Industry Canada Industrie Canada

Information and Communications Technologies (ICT)

# Quarterly Monitor of the Canadian ICT Sector
# Second Quarter 2010

Canada

*Quarterly Monitor of the Canadian ICT Sector*
*(URL: http://www.ic.gc.ca/eic/site/ict-tic.nsf/eng/h_it06100.html)*

**Industry Canada**
**Spectrum, Information Technologies and Telecommunications**
**Information and Communications Technologies Branch**

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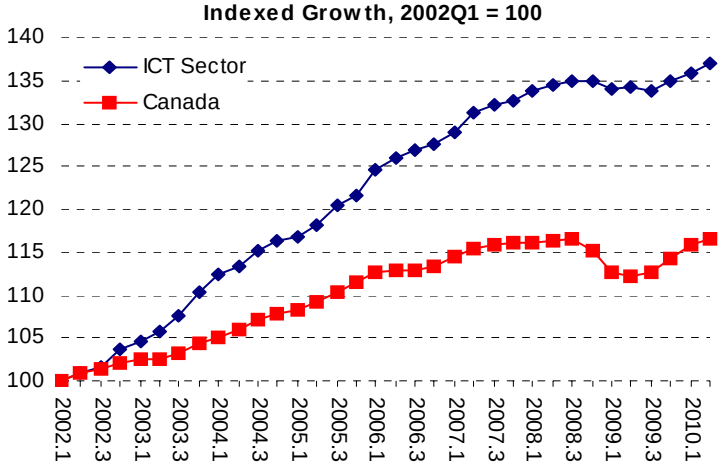
# Gross Domestic Product

## *ICT output increased...*

The second quarter of 2010 marked the third consecutive increase in real ICT sector output, up 0.8%. Real output for all Canadian industries increased for a fourth consecutive quarter, up 0.6%. Both the ICT sector and the overall Canadian economy GDP have been trending upwards steadily following the downturn between mid-2008 and mid-2009.

**Real GDP: ICT Sector and Canadian Economy, Indexed Growth, 2002Q1 = 100**

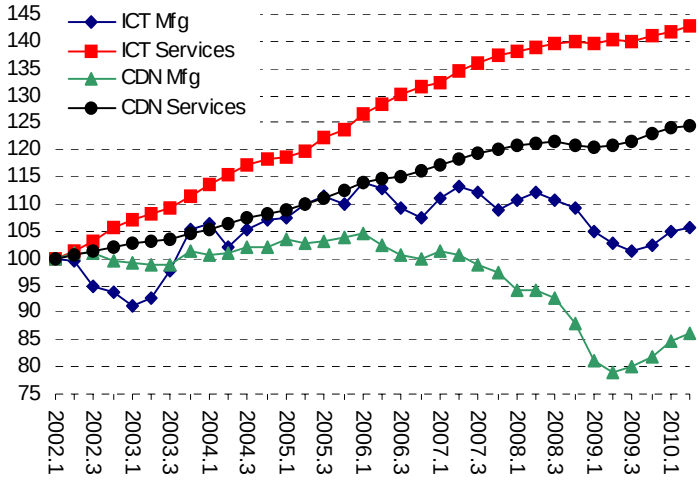



ICT manufacturing GDP increased for the third consecutive quarter, up 0.9%. Total Canadian manufacturing GDP also has steadily increased for four consecutive quarters. Both ICT manufacturing GDP and Canadian manufacturing GDP trended downwards from mid-2008 until mid-2009, however ICT manufacturing GDP levels did not fall as severely as Canadian manufacturing GDP levels.

ICT services output grew 0.8% in the second quarter of 2010 for a third consecutive quarterly increase. Although ICT services output flattened in early 2009, it resumed its moderate upward trend at the end of 2009. In comparison, total Canadian services output increased for the fifth quarter in a row, up 0.1% this quarter.

