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# Divergence in the development of export markets



The divergence in the economic development between geographic areas and countries has continued over the past few months. In Europe, economies are currently shrinking in Russia and Ukraine. Italy, Switzerland, Austria, Greece and Finland are reporting zero or modest growth. The countries with the fastest growth rates are the UK, Spain, Sweden and Ireland.

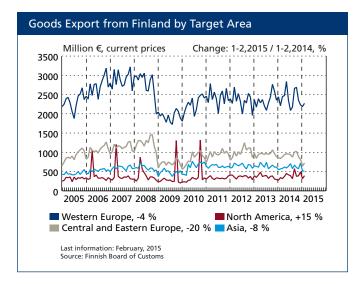
More than 70 per cent of Finnish exports go to Europe. While growth forecasts for Europe as a whole in 2015 have been slightly brighter in the last few months, exports from Finland to Europe have not yet to pick up. Russia in particular weakens the outlook: exports from Finland to Russia have collapsed by 38 per cent in early 2015. Export of technology industry products from Finland to Russia fell by 34 per cent from the previous year: Russia only accounted for five per cent of total technology industry exports in early 2015.

The domestic market in Germany is burdened by low levels of investments and, as a result, weak demand for investment goods. Machinery represents the largest industrial sector in Germany and is feeling the effect of this, reporting a seven per cent drop in new domestic orders from February 2014 to February 2015. Orders from abroad remained unchanged, however.

Slightly less than 10 per cent of Finnish exports go to North America. Exports from Finland to the USA in early 2015 were up 15 per cent on the same time last year. Technology industry exports increased by 21 per cent. Positive economic development continues in the US, but the strengthening dollar is weighing on the growth and profitability of the US export sector.

Almost 15 per cent of Finnish exports go to Asia. The figure is down eight per cent from early 2014 to early 2015. Technology industry exports have decreased by 11 per cent. The downward trend in exports to Asia is mainly due to a slower growth rate in China and an increase in the manufacturing operations of Finnish companies' factories in China.

In total, exports from Finland shrank by seven per cent in early 2015. Technology industry exports fell slightly. The weaker euro has done little to help Finnish exports.





# The number of new orders falls again

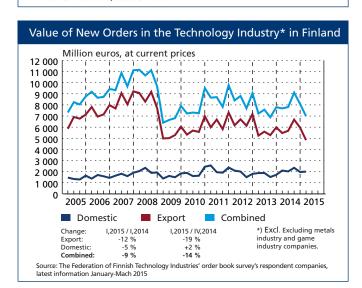
#### Despite personnel reductions, early 2015 sees up to 7,000 new recruitments

The turnover of companies in the technology industries in Finland totalled EUR 66.1 billion in 2014. This represents a growth of some two per cent from the previous year. In 2008, prior to the financial crisis, the Finnish technology industry's turnover was EUR 85.7 billion.

Technology industry companies received slightly decreased levels of new orders between January and March. However, order books have strengthened from the previous year, due in particular to the previously received ship orders. Even so, order books did not quite reach the level reported in December.

The slight improvement in calls for tenders in the industry in early 2015 speaks to the modest improvement of the market situation. The companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between January and March was nine per cent lower than in the corresponding period in 2014, and 14 per cent lower than in the preceding quarter. Of the respondents, 55 per cent said the number of new orders was down from October—December, 40 per cent said it was up and five per cent said it had remained stable.

Turnover of the Technology Industry in Finland 225 200 175 150 125 100 75 50 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Seasonally adjusted turnover index Mechanical Engineering 41% Metals Industry 14% Information Technology 15% Industry 22% Consulting Engineering 8%.

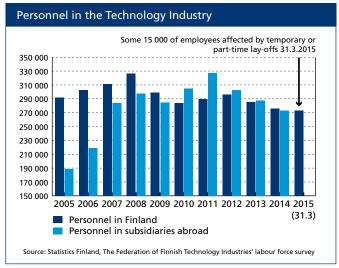


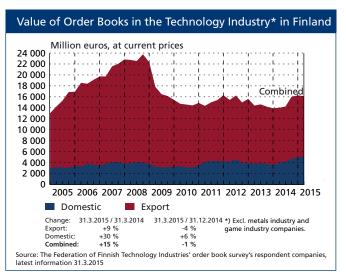
At the end of March, the value of order books was up 15 per cent from the corresponding period last year, but slightly below the value reported at the end of December. Forty-nine per cent of companies reported an increase in the level of order books from December, while 41 per cent reported a drop and 10 per cent had seen no change.

