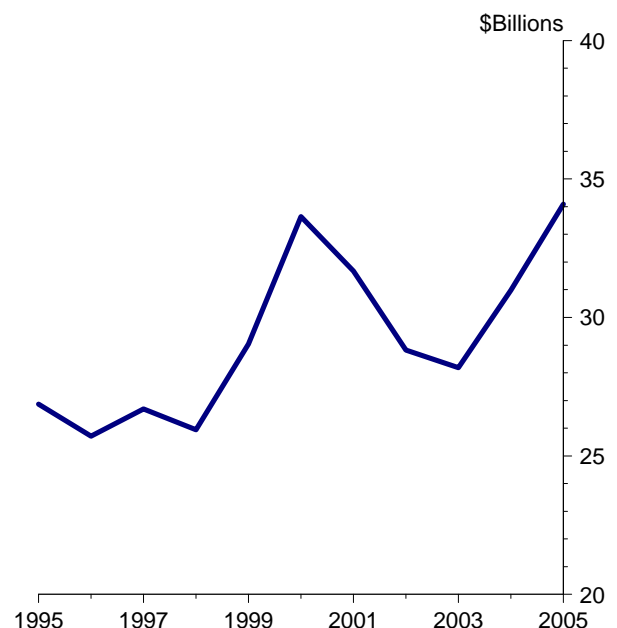


## Exports ♦ December 2005

- Despite a decline in shipments of forest products, the overall value of BC exports climbed 10.0% in 2005. Substantial increases in exports of energy products (+68.3%) and metallic mineral products (+28.6%) were the main contributors to the overall rise.
- The jump in the value of energy exports has been due to a combination of price hikes and increased demand. The value of electricity exports soared 127.7% from 2004 to 2005, while natural gas shipments jumped 52.0% and exports of coal grew 89.9%.
- The rise in international shipments of metallic mineral products was driven mainly by increases in exports of copper ores and concentrates (+67.3%) and molybdenum ores and concentrates (+75.7%). Shipments of unwrought zinc slumped 16.9%, while exports of unwrought aluminum edged down 2.5%.
- The forest sector saw declines in shipments of both solid wood products (-5.8%) and pulp and paper products (-7.5%). Falling prices for softwood lumber have resulted in a 9.0% drop in exports of that product despite a 3.4% increase in quantity of lumber shipped. Exports of softwood plywood and veneer (-5.5%) and other panel products (-16.4%) fell, but shipments of valued added wood products climbed 5.1%. In the pulp and paper sector, a 13.2% plunge in shipments of pulp was the main driver of the decline in pulp and paper exports. Shipments of newsprint actually grew slightly, edging up 2.5%.
- There was an 11.3% drop in exports of apparel and accessories as competition from countries such as China caused problems for the domestic industry.
- The value of machinery and equipment exports rose 7.1% in 2005, including a 6.8% boost in shipments of motor vehicles and parts.
- Destinations that recorded significant increases in BC exports in 2005 included India (+46.9%), South Korea (+28.9%), the UK (+23.6%) and Mexico (+21.5%). There were significant declines in shipments to Australia (-19.7%) and Hong Kong (-10.5%).

*The value of BC exports has regained all the ground lost between 2000 and 2003*



## SEASONALLY ADJUSTED EXPORTS

*Exports (adjusted for seasonality)  
climbed in December*

Seasonal adjustment supplies a means of making month-to-month comparisons by removing the regular periodic seasonal fluctuations that occur. Variations from normal seasonal patterns are revealed in the seasonally adjusted data series.

- A substantial jump in exports of energy products (+15.5%), particularly coal shipped to Japan and Europe, helped drive up overall exports 5.9% in December. Forest product (+4.2%) and machinery, equipment and automobile exports (+3.9%) also posted healthy increases.
- Shipments to the US slipped 1.1% as exports of energy products to that country fell 11.2%. A 6.2% rise in shipments of forest products partially offset the drop in energy exports.



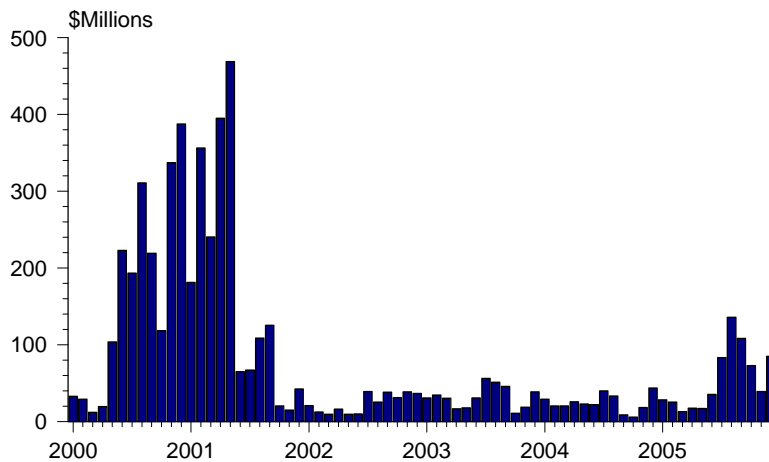
**BC Exports, Seasonally Adjusted (\$Millions)**

