



VDMA Position Paper

**Technical and  
Environmental Affairs  
Department**

# VDMA Position

## Eco-labelling in Mechanical Engineering

Key concerns for the capital goods industry

- Minimum efficiency standards represent the better approach
- Labelling is not a panacea
- Labelling in mechanical engineering is subject to demanding conditions
- Product environmental footprint requires a robust methodology
- Management systems rather than organisational footprint
- Towards more effective market surveillance
- Advisory services for business operators

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## **VDMA Position**

### **Eco-labelling in Mechanical Engineering**

#### **I. Introduction**

In recent years, the European Commission has created new realities in the field of “eco-labelling”, i.e. product labelling with regard to environmental impact<sup>1</sup>. Various EU legislative initiatives have led to an increase in product labelling. In 2010, the scope of Directive 2010/30/EU on labelling and standard product information (EU Energy Label) was broadened to cover the consumption of energy and other resources by energy-related products. Now the extension of mandatory labelling to non-energy-related products is being discussed. In April 2013, a methodology was proposed for calculation of environmental footprints for products and organisations. At European level, the energy policy objectives for 2020 and the Roadmap to a Resource-Efficient Europe are contributing to greater attention being paid to conservation of resources. These efforts are receiving broad support at national level.

Labels are test or quality markings which ascribe a defined set of characteristics to products. While businesses mainly use labels to inform customers about product characteristics, and to set themselves apart from competitors in a positive way via appropriate marketing activities. In the political sphere labelling activities are not only associated with the aims of providing information and transparency, but also with the wish to control market processes (keyword: sustainable consumption).

#### **II. VDMA Position**

VDMA supports the policy objectives of reducing harmful impact of products. The mechanical engineering industry can make a significant contribution to achieving these aims. At the same time, VDMA advocates using appropriate instruments to fulfil these objectives.

Product labelling may relate to various environmental characteristics. In the following text, VDMA sets out its position on environment-related labelling obligations for the capital goods industry. The analysis goes beyond the Labelling Directive 2010/30/EU, implemented in the German Energy Labelling Act (EnVKG), about indicating energy consumption in the usage phase. We also consider initiatives that cover the entire product lifecycle. This is the case of the Ecodesign Directive, which lays down information obligations in product-specific implementation measures, as well as the footprint methodology, where environmental impact is established via the calculation and display of an index number. A distinction is made between product and organisational footprints.

##### **1. Minimum efficiency standards represent the better approach – No pull effect in the market for capital goods**

Capital goods are already affected regularly in the environmental policy field by product-specific measures in the Ecodesign Directive. The Directive is intended to take into account the most significant environmental impact of a product throughout its lifecycle, and set

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<sup>1</sup> In this paper eco-labelling is used as a generic term covering all types of environmental labelling. It is not a reference to the official Ecolabel introduced by the European Commission.

minimum efficiency standards where there is the greatest potential for curbing environmental impact. Besides the ecodesign requirements, information or labelling obligations are frequently imposed on manufacturers. Therefore, in the opinion of VDMA, no additional environmental policy instrument for market management is required for B2B products. Moreover, the pull effect which it is hoped that the introduction of eco-labels will bring about, will often not be achieved, because for customers of the capital goods industry who are making long-term investments, factors other than efficiency are at least equally relevant.

Above all, product-specific regulation should focus on areas where there is genuine potential that can be leveraged. For small and medium-sized firms, environmental product requirements mean alterations to manufacturing processes. This financial burden should only be imposed on companies that are subject to international competition after more detailed scrutiny. In this regard, the approach of the Ecodesign Directive is correct. It formulates minimum conditions that must be met before a product is deemed worth regulating. These include:

- a clearly definable product,
- market relevance (minimum quantities produced),
- a significant efficiency potential.

## **2. Labelling is not a panacea**

In principle, VDMA supports measures which make the market transparent. This is because only if market players are informed about the technologies and products available and how to use them will innovative products be adopted. Labels can contribute to market transparency, and to this extent, in the view of VDMA, can be useful in selected areas<sup>2</sup>.

However, in the capital goods field, the constraints and prerequisites for labelling must be examined closely. VDMA has observed with concern that the legislator increasingly views labelling as a seemingly simple solution to a complex issue, and imposes growing requirements for it. Labelling is not a panacea or a 'one size fits all' product.

Consumer goods and capital goods differ considerably in terms of their complexity, their purpose and their customer base, and therefore the audience for possible product labelling. Consumer goods – such as TV sets or toasters – are usually designed for one specific purpose. In the case of capital goods, they are often one-off products tailored to the requirements of the customer. Therefore, in principle, they can only be evaluated in relation to their intended use. The customer defines in the technical specifications what requirements a product must meet over a defined time period. The customer and the manufacturer jointly draw up a requirements profile that includes numerous product characteristics. Depending on the depreciation period, it is in the operator's interest that the product functionality and the increase in the overall efficiency of the product should be considered in equal measure in the requirements profile. In the context of this close collaboration, new investments are regularly an investment in environmental protection. Against this backdrop, one-dimensional labels, which provide information about an individual product characteristic, are of little value to the operator.

