the internationally accepted GLOBIO method. GLOBIO uses so-called 'dose-response' relationships (i.e. the effect of a pressure factor on biodiversity), that are based on the best available scientific knowledge. The footprint methodology is location specific and measures the impact of the major pressures related to the supply chain of a product. Included pressures are: Land use (both for raw materials and production and storage facilities), Greenhouse gasses and Emission to water.

By comparing the impact in the current situation (before measures) with the impact in a new situation (after measures) the effectiveness of biodiversity friendly measures can be tested, not only afterwards but also in advance.

The method has been implemented for a product impact assessments of several companies: Carpets (Desso), health food and materials (DSM), coffee (Moyee), bio-plastic tree support systems (Natural Plastic) chocolate (Tony's Chocolonely), recycled materials based products (Better Future Factory), paper (Schut Papier) and soy and almond drink (Alpro). The method has also been used to determine the biodiversity footprint of milk from the Dutch dairy sector. For two cases also the impact of water extraction has been tested.

Based on the results and feedback from the companies, it can be concluded that the method can help companies to:

- Gain insight into the pressure factors and company processes that make the largest contribution to their biodiversity footprint taking into account local conditions;
- Determine the difference in footprint between the present and an alternative or future situation;
- Calculate the effectiveness of biodiversity friendly measures.

The Biodiversity Footprint Calculator

To give the footprint method a higher exposure a simplified web-tool has been developed. The open source Biodiversity Footprint Calculator focuses on the two largest pressure factures, Land use and GHG, and on the three most important parts of the supply chain: Raw materials, production process and transport. In spite of the limitations, the calculator will include more than 80% of the total impact on terrestrial biodiversity. So the Calculator is a good first step for a company that wants to find out the source of the biggest impact and in which part of the supply chain measures will be most (cost) effective.

Interested: Get started!

Go to: http://www.plansup.nl/biodiversity-footprint-calculator/

More Info on calculator and full method:

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