Judging from order trends in recent months, the turnover of technology industry companies is expected to be slightly higher in the spring of 2015 than in the corresponding period last year.

In 2014, the number of personnel employed by Finnish technology industry companies decreased by more than three per cent, or almost 10,000 employees. On average, the industry employed 276,000 people in 2014. At the end of March, the number of personnel came to 273,000, down by some 3,000 from the 2014 average. In 2008, the industry employed a total of 326,000 people in Finland.

Despite the reductions, technology industry companies recruited a total of 20,000 new employees last year. A total of 7,000 new recruitments took place in January–March. Some companies were increasing their personnel, while others were hiring new employees due to retirements and employee turnover.





Source: Macrobond, Statistics Finland

## Electronics and Electrotechnical Industry in Finland





# New orders down from 2014, order books expand

The turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment and medical technology) in Finland was EUR 14.9 billion in 2014. It fell by some five per cent from 2013. In 2008, prior to the financial crisis, the turnover of the Finnish electronics and electrotechnical industry was EUR 30.4 billion.

The level of new orders in the industry between January and March fell from the corresponding period last year. However, order books were up in March from the level reported one year previously.

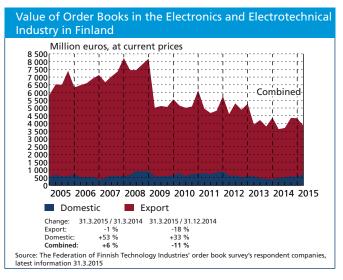
The electronics and electrotechnical industry companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders in the industry between January and March was eight per cent lower than in the corresponding period last year, and 18 per cent lower than in the preceding quarter.

At the end of March, the value of order books was up six per cent from the corresponding period last year, but 11 per cent lower than the value reported at the end of December.

Judging from order trends in recent months, the turnover of electronics and electrotechnical industry companies is expected to remain more or less at the same level in the spring of 2015 than in the corresponding period last year.

The number of electronics and electrotechnical personnel in Finland fell by almost 1,000 people, or two per cent, in 2014. On average, the industry employed 42,300 people in 2014. At the end of March, the number of personnel came to 42,000, slightly below the 2014 average. In 2008, the industry employed a total of 60,900 people in Finland.

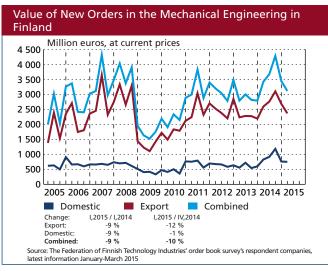
#### Value of Order Books in the Electronics and Electrotechnical Industry in Finland 7 500 7 000 6 500 6 000 5 500 5 000 4 000 3 500 3 000 2 500 2 000 1 500 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Domestic Export Combined I,2015 / IV,2014 1,2015 / 1,2014 Change: Export: +25 % +26 % Combined: -18 % Source: The Federation of Finnish Technology Industries' order book survey's respondent companies

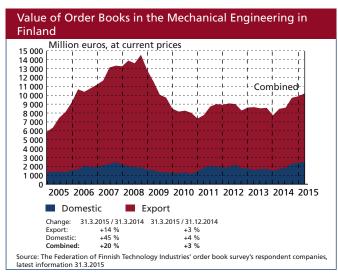




## Mechanical Engineering in Finland







# New orders drop again, order books strengthened by ship orders

The turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland was EUR 27.1 billion in 2014, remaining unchanged year-on-year. In 2008, prior to the financial crisis, the Finnish mechanical engineering accumulated a total turnover of EUR 33.3 billion.

