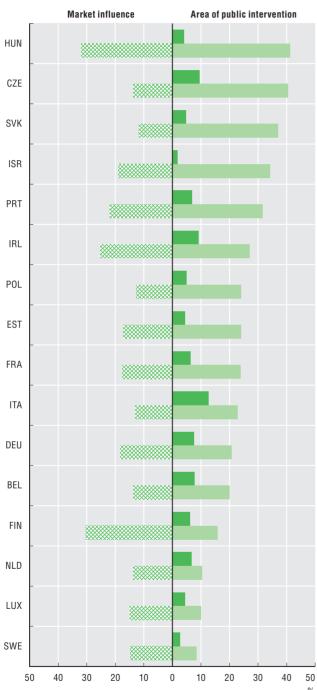
# 4. Innovation and environmental

# Motivations of firms introducing environmental innovations, 2006-08

Firms citing factors as motivations, percentage of innovative firms





 $\it Source: OECD, based on Eurostat (CIS-2008)$  and national data sources, June 2011.

StatLink http://dx.doi.org/10.1787/888932486849

Innovation can be a source of environmental benefits for the firm that introduces the innovation (as part of its production process) as well as for customers that purchase the innovation (as part of its end use). Firms introduce innovations in response to factors such as regulations, the availability of public support or (current or future) market demand. In most countries regulations (existing or future) are the main driver, followed by market demand from customers. In Sweden, Luxembourg, the Netherlands and Finland, market demand is identified as the main driver of environmental innovations.

The effects of environmental innovation take many forms: reducing material or energy use per unit of output, reducing the enterprise's CO<sub>2</sub> "footprint", reducing waste or pollution, etc. For both producers and end users, reduced energy consumption appears to be an important effect of environmental innovations: more than 40% of all innovating firms report this in Switzerland, Germany and Portugal.

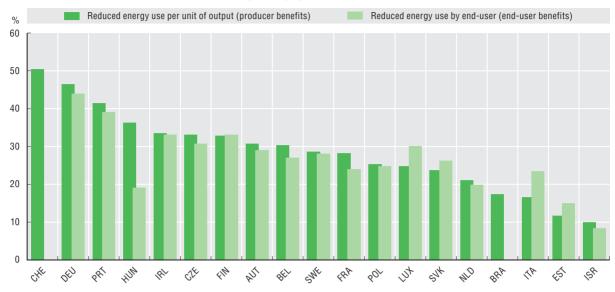
# **Definitions**

In the CIS-2008, an environmental innovation is defined as an innovation that leads to more environmental benefits than alternatives. It can be a product (good or service), process, organisational or marketing innovation. The environmental benefits can be the primary objective or the result of other innovation objectives. The environmental benefits of an innovation can occur during the production of a good or service (producer benefits), or during the after sales use of a good or service by the end user (end-user benefits).

For these two indicators, innovative firms refers to firms with any of the four types of innovation (product, process, marketing and organisational).

#### Benefits of environmental innovations, 2006-08

As a percentage of innovative firms



Source: OECD, based on Eurostat (CIS-2008) and national data sources, June 2011. See chapter notes.

StatLink http://dx.doi.org/10.1787/888932486868

#### Measurability

The CIS-2008 survey was the first to introduce an *ad hoc* (voluntary) module on environmental innovation. Given that some of the concepts were new to respondents, some results may be less robust than those of more established indicators. In principle, all firms were asked questions on innovations with environmental benefits (not just innovators) although this may not have been the case in some countries. Some respondents may have found the distinction between (intended) objectives and (observed) effects, as well as certain concepts, confusing. For example, in some countries data on energy-related benefits for end users are almost identical to those for producers.



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