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<sup>2</sup> Voluntary commitments concerning energy consumption labelling exist for valves and in building automation. In the building sector, an approach to labelling of buildings is conceivable.

Efficient capital goods are a prerequisite, but no guarantee of increased resource-efficiency. Only appropriate use of the products guarantees the intended energy savings. The surroundings in which a machine is used can also influence the measured environmental impact. In this case, advisory services for operators can improve the availability of information. Therefore, labelling proposals for products made by the capital goods industry relating to the usage phase must be scrutinised closely.

Ultimately, the aspect of international competitiveness plays an essential role. The heavily-regulated European economy is losing attractiveness for manufacturers from third countries, since the constraints are too great. Moreover, the individual European manufacturer has to make his product according to stricter and therefore more expensive requirements, or in two versions, if he wants to do business in markets that are outside Europe, with different regulations or none at all. Both these requirements lead to a weakening of European competitiveness.

### **3. Labelling in mechanical engineering is subject to demanding conditions**

Due to the previously described complexity of capital goods, the drawing up of a labelling concept in the capital goods industry requires at least the following:

1. For the product field, typical applications for the products in this group need to be able to be defined;
2. Based on the typical applications, reference processes need to be able to be established;
3. The reference processes need to enable comparable measurements of relevant “indicators”, and be able to form the foundation for drawing up a system of indicators on which any label system must be based;
4. The necessary measurement rules (international or European standards) must be available;
5. The expense of drawing up the labelling concept must be economically justifiable (cost-benefit ratio). In particular, the additional burden for small and medium-sized enterprises should be taken into account.

### **4. Product environmental footprint requires a robust methodology**

The European Commission has put forward its concept for the creation of an internal market for green products. The key feature is the proposal for a methodology for calculating product and organisation environmental footprints. A three-year pilot phase will run until 2016.

In principle, VDMA prefers the holistic approach of a lifecycle analysis, which underpins the calculation of product footprints, to an analysis of individual phases in the lifecycle. In order to come up with meaningful results, the methodology used must in any case be easy to use, robust, and there must be sufficient underlying data. In the case of capital goods, it is difficult to compare products over their whole lifecycle due to their complexity. Capital goods are often products individually tailored to customer requirements. The trend is to use the same machine to manufacture different products in small production runs<sup>3</sup>. It is only attractive for a few manufacturers to be able to make customer-specific or product-specific claims. VDMA

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<sup>3</sup> Industry 4.0 imposes totally new requirements on production systems and machines. They must be adaptable, since the products to be manufactured may change at any time. The result is that production is becoming more individual, more flexible and faster.

supports companies in developing product-specific guidance<sup>4</sup> taking account of resource-efficiency. However, it is difficult to establish widely comparable assessment procedures. Therefore, VDMA rejects the use of comparative footprints. The voluntary character of the proposed methodology and its thorough testing is welcome.

## **5. Management systems rather than organisational footprint**

In the view of VDMA, organisational footprints are superfluous. The established environmental or energy management systems (such as EMAS, ISO 14001, ISO 50001) are sufficient to show the environmental improvements by individual organisations. Economic viability, such as process optimisation in production, is of paramount importance for any business. A footprint does not create added value for the environment. Instead, enormous administrative, financial, and time costs will be generated for small and medium-sized firms, due to the possible documentation requirements throughout the supply chain.

## **6. Towards more effective market surveillance**

The relevance of market surveillance grows with every product policy regulation in the environmental field. Responsible businesses are placed at a disadvantage by ineffective market surveillance compared with those who deliberately exploit loopholes in the application of the rules. The capital goods industry advocates effective market surveillance and, therefore, welcomes the Commission's efforts to tighten the EU regulatory system. In this regard, third-party certification is no substitute for market surveillance by government.

## **III. Conclusions**

Labelling will only be effective if it is a joint project. Politicians, manufacturers and operators must evaluate jointly whether labelling or another instrument is appropriate to provide information about environmentally relevant product characteristics.

From the viewpoint of VDMA, the introduction of labels alone will not lead to increased demand for energy-efficient technologies. This would need to be accompanied by wide-ranging provision of information and awareness campaigns, emphasising lifecycle cost analyses. Constraints that affect the environmental impact of products should also be taken into account. Advice to operators and other initiatives could create efficiency gains where product design or a label no longer helps.

The mechanical engineering industry is making a major contribution with its technologies to achieving environment and energy policy goals. In the view of the industry, innovative technologies must meet functional product requirements and, at the same time, minimise harmful impact of products on the environment. Therefore, the industry is critical of the exclusive focus on energy aspects. This would result in the human and financial resources of the sector, which is dominated by SMEs, being tied up unnecessarily in one aspect of product development, whereas the environmental and energy policy objectives will be attained more quickly and sustainably through a holistic approach.

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<sup>4</sup> Example: VDMA guidelines on application-independent calculation of energy consumption.

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