The number of new orders received by mechanical engineering companies waned between January and March. However, order books were up significantly in March from the level reported one year previously, and slightly up from December. The strengthening of the order books since the summer of 2014 is mostly due to the expanded order books of shipyards.

The mechanical engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between January and March was nine per cent lower than in the corresponding period in 2014, and 10 per cent lower than in the preceding quarter.

At the end of March, the value of order books was 20 per cent higher year-on-year, and three per cent higher than at the end of December.

Judging from order trends in recent months, the turnover of mechanical engineering companies in the spring of 2015 is expected to be slightly higher than the corresponding period last year.

The number of mechanical engineering personnel in Finland dropped by 6,500 people, or five per cent, last year. On average, the industry employed 118,900 people in 2014. At the end of March, the number of personnel came to 118,000, slightly less than the 2014 average. In 2008, the industry employed a total of 150,100 people in Finland.

## Metals Industry in Finland





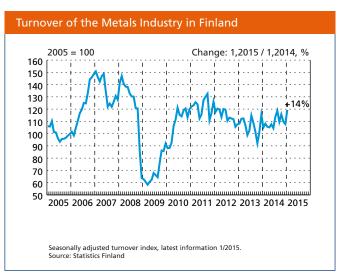
# Production slightly down but turnover growing

The turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland was EUR 9.1 billion in 2014, growing by some three per cent from 2013. In 2007, prior to the financial crisis, the corresponding figure was EUR 11.2 billion.

The total production of steel products, non-ferrous metals, castings and metallic minerals in Finland increased by some four per cent last year. Production between January and February 2015 was slightly lower than in the corresponding period in 2014, but turnover grew.

Global steel production grew by just one per cent from 2013 to 2014. In January-March 2015, production was down by two per cent from the corresponding period in 2014. Production in North America fell by six per cent and in the EU and Asia by one per cent. By far the largest production country, China, accounted for 50 per cent of global steel production in March.

In 2014, the number of personnel employed by Finnish metals industry companies decreased by three per cent, or 500 employees. On average, the industry employed 15,300 people in 2014. At the end of March, the number of personnel came to 15,000, slightly less than the 2014 average. In 2008, the industry employed a total of 18,100 people in Finland.

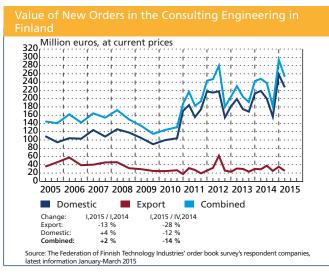


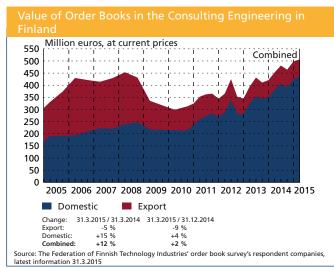




## Consulting Engineering in Finland







# New orders and order books above last year's level

The turnover of consulting engineering companies (industrial, social and construction expert services) in Finland was about EUR 5 billion in 2014. This is slightly higher than the previous year. In 2008, prior to the financial crisis, the industry's turnover in Finland was EUR 5.5 billion.

In the consulting engineering sector, both new orders and order books were up from January–March last year. The number of new orders fell from the previous quarter, however. Typically for the sector, order volumes fluctuate strongly from one quarter to another.

The consulting engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders in the industry between January and March was two per cent higher than in the corresponding period last year, but 14 per cent lower than in the preceding quarter.

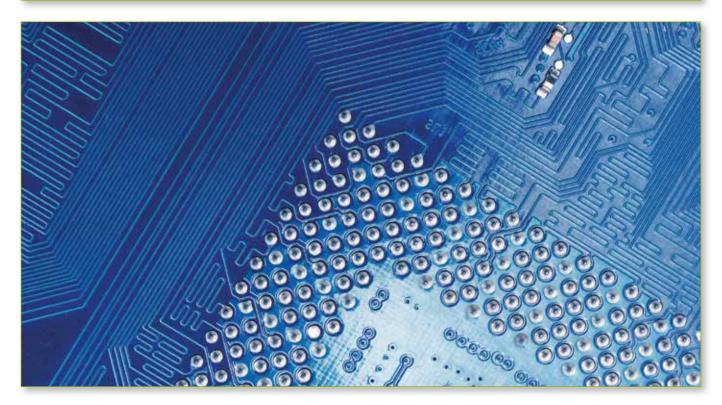
At the end of March, the value of order books was 12 per cent higher than in the corresponding period last year, and two per cent higher than at the end of December.

