

# How to promote bio-based products?

## Introduction

In the past few years there has been a growing interest among consumers all over the world in the protection of the environment. The limited availability of resources and increasing environmental awareness have resulted in a growing market for sustainable products. Despite this growing trend there is still a problem in getting consumers to choose bio-based products over other products.

When promoting bio-based products it is essential to understand how the products and their production processes affect the environment. In order to convince a customer of the greenness of your product, you need to be able to clearly explain the benefits of using it, in which way it is green and how much greener it is than other products. However, knowing the facts is not enough. It is equally important to know how to reach the right audience and strike the right emotional tone.

In addition to general marketing methods, bio-based products can be promoted with some more focused tools. This is called green or environmental marketing. This article covers some regulative issues of green marketing and some key tools, like standardisation, certification, and labelling.

### Green marketing

Green marketing refers to promoting products by employing environmental claims either about their attributes or about how they are made. Firms may choose to green their systems, policies and products because of economic and noneconomic pressures from their consumers, business partners, regulators, citizen groups and other stakeholders.

Increased environmental awareness has led to an increasing number of companies going green. By promoting bio-based products a firm can besides satisfying its customers also reduce its costs and differentiate itself from competitors. Regardless of the incentives of going green, a firm may achieve a competitive advantage from it.

## Regulation and guidelines concerning environmental marketing in Europe

Until now the EU has not issued principles or rules specifically meant for governing environmental or green marketing. This means that the regulation on commercial communication also covers green marketing. This regulation includes basic principles requiring all commercial communication to e.g.:

- not be misleading to the targeted public (Directive 450/1984),
- be readily recognisable as commercial communication and be distinguishable from editorial content including that all surreptitious promotional messages are explicitly banned (Directive 65/2007),
- not encourage behaviour grossly prejudicial to the protection of the environment (Directive 65/2007),
- not to result in a misleading commercial practice (Directive 29/2005).

In addition to directives regulating commercial communication, the European Commission has published guidelines for making and assessing environmental claims<sup>1</sup>. The report basically recommends that environmental claims should refer and adhere to the principles and indications of the ISO international standards on Eco-Labeling (ISO 14000 series). After issuing these regulative pieces and recommendations, the Commission has taken more active position by adopting a specific Action Plan, aimed at promoting sustainable production and consumption<sup>2</sup>.

The European Commission, in the framework of the Lead Market Initiative, has appointed an Ad-hoc Advisory Group for Bio-based Products. The Advisory Group's main recommendations to promote bio-based products are stated in their report "Taking bio-based from promise to market". This report<sup>3</sup> includes recommendations for legislation promoting market development, product-specific legislation and legislation related to biomass. It also aims at encouraging green public procurement for bio-based products and includes recommendations to develop standards, labels and certifications.

**Examples of the recommendations presented in the report "Taking bio-based from promise to market":**

- The biological/bio-based carbon contained in bio-based products shall be deducted in the calculation of the total CO<sub>2</sub> equivalent emissions of the products.
- Consider setting indicative or binding targets for certain bio-based product categories, drawing on the experience from biofuel quotas in the EU.
- Allow Member States to reduce taxes for sustainable bio-based product categories.
- Allow bio-based plastic to enter all waste collection and recovery systems, including composting, recycling and energetic recovery (depending on the type of plastic and compliance with applicable standards). Bio-based plastics certified compostable according to EN 13432 should gain unhindered access to biowaste.
- Develop clear and unambiguous European and international standards.

Following the guidelines published by the EU, the Nordic Consumer Ombudsmen decided to update their earlier adopted guidelines on Environmentally Oriented Claims in Marketing. The guidelines<sup>4</sup> set as key principles for environmental marketing claim that all promotional messages:

- must be accurate and balanced (i.e. making clear whether claims refer to a company's entire product range or only to part of it, to the packaging or other aspects, and avoiding exaggeration of positive environmental impact),
- should accurately consider the overall impression they convey to the general public, making sure that such impression is based on facts,
- need to be phrased in a transparent and not misleading way and must be able to offer proper substantiation of their claims (possibly making the documents apt to sustain ethical claims publicly available, e.g. on the company's website or in its corporate information),
- should use particular caution when referring to environmental and ethical labels, where self-declared marks should pay attention to avoid any potential confusion with official marks (in

such cases there should always be a reference to where detailed information about the used label system is available on all advertising material as well as on packaging.

These guidelines define the principles of “good environmental marketing”. If a firm decides not to follow these guidelines, it can be readily accused of greenwashing. Greenwashing refers to the deceptive use of green marketing in order to promote a misleading perception that a company's products or policies are environmentally friendly. The guidelines for environmental claims should be followed quite carefully, since greenwashing accusations can be quite harmful to a firm's reputation.

## **Standardisation**

Standards regarding bio-based products are important because they help verify product-related claims and help businesses and consumers choose the right products. At the moment there is an absence of standards concerning the quality, functionality and characteristics of bio-based products. This can hinder the market uptake of products both on consumer markets and in public procurement (public procurement is a sizeable segment with an increasing preference for sustainable products). E.g. the prefix “bio” can refer to many things e.g. biomass raw material, biotechnology, and biodegradability. The lack of an agreement on its meaning can lead to misunderstandings and even greenwashing accusations.

The communication challenges have been understood, and there are attempts to develop European standards for biopolymers and bio-lubricants in relation to their bio-based product aspects. CEN has published a Recommendation for terminology and characterisation of biopolymers and bioplastics<sup>5</sup> and bio-lubricants and bio-based lubricants<sup>6</sup>. Moreover, a standardisation programme is under development to prepare a definition of the term “bio-based”<sup>7</sup>.