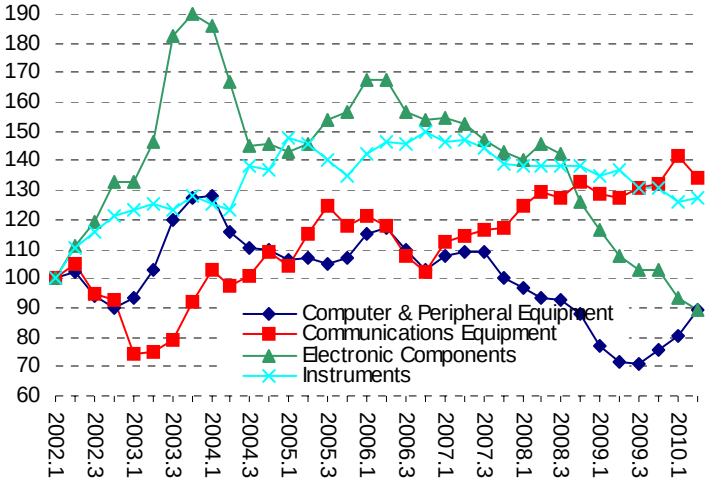
* See ICT services definition on page five. This total includes the ICT wholesaling industries.

**Real GDP: ICT & CDN Manufacturing & Services Industries, Indexed Growth, 2002Q1 = 100**




Real GDP increased in two out of the four key ICT manufacturing industries this quarter. The computer and peripheral equipment industry and the instruments industry increased 11.3% and 1.1%, respectively. The computer and peripheral equipment industry has increased sharply since the third quarter of 2009. On the other hand, the instruments industry had been dropping since the second quarter of 2009, and only turned around in this quarter. The communications equipment industry dropped sharply (-5.3%). However, it continues to be the most rapidly increasing industry in terms of GDP since the end of 2006, and the only industry that has shown an upward trend since the end of 2006. GDP in the electronics component industry has been falling since the second quarter of 2008, and continues to fall this quarter, down 4.4%.

**Real GDP: Selected ICT Manufacturing Industries, Indexed Growth, 2002Q1 = 100**

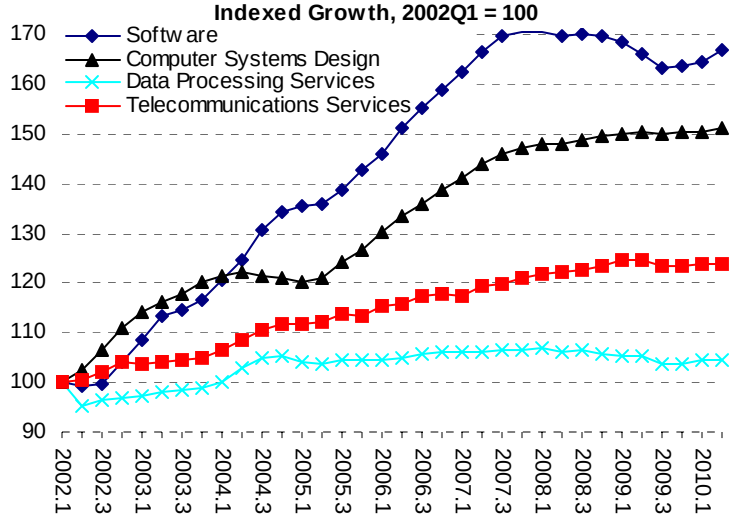


# Gross Domestic Product

Excluding wholesale, ICT services output increased 0.3% from the previous quarter, marking the third consecutive increase in the absence of wholesale. Meanwhile, the ICT wholesaling industry output increased 6.6% this quarter.

Growth in the ICT services sub-sector was lead by software publishing (+1.3%). Computer systems design, data processing services, and telecommunications services industries increased by 0.3%, 0.1%, and 0.1%, respectively. Since the end of 2009, only the software publishing industry has seen a significant upward trend. Despite this, it has not yet recovered the level reached in the first quarter of 2009.

