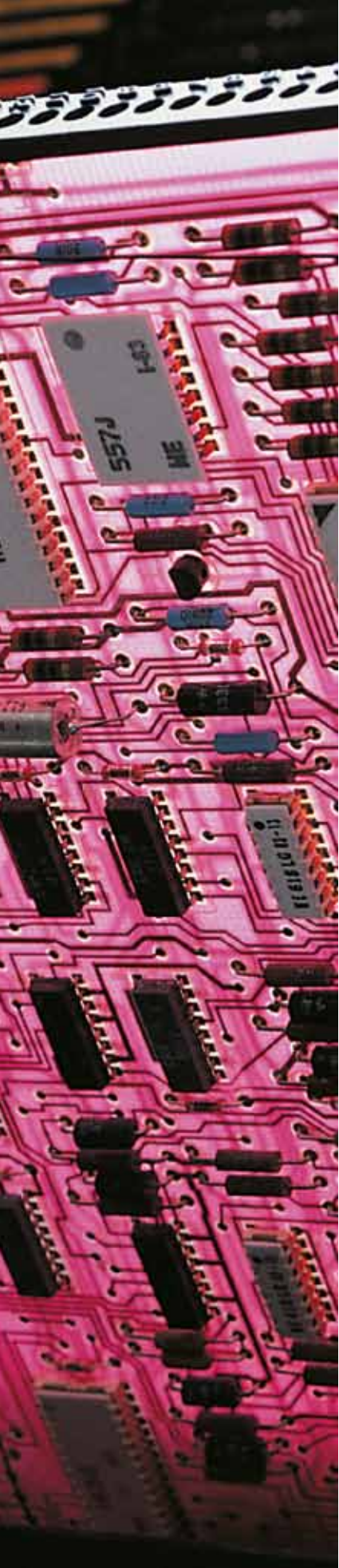


ISO standards



**What's
the bottom line**





ISO in brief

ISO is the International Organization for Standardization. ISO has a membership of 164* national standards bodies from countries large and small, industrialized, developing and in transition, in all regions of the world. ISO's portfolio of over 19 200* standards provides business, government and society with practical tools for all three dimensions of sustainable development: economic, environmental and social.

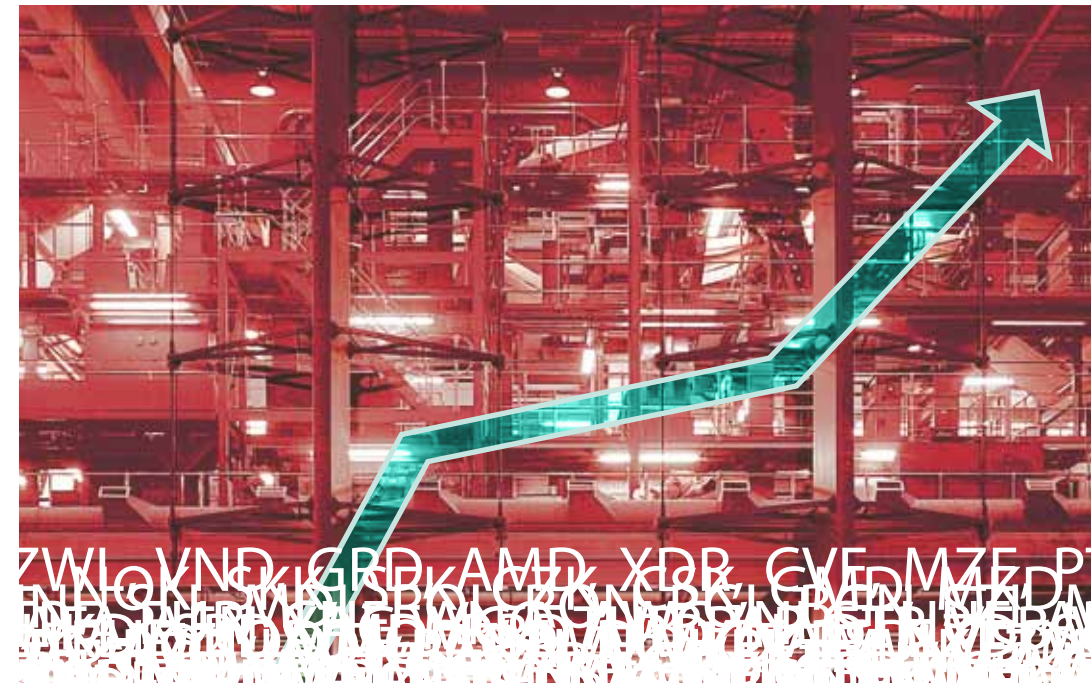
ISO standards make a positive contribution to the world we live in. They facilitate trade, spread knowledge, disseminate innovative advances in technology, and share good management and conformity assessment practices.