The turnover of consulting engineering companies in the spring of 2015 is expected to exceed last year's levels.

The number of personnel employed by the Finnish consulting engineering industry in 2014 remained unchanged from 2013. On average, the industry employed 46,000 people in 2014. At the end of March, the number of personnel was slightly higher than the 2014 average. In 2008, the industry employed a total of 45,500 people in Finland.

## Information Technology in Finland





#### Growth of order books continues

The turnover of companies in the information technology sector (IT services and software) in Finland totalled EUR 10 billion in 2014, growing some 20 per cent from 2013. This growth was largely driven by the game industry. In 2008, prior to the financial crisis, the Finnish information technology industry's turnover was EUR 6.7 billion.

New orders in the information technology (excluding game industry) fell between January and March. Even so, the order books were up from March last year. Nevertheless, there are major differences between individual companies. Typically for the sector, order volumes also fluctuate strongly from one quarter to another.

The information technology companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between January and March was 18 per cent lower than in the corresponding period in 2014, and 11 per cent lower than in the preceding guarter.

At the end of March, the value of order books was seven per cent higher than in the corresponding period last year, and similar to the value reported at the end of December.

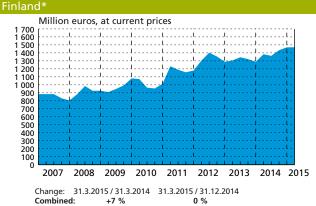
Judging from order trends in recent months, the turnover of information technology companies is expected to be higher in the spring of 2015 than in the corresponding period last year.

In 2014, the number of personnel employed by Finnish technology industry companies decreased by three per cent, or 1,500 employees. On average, the industry employed 53,000 people in 2014. At the end of March, the number of personnel came to 52,000, slightly less than the 2014 average. In 2008, the industry employed a total of 51,700 people in Finland.

## Value of New Orders in the Information Technology in Million euros, at current prices 850 800 750 700 650 550 500 450 400 350 300 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 I,2015 / IV,2014 1,2015 / 1,2014 Change: \*) Excl. game industry companies

Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information January-March 2015

### Value of Order Books in the Information Technology in



\*) Excl. game industry companies.

Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information 31.3.2015

### Fall in staff numbers in Finland and abroad in 2014

The number of Finnish technology industry staff employed by foreign subsidiaries shrank by around five per cent in 2014. Staff in Finland fell by more than three per cent. Finnish companies employed a total of 549,000 people in 2014. Domestic operations accounted for 276,000 jobs, while 273,000 people worked for international subsidiaries.

Staff numbers in international subsidiaries fell in all sectors except mechanical and consulting engineering, where personnel numbers grew by around one per cent. Technology industry personnel shrank the most in emerging markets, on average by six per cent. Personnel numbers in Western Europe fell by some four per cent. In North America, staff numbers were down by two per cent. Significant restructuring in a few companies also affected personnel numbers in 2014.

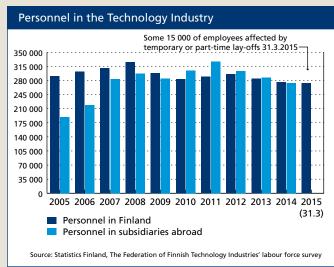
As much as 65 per cent of all staff employed by the Finnish technology industry companies abroad are located in low-cost economies in emerging regions: Asia, Africa, the Middle East, Central and Eastern Europe and Latin America. In 2014, the number of personnel in these areas fell by some 11,000 people. 2014 marks the third consecutive year of falling staff numbers in emerging markets.