**Real GDP: Selected ICT Services Industries, Indexed Growth, 2002Q1 = 100**

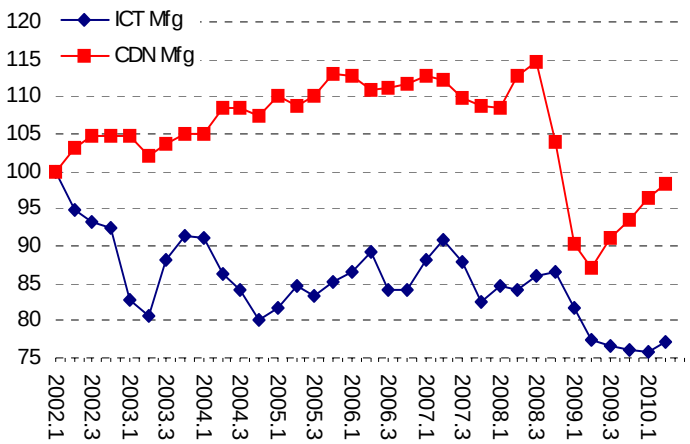



# Manufacturing Shipments

## *ICT manufacturing shipments rebounded...*

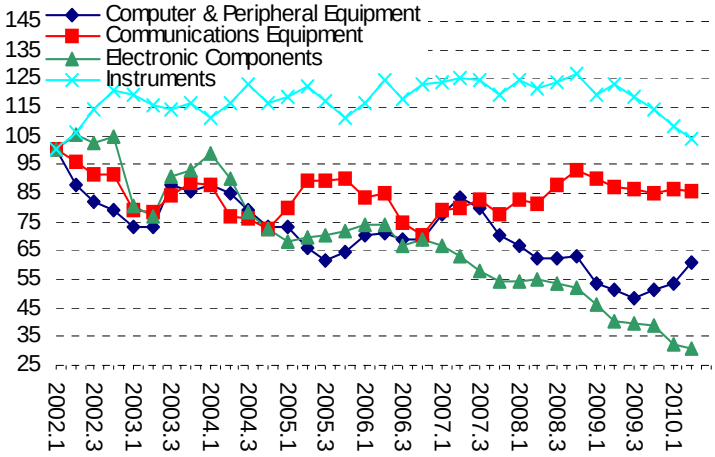
ICT manufacturing shipments were up 1.7% this quarter, after dropping for five consecutive quarters. ICT manufacturing shipments experienced a sharp decline between the third quarter of 2008 and the second quarter of 2009, which brought shipments down to their lowest level since 2002. This decline tapered off in the second half of 2009, finally turning around with an increase this quarter. On the other hand, Canadian manufacturing shipments have been increasing steadily since the second quarter of 2009.