ISO standards provide solutions and achieve benefits for almost all sectors of activity, including agriculture, construction, mechanical engineering, manufacturing, distribution, transport, healthcare, information and communication technologies, the environment, energy, safety and security, quality management, and services.

ISO only develops standards for which there is a clear market requirement. The work is carried out by experts in the subject drawn directly from the industrial, technical and business sectors that have identified the need for the standard, and which subsequently put the standard to use. These experts may be joined by others with relevant knowledge, such as representatives of government agencies, testing laboratories, consumer associations and academia, and by international governmental and nongovernmental organizations. An ISO International Standard represents a global consensus on the state of the art in the subject of that standard.

*May 2012

ISO (International Organization for Standardization) is the developer and publisher of more than 19 200 voluntary International Standards bringing benefits for business, government and society.



But how do ISO standards contribute to the economic returns of countries and companies? What is the “bottom line”?

This brochure provides answers by giving examples in hard figures of the benefits of implementing ISO's and other voluntary, consensus-based standards:

1. For the global economy and a number of national economies
2. For individual companies from different sectors and countries.

An ISO/IEC inventory of studies on the economic and social benefits of standards, from which many of the following examples are taken, can be accessed at:

www.standardsinfo.net/info/benefits/benefits.html

Global impact



- Estimates by the Organisation for Economic Co-operation and Development (OECD) and the US Department of Commerce both show that standards and related conformity assessment (checking that products and services measure up to standards) have an impact on **80%** of the world's trade in commodities
- The World Trade Organization (WTO) requires its members to use international standards of the type developed by ISO, in order to avoid the technical barriers to trade that can be caused by differing national or regional standards

National impact

Macroeconomic studies on the contribution of standards to national economic growth show that :

- Standardization directly contributes to the growth in the French economy, for up to **0.81%**, or almost **25%** of GDP growth
- Macroeconomic gains are a function of both more efficient production (labour productivity) and better decision making (capital productivity) within the New Zealand economy. Standards are a powerful economic lever and, over time, could lead to a **1.0%** – or **NZD 2.4 billion** – increase in New Zealand's annual economy-wide GDP
- In Canada, growth in the number of standards accounted for **17%** of the labour productivity growth rate and about **9%** of the growth rate in economic output (real GDP) over the 1981 to 2004 period. If there had been no growth in standards in this period, real GDP would have been **CDN 62 billion** lower





Over the 40 years to 2002, a 1% increase in the number of Australian Standards is associated with a **0.17%** increase in productivity across the economy. Additionally, standards can be considered, together with R&D expenditure, as contributing factors to the stock of knowledge: a 1% increase in this joint stock of knowledge leads to a **0.12%** increase in economy-wide productivity

The economic benefits of standardization represented about 1% of GDP in Germany, where standards made a greater contribution to economic growth than patents or licenses. Export-oriented sectors of German industry used standards to open up new markets and facilitate technological change

In the United Kingdom, standards made an annual contribution of **GBP 2.5 billion** to the economy, and 13% of the growth in labour productivity was attributed to standards. Standards were identified as enablers of innovation and facilitators of technological change. The economic return on investment in standards made sound business sense at both macro- and micro-economic levels

Industry-sector impact

Studies investigating the benefits of standards for industry sectors indicate the significant contribution of standards to the performance of business sectors (in terms of profit, growth, or both). A few examples are given below.