In addition to standards, there is a voluntary industry self-commitment for highlighting bio-based and biodegradable polymer products<sup>8</sup>, acknowledged by DG Enterprise in 2004. Members of ERRMA are also preparing a self-commitment concerning bio-hydraulic fluids, laying down requirements for technical, biodegradable, toxicological and minimum renewable raw material content standards.

## **Certification and labelling**

Certification and labelling help in promoting bio-based products because they inform businesses and consumers about the products' environmental benefits and therefore help them to choose the most sustainable products.

There are two labelling schemes, namely OK bio-based and BioPreferred, focusing on bio-based products (Figure 1). Moreover, there are general ecolabels such as the EU Ecolabel that may be available for both bio- and fossil-based products. More information about international and national environmental labelling schemes can be found e.g. in Ecolabels (<http://ecolabelling.org/>) or Global Ecolabelling Network (<http://www.globalecolabelling.net/>).

It is important to note that the certification schemes to a varying degree take into account the lifecycle of products and the tiers of sustainability. The schemes apply to different phases of the value chain,

e.g. to biomass production, to the production of intermediate products or to the final product at the consumer interface. However, certification does not deal e.g. with emissions from the manufacturing process or with the quality of the final product. Moreover, there are global, international and national schemes of labels and certificates.

### Figure 1. Labelling schemes for bio-based products

#### ● Labels for bio-based products

Belgian company Vincotte launched a global certification programme **OK biobased** in 2009. The methodology for OK biobased is based on an American standard (ASTM D6866). Each certified product must have at least 30% of organic carbon and at least 20% carbon content of renewable raw material. The OK biobased label can include one to four stars according to the share of renewable carbon content of the product. The programme is open for all biobased products except biofuels. At the moment there are products of five companies certified through this programme.

In the US, the USDA launched a programme **BioPreferred** in the end of 2009 to increase the purchase and use of renewable, environmentally friendly biobased products. BioPreferred includes a preferred programme for US Federal agencies and their contractors, and a voluntary labelling programme for the consumer marketing of biobased products. The labelling programme is still in the development phase but it is expected to be finalised soon.

#### ● General ecolabels

The **EU Ecolabel** scheme encourages the production and consumption of products which are less harmful for the environment compared to other products of the same product group. Current product groups include e.g. lubricants, paints and varnishes, floor coverings and various detergents and cleaning products. Moreover, it has been suggested that biobased products would become a new product group category within the EU Ecolabel scheme. Many countries also have their own schemes such as **Blaue Engel** in Germany and **NF Environnement** in France.

Moreover, there are several national and global certification schemes for organic products. For example **ECOCERT** primarily certifies food and food products, but the scheme also covers cosmetics, detergents, perfumes, and textiles. ECOCERT was founded in France, but it operates globally. Like all organic production labels, ECOCERT does not certify genetically modified organisms (GMOs).

When adopting labels to products, marketers should be careful. While a label can help in decision-making, oversaturation of labels in the market has resulted in label blindness. For the most part, consumers today recognise a handful of labels only. Therefore, marketers must identify whether the logo is credible, meaningful and recognisable by the intended audience and fits the organisation's message.

## Case studies

### Case Renewable Lubricants Inc.

Renewable Lubricants is a developer and manufacturer of high performance bio-based lubricants in USA, with a range of over 150 bio-based products. Renewable Lubricants has participated in the USDA-launched BioPreferred programme and certified and labelled its products according to the USDA Certified Biobased Product system. The investment to participate in the programme and certify the products has had its benefits. Renewable Lubricants has increased its sales to government and commercial markets. Current customers include government agencies such as USDA, DOI, DOE, US Navy, US Coast Guard, and US Air Force<sup>9</sup>.

### Case Mobil

Green marketing can go horribly wrong if the products fail to provide credible, substantial environmental benefits. Mobil's Hefty photodegradable plastic bag was introduced as early as 1989, displayed the term "degradable" with the explanation that an exposure to sun, wind and rain promoted its decomposition into harmless particles in landfills. Because most garbage is buried in landfills that

allow limited exposure to the mentioned elements making degradation virtually impossible, the claim enraged environmentalists. Ultimately, seven state attorneys general sued Mobil on charges of deceptive advertising and consumer fraud. Mobil was forced to remove the claim from its product and promised to use extreme caution in making any environmental claims in the future<sup>10</sup>.

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<sup>1</sup> [http://ec.europa.eu/consumers/cons\\_safe/news/green/guidelines\\_en.pdf](http://ec.europa.eu/consumers/cons_safe/news/green/guidelines_en.pdf)

<sup>2</sup> <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/507>

<sup>3</sup> [http://ec.europa.eu/enterprise/sectors/biotechnology/files/docs/bio\\_based\\_from\\_promise\\_to\\_market\\_en.pdf](http://ec.europa.eu/enterprise/sectors/biotechnology/files/docs/bio_based_from_promise_to_market_en.pdf)

<sup>4</sup> <http://www.consumerombudsman.dk/Regulatory-framework/dcoguides/Environmental-and-ethical-marketing>

<sup>5</sup> CEN/TR 15932:2010

<sup>6</sup> CEN/TR 16227:2011

<sup>7</sup> CEN/TC 411

<sup>8</sup> [http://www.errma.com/index.php?option=com\\_docman&task=cat\\_view&gid=11&Itemid=24](http://www.errma.com/index.php?option=com_docman&task=cat_view&gid=11&Itemid=24)

<sup>9</sup> <http://www.renewablelube.com>

<sup>10</sup> <http://www.greenmarketing.com/files/Stafford-MyopiaJune06.pdf>