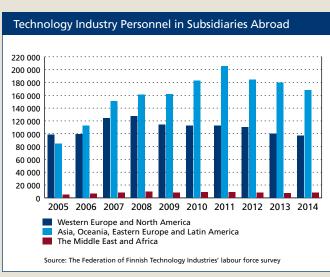
The largest concentrations of foreign subsidiaries in 2014, measured by number of staff, are as follows: China (45,300), India (28,300), the United States (22,100), Germany (18,700), Mexico (15,600), Sweden (14,400), Brazil (13,400), Vietnam (10,200), Poland (9,900) and the United Kingdom (7,200).

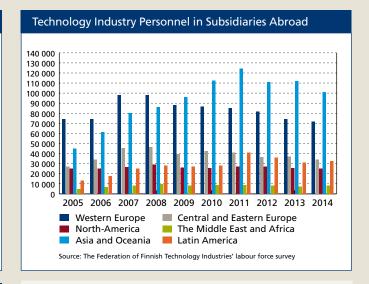
In Finland, technology industry companies decreased their staff by around 9,500 people in 2014. Since 2008, the total number of staff has dropped by 50,000.

According to the Federation of Finnish Technology Industries' quarterly survey, the negative development of personnel numbers continued between January and March 2015. All in all, staff numbers shrank by some 2.3 per cent from the average numbers in 2014. At the end of March, the industry employed 273,000 people in Finland

The structural changes over the last few years reflect intensifying price competition. To maintain their competitiveness, companies have shifted their production and services towards emerging markets and countries with low labour costs. More recently, mechanical engineering companies in particular have grown in emerging markets. This trend is expected to continue over the next few years.







In April 2015, the Federation of Finnish Technology Industries conducted a survey of the number of domestic and international staff employed by its member companies at the end of 2014, by country. Member companies of the Federation of Finnish Technology Industries account for around 80 to 90 per cent of all technology companies operating in Finland, measured by turnover.

Foreign subsidiaries are companies in which the Finland-based parent company has a share of at least 50 per cent. The number of international staff can change by way of company acquisition/divestment, expansion/reduction of operations or increase/decrease in the percentage of ownership.

The number of staff in Finland at the end of March 2015 was investigated as part of the quarterly survey. Information on suspensions, temporary employment and recruitment was gathered separately.

#### Electronics and Electrotechnical industry

Finnish electronics and electrotechnical industry companies employed a total of 156,000 people in 2014. About 114,000 employees worked in international subsidiaries and 42,000 in Finland. Staff numbers abroad shrank by some nine per cent in 2014. In 2000, 63,000 employees were based in Finland and 55,000 in subsidiaries abroad.

More than 80 per cent of all international staff employed by Finnish electronics and electrotechnical industry companies are located in the emerging market countries of Asia, Africa, the Middle East, Central and Eastern Europe and Latin America. The number of personnel in these regions grew by 66,000 over the last 14 years. However, the number of personnel dropped by around 10,000 in 2014

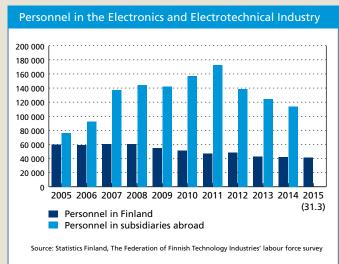
In Finland, electronics and electrotechnical industry companies reduced their personnel by 1.5 per cent in the first quarter of 2015 from the 2014 average. At the end of March, the industry employed 42,000 people in total.

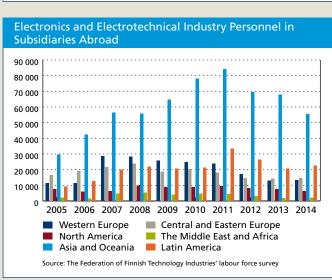
#### Mechanical Engineering

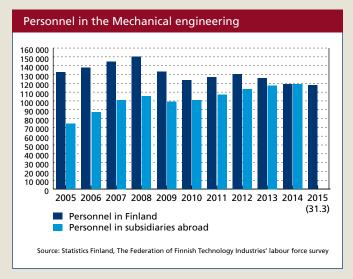
Finnish mechanical engineering companies employed a total of 238,000 people in 2014. Personnel numbers in Finland and abroad were the same: slightly less than 119,000 employees. In the reference year 2000, staff numbers were 130,000 in Finland and 62,500 in foreign subsidiaries. In 2005–2008, international staff grew by almost 50 per cent (35,000 new employees) due to investment projects and corporate restructuring, but shrank by almost six per cent in 2009. In 2010–2013, staff numbers in foreign subsidiaries increased by 16 per cent. The growth trend continued in 2014, and the number of international staff grew by one per cent. Personnel in Finland shrank by around five per cent.