- According to the Canberra-based Centre for International Economics, in Australia, a sampling of standards in the mining industry generated annual benefits between **AUD 24 million** and **AUD 100 million**
- According to Prof. Junijiro Shintaku and partners at the University of Tokyo, standards contributed in a decisive way to the development of the modern optical storage industry in the mid- to late-1990s. Availability of open international specifications accelerated technology transfer of finished product technology, leading to much faster market expansion based on a more efficient division of labour between companies from newly industrialized economies in Asia and companies from advanced economies. As a result, markets such as that of DVD devices increased by nearly **20 times** in size between 1998 and 2004 (**from USD 1 billion to over 19 billion**)
- According to a study on the global automotive industry conducted in 2009 by ISO and Roland Berger Strategy Consultants, around **80 specific impacts** from standards were identified and quantified. The total gross profit contribution of standards on the three core business functions (engineering, procurement and production) for auto manufacturers and parts suppliers was estimated in the range between **1.3% and 1.8%** of total sales. To give a better appreciation of the scale of the standards' impact, the above estimate was projected onto the total industry revenues for 2008. As a result, the total contributing impact of standards was estimated **between USD 38 billion and 55 billion**





Company impact

Standards provide tangible and quantifiable benefits to companies.

A series of ground-breaking case studies by ISO and partner organizations based on the experiences of 11 companies operating in a variety of business sectors in 10 countries, shows that implementing standards can provide economic benefits from between **0.5 % and 4 %** of their annual sales revenues.

More information on the examples given below can be accessed at:

www.iso.org/iso/benefits_of_standards

✔ PTT Chemical Public Company in Thailand saved **USD 9.4 million** in 2010 from increased plant reliability, reduced off-specification product, and lower energy and ethylene consumption by applying standards. The company also calculated that standards contributed **3 %** of sales revenue for total high density polyethylene

✔ NTUC Fairprice, Singapore, a supermarket chain, estimated **at SGD 13.6 million** the total benefits over 10 years from implementing standards in its procurement, warehousing / distribution and retail functions. The company also estimated a **SGD 7.8 million** saving from the use of over 300 000 standardized pallets

✔ Vietnamese electrical equipment manufacturer, Electrical Devices Joint Stock Company No. 1 (VINAKIP), estimated that standards contributed **20 %** of earnings before interest and taxes and **4 %** of overall sales revenue

✔ Colombian plastics company Gerfor attributed **47 %** of total sales revenue to contracts for which compliance with standards (especially ISO 9001) was considered essential to winning the sale. The company also reduced PVC resin inspection and analysis time from **four hours to 15 minutes** by following standards-based procedures



✔ Impact of standards on total earnings before interest and taxes of Festo Brasil, a Brazilian automation technology provider, totalled **BRL 4.37 million**, corresponding to **1.9 %** of company turnover

✔ Standards contributed **30 % (USD 648 000)** of annual gross profits from the asparagus exporting business of Peruvian fruit and vegetable grower DanPer Trujillo

✔ Botswana brick manufacturer Lobatse Clay Works estimated standards as having a positive impact of **4.96 %** on earnings before interest and taxes and contributing **2.63 %** of total sales/turnover of the brick manufacturer in Botswana



✔ German electricity switchgear supplier Siemens cites cumulated benefits on earnings before interest and taxes from using standards of between **1.1 % to 2.8 %**

✔ Pretoria Portland Cement Company, of South Africa, calculated an annual total financial impact of standards on total revenue at **2.5 %**, based on savings in R&D, procurement, production/operations and sales and marketing functions. It also calculated a **12 %** reduction in time used to negotiate contractual agreements as a result of implementing standards in the sales and marketing process



✔ Nanotron Technologies, a German information and communications technology company, achieved **14 %** cost savings and **19 %** increase in sales revenue by using standards, equivalent to almost **33 %** of overall annual sales revenue

✔ A **0.43 %** contribution to total revenue by using standards was reported by Indonesian pre-cast concrete manufacturer, PT Wijaya Karya (WIKA)

Standards are business issues

✔ Standardization is a strategic business issue with a direct impact on new product development

✔ Leadership in standards = Leadership in technology

✔ Standards are never neutral. They reflect the strengths and innovations of those who develop them. Therefore, non-participation in standardization hands decision making over to the competition

✔ The pace of development of International Standards is accelerating



How to get your share of the benefits



To discover how ISO International Standards can benefit *your* organization :

Visit the ISO Website www.iso.org

Contact your national standards body www.iso.org/isomembers



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