**Manufacturing Shipments: ICT and Canadian Manufacturing Industries, Indexed Growth, 2002Q1 = 100**




## *...due to an increase in computers & peripherals.*

**Manufacturing Shipments: Selected ICT Manufacturing Industries, Indexed Growth, 2002Q1 = 100**



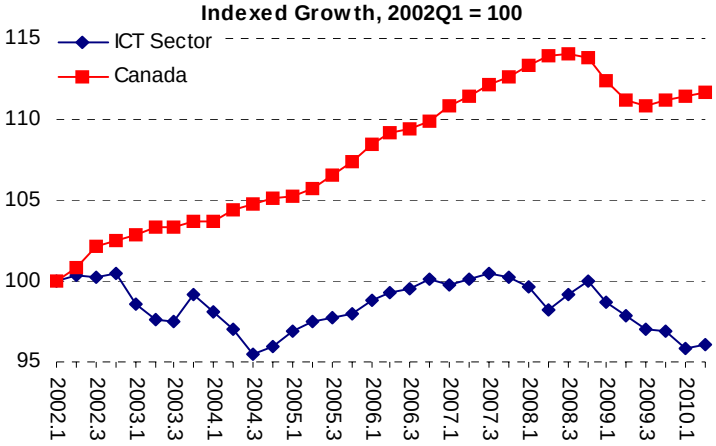

Growth in ICT manufacturing shipments this quarter was mainly attributed to increased shipments by the computer and peripheral equipment industry (+13.0%). All other key ICT manufacturing industries fell this quarter. Shipments of the electronic components industry have trended downwards since mid-2009. Shipments by the instruments and the communications equipment industries fell by 3.7% and 0.1%, respectively. Instruments shipments have declined steadily since the second quarter of 2009, while communications equipment shipments were moderately flat.

# Employment*

## *Slight increase in ICT employment...*

ICT employment grew in the second quarter of 2010 (+0.3%), after falling for five consecutive quarters. Employment in the Canadian economy has been increasing since mid-2009, up 0.2% this quarter.

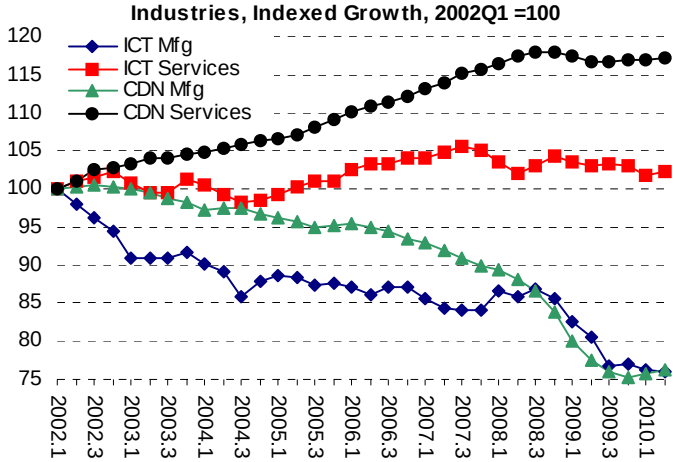
**Employment: ICT Sector and Canadian Economy, Indexed Growth, 2002Q1 = 100**



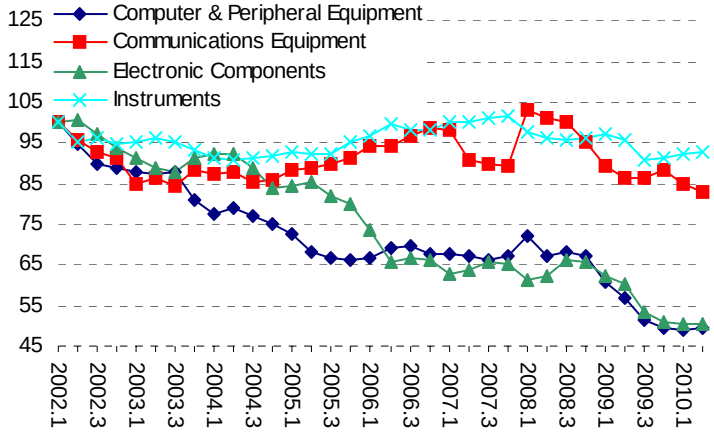

ICT manufacturing industries employment was down 0.3% this quarter. The declining trend in ICT manufacturing industries employment has tapered off since the third quarter of 2009. On the other hand, Canadian manufacturing industries employment grew 0.4% this quarter, ending its non-stop decline since 2006. Since the third quarter of 2008, ICT manufacturing industries and total Canadian manufacturing industries employment have followed a similar trend.

Employment in the ICT services industries increased 0.4% this quarter. It has trended downwards since the end of 2008, but the decline has been modest in comparison to manufacturing industries. Employment in the Canadian services sector did not change significantly; it remains flat.