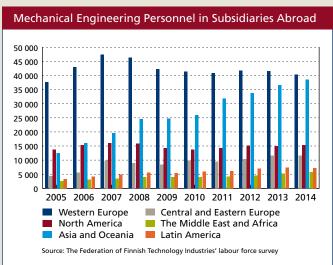
About half of all international staff employed by Finnish mechanical engineering companies are located in the developed countries of Western Europe and North America.

In Finland, mechanical engineering industry companies reduced their personnel by about one per cent in the first quarter of 2015 from the 2014 average. At the end of March, the industry employed some 118,000 people in total.









#### PERSONNEL DEVELOPMENT

#### Metals Industry

Finnish metals industry companies employed a total of 35,000 people in 2014. About 20,000 employees worked in international subsidiaries and 15,000 in Finland. In the reference year 2000, staff numbers were slightly less than 18,000 in Finland and in excess of 12,000 abroad.

In 2014, the average reduction in staff numbers in Finland was 500 employees, or some three per cent. The number of international personnel shrank by around 16 per cent. Corporate restructuring and other measures have caused strong fluctuations in international employment in the past few years. More than 60 per cent of all international staff employed by Finnish metals industry companies are located in Western Europe and North America.

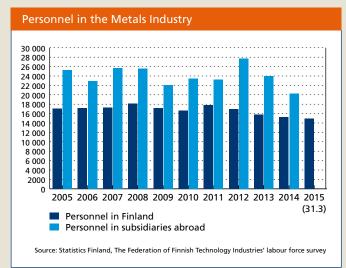
In Finland, metals industry companies reduced their personnel by 2.4 per cent in the first quarter of 2015 from the 2014 average. At the end of March, the industry employed some 15,000 people in total.

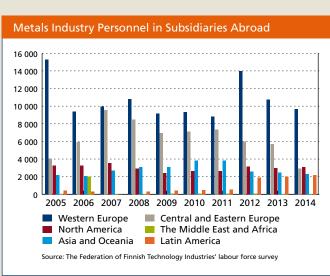
#### Consulting Engineering

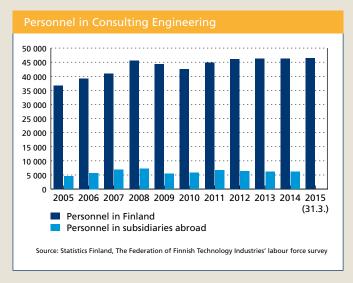
Finnish consulting engineering companies employed 52,000 people in 2014. A total of 46,000 employees worked in Finland and 6,000 in international subsidiaries. In the reference year 2000, staff numbers totalled 31,000 in Finland and slightly fewer than 3,000 abroad. Personnel numbers abroad remained close to the levels reported in 2013.

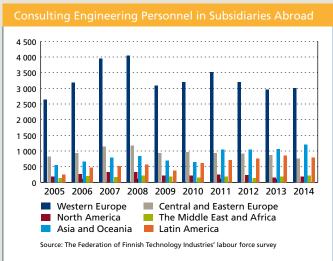
In this industry, about half of the international staff employed by Finnish companies are located in Western Europe, while slightly less than half work in the emerging market countries.