**Employment: ICT & CDN Manufacturing & Services Industries, Indexed Growth, 2002Q1 =100**

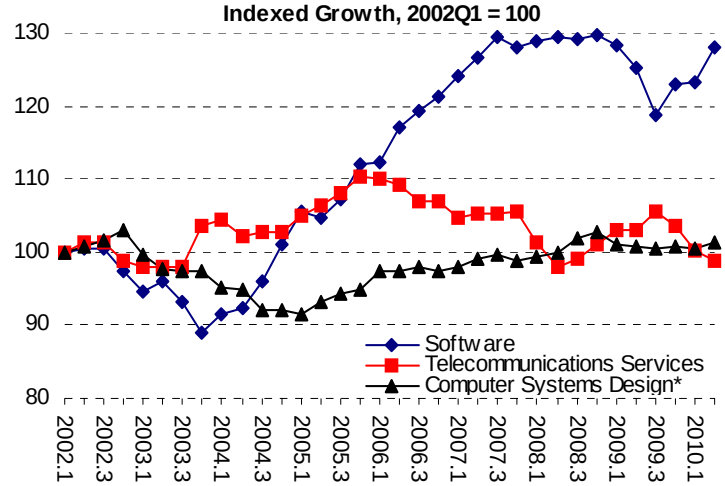



**Employment: Selected ICT Manufacturing Industries, Indexed Growth, 2002Q1 = 100**




In two of the four key ICT manufacturing industries, employment increased this quarter. Employment in the computer and peripheral equipment industry grew 1.5%. Although employment in this industry fell for six consecutive quarters prior, the magnitude of declines had been decreasing in scale since mid-2009. Employment in the instruments industry continued its upward trend for a third consecutive quarter, up 0.4%. Meanwhile, employment in the communications equipment industry and electronic components industry fell by 2.0% and 0.1%, respectively. Employment in the electronic components industry has been following the computer and peripheral equipment industry closely in trend since the third quarter of 2008. Both industries had been falling up until the end of 2009 and tapered off at the start of 2010.

**Employment: Selected ICT Services Industries, Indexed Growth, 2002Q1 = 100**




On the services side, two out of the three key ICT services industries increased employment this quarter. Employment in the software industry and computer systems design industry both increased for a third quarter in a row, by 3.8% and 0.6%, respectively. Employment in the software industry bounced back in the last three quarters (+7.8%) after a large drop in the first three quarters of 2009 (-8.5%). On the other hand, employment in the telecommunications services industry is still declining, down 1.6% in the second quarter and 6.5% in the last three quarters.

*Note: Due to reclassification of some of the establishments within the data processing industry to the computer systems design industry, employment in the computer systems design industry has been combined with employment in the data processing industry

* see note 1 on page 5

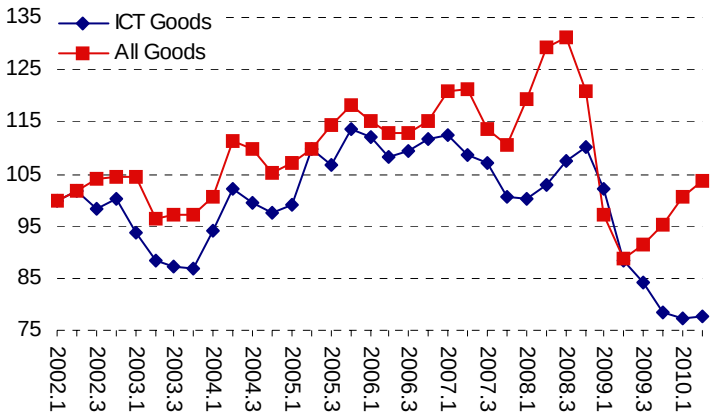
# Exports of Goods



## *ICT exports began to turn around...*

In the second quarter of 2010, ICT goods exports increased 0.4%, following five quarters of decline. ICT exports dropped sharply throughout 2009, leaving ICT goods exports at the lowest level of the analyzed period. The declining trend flattened off at the end of 2009 and turned around this quarter. Total Canadian exports turned around well before ICT, increasing steadily since the third quarter of 2009.

**Exports: ICT Goods and All Goods, Indexed Growth, 2002Q1 = 100**

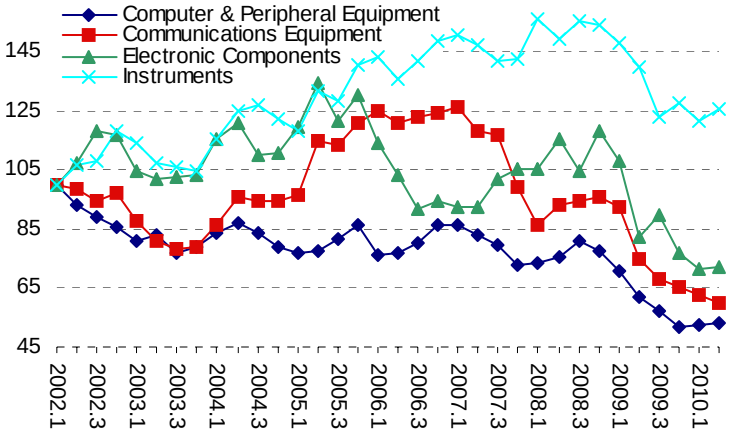



## *...led by growth in instruments.*

Three out of the four key ICT product group exports experienced increases this quarter. Exports of instruments, computer equipment, and electronic components were up 3.6%, 1.7%, and 0.8%, respectively. However, exports of communications equipment fell 3.8% this quarter.

Exports of electronic components, communications equipment, and computer and peripheral equipment have all trended downwards since the end of 2008. Although decreases tapered off for computer and peripheral equipment and electronic components, their exports remain at the lowest level seen since 2002. Exports of communications equipment fell sharply in the second quarter of 2009 and continue to steadily trend downwards. Exports of instruments dropped between the third quarter of 2008 and the third quarter of 2009. Since then, it has fluctuated near the same level.

**Exports: ICT Goods by Selected Product Group, Indexed Growth, 2002Q1 = 100**

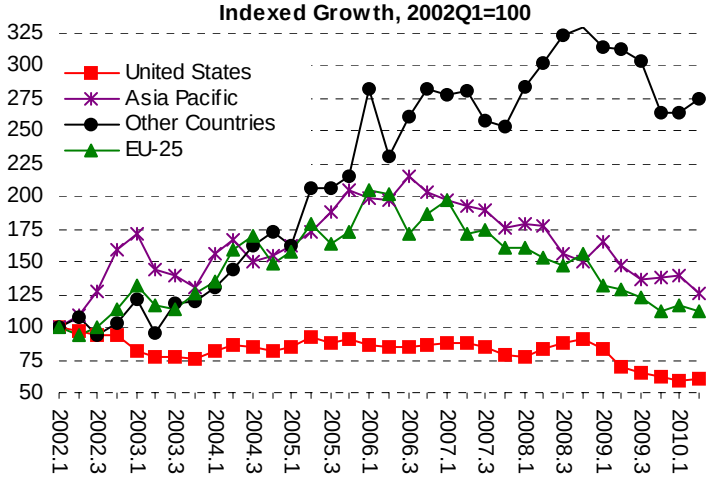



## *Exports to the US increased...*

ICT exports to the US have fallen steadily since the end of 2008, turning around this quarter (+2.9%). The US share in Canadian ICT exports now stands at 64%, up 1 percentage point from the previous quarter.

After increasing for two consecutive quarters, ICT exports to Asia Pacific economies fell by 10.1%. This quarter's decline was substantial in comparison to the increase of 1.9% in the previous quarter. ICT exports to the EU-25 also decreased this quarter (-3.7%), nearly eliminating the increase of 4.2% in the last quarter. Exports to 'Other countries' increased for the second quarter in a row, up 3.7%. The share of ICT exports to the EU-25 and Asia Pacific now stands at 12.4% and 11.2%, respectively, while 'Other countries' share increased and now stands at 12.2%.