In Finland, consulting engineering companies increased their personnel slightly between January and March from the 2014 average. At the end of March, the industry employed 46,000 people in total







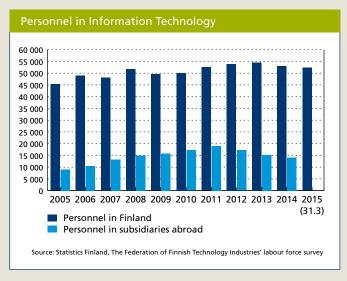


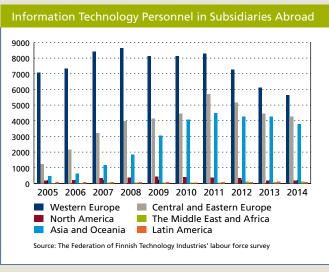
#### Information Technology

Finnish information technology companies employed a total of 67,000 people in 2014. Some 53,000 employees worked in Finland and 14,000 in international subsidiaries. In the reference year 2000, staff numbers totalled 37,000 in Finland and 5,000 abroad. Staff numbers abroad have declined for the past three years. In 2014, international personnel numbers shrank by around seven per cent.

Some 40 per cent of all international staff employed by the Finnish information technology companies are located in Western Europe and around 27 per cent in Asia.

In Finland, information technology companies reduced their personnel by 1.3 per cent in the first quarter of 2015 from the 2014 average. At the end of March, the industry employed approximately 52,000 people in total.







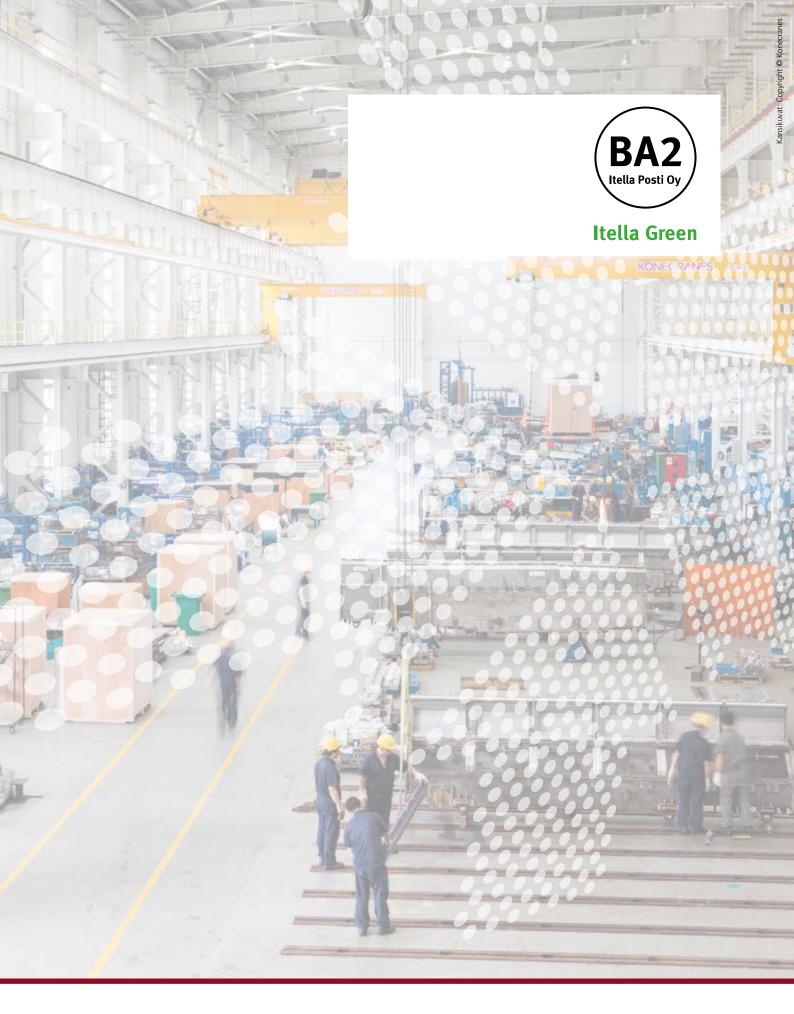
### **ECONOMIC SITUATION AND OUTLOOK 2/2015**

Information based on the situation on 5 May 2015.

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Please visit the homepage of the Federation of Finnish Technology Industries for additional information on technology industry turnover, exports, investments, personnel and the development of producer and metal prices: www.techind.fi.



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