**Exports: ICT Goods by Major Market, Indexed Growth, 2002Q1=100**



# Notes, Definitions and Sources

### Real GDP Versus Manufacturing Shipments

It is important to note that GDP and shipments differ in two ways. First, GDP measures the total contribution of an industry to the economy in terms of value-added while shipments are a simple measure of revenues. Most of the time, changes in shipments are good indicators of changes in GDP but structural changes to an industry (for example, an increase in outsourcing) can lead to different trends in GDP and shipments indices. Second, GDP is measured in constant dollars while shipments are measured in current dollars. This means that when prices increase, GDP fluctuates less than shipments but when prices decline, GDP fluctuates more than shipments. In the ICT context, this difference is very important in measuring output of the computer equipment industry since a hedonic price index is used. A hedonic price index is a statistical tool used to standardize per unit prices for goods whose quality and characteristics change rapidly such as a computer. The hedonic price index adjusts the price of a computer based on the improvements in speed, design, etc. Using this hedonic price deflator, a very rapid decline in production prices is observed resulting in a much stronger growth in the GDP index compared to the shipments index for the computer equipment industry.

### Information and Communications Technologies Sector*

**ICT Manufacturing:**

- Computer and Peripheral Equipment Mfg
- Communications Equipment Mfg
  - -wired communications equipment mfg
  - -wireless communications equipment mfg
- Audio and Video Equipment Mfg
- Electronic Component Mfg
- Instruments Mfg
- Communication Wire and Cable Mfg
- Commercial and Service Machinery Mfg

**ICT Services:**

- Software
- Computer Systems Design
- Data Processing Services
- Telecommunications Services
- Cable and Other Program Distribution
- ICT Wholesaling

** Based on the North American Industry Classification System*

***Sources**:*
*GDP (2002 constant dollars): GDP by Industry, Industry Measures and Analysis Division, Statistics Canada.*
*Manufacturing Shipments: Monthly Survey of Manufacturing, Manufacturing, Construction and Energy Division, Statistics Canada.*
*Employment: Survey on Employment, Payrolls and Hours (SEPH), Labour Statistics Division, Statistics Canada.*
*Exports: Trade Data Online, International Trade Division, Statistics Canada.*

***Notes**:*
1. *Self-employed workers are not included. Employment trends in this publication are based on the Survey on Employment, Payrolls and Hours (SEPH) and might be slightly different from trends based on annual industry specific surveys reported in the ICT Statistical Overview. Although data from SEPH might not be as reliable as data from industry specific surveys, they are timelier and provide an indication of the current employment situation.*
2. *Data used in this report are adjusted for seasonal variation.*

### Export Markets:

United States: United States.

EU-25: United Kingdom, Germany, France, Belgium, Netherlands, Italy, Spain, Sweden, Austria, Finland, Ireland, Denmark, Poland, Portugal, Czech Republic, Greece, Luxembourg, Hungary, Slovenia, Latvia, Lithuania, Estonia, Slovakia, Cyprus and Malta.

Asia Pacific (based on Department of Foreign Affairs and International Trade definition): Afghanistan, Australia, Bangladesh, Bhutan, Brunei Darussalam, Burma (Myanmar), Cambodia (Kampuchea), China, Cook Islands, Fiji, French Polynesia, Guam (U.S.), Hong-Kong, India, Indonesia (includes East Timor), Japan, Kiribati (includes Tuvalu), South Korea, Kyrgyzstan, Laos, Macau (Macao), Malaysia, Maldives, Micronesia, Mongolia, Naura, Nepal, New Caledonia, New Zealand, Niue, Pakistan, Papua New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Taiwan (Taipei), Tajikistan, Thailand, Tonga, Turkmenistan, Uzbekistan, Vanuatu (New Hebrides), Vietnam.