Month	Agriculture & Fish	Energy	Forest Products	Machinery & Equip, Auto	Industrial, Consumer	Total	Exports to USA
Dec 2003	205	361	1,032	322	441	2,362	1,546
Jan 2004	170	331	1,013	310	399	2,222	1,478
Feb	187	349	1,071	332	455	2,395	1,542
Mar	188	351	1,160	317	452	2,468	1,618
Apr	190	342	1,184	314	497	2,528	1,646
May	196	441	1,336	340	531	2,844	1,766
Jun	197	384	1,310	345	491	2,727	1,791
Jul	206	387	1,263	357	497	2,711	1,758
Aug	187	378	1,282	340	521	2,708	1,770
Sep	200	299	1,267	341	493	2,600	1,722
Oct	209	338	1,176	341	503	2,567	1,648
Nov	197	460	1,116	340	491	2,604	1,708
Dec	186	452	1,124	326	517	2,604	1,677
Jan 2005	189	437	1,116	332	545	2,619	1,666
Feb	184	419	1,167	337	550	2,657	1,727
Mar	181	443	1,130	336	507	2,598	1,730
Apr	184	495	1,105	351	515	2,650	1,735
May	187	537	1,131	356	533	2,745	1,735
Jun	206	612	1,107	360	591	2,878	1,775
Jul	176	682	990	361	480	2,689	1,807
Aug	203	801	1,074	364	551	2,993	1,844
Sep	197	780	1,041	365	587	2,970	1,828
Oct	202	844	1,125	375	529	3,074	2,021
Nov	209	719	1,130	377	585	3,019	2,026
Dec	203	830	1,178	391	595	3,197	2,005

## Electricity Puts a Charge into BC's Exports

After a slow start early in the year, BC exports of electricity surged in the second half of 2005 to their highest levels since the energy crisis that hit California back in 2000 and 2001. At year end, exports of electricity to the United States were up 128% compared to the value of electricity transmitted over the border in 2004. The largest component of this increase was price inflation, but growth in demand also played a role as quantities exported climbed as well, rising 44%.

The value of BC exports of electricity are the highest they've been since the energy crisis in California in late 2000-early 2001



Source: Statistics Canada

From January to July 2005, prices of electricity were already significantly higher compared to a year earlier, but the effects of hurricanes Katrina and Rita wreaked havoc on energy supplies in the United States as infrastructure damage limited the availability of natural gas. As a result, prices for all types of energy products, including electricity, soared. The hurricanes also contributed to increased demand for electricity imports into the United States as power companies using natural gas to generate electricity needed to find alternative sources of power.

One may wonder how British Columbia is able to export power to other destinations given that BC Hydro, which is by far the largest electricity supplier in the province, has claimed it does not have sufficient resources to meet the needs of British Columbians and that there is a need to develop new power production capacity within the province. A possible explanation for this apparent contradiction is that the province is also a significant importer of electricity.

Since most electricity in BC is hydro-electricity generated from water flowing through dams, the province has an advantage over those regions where electricity is mainly generated from nuclear facilities, or gas or coal-fired operations. While it is fairly simple to turn the flow of water going through the dams on and off, it is

*The value of exports of electricity rose dramatically in 2005*

*Not since the energy crisis in California in 2000/2001 has the value of BC exports of electricity been this high*

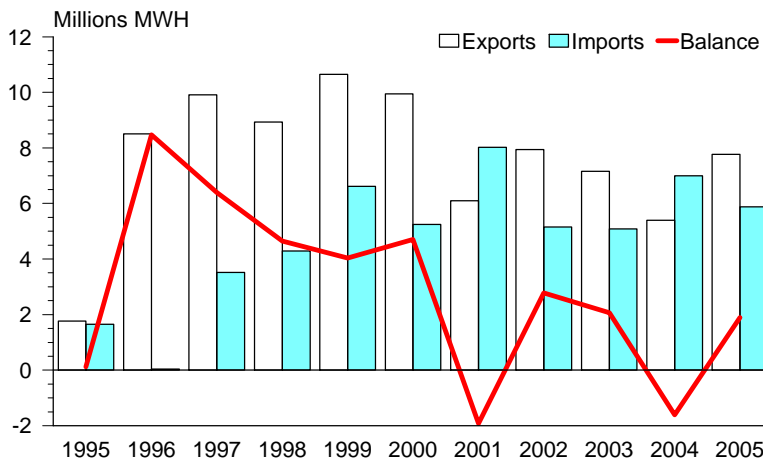
*Hurricanes Katrina and Rita contributed to the price inflation in energy products*

quite impractical to regulate the flow of electricity from other generation sources, such as nuclear power, in this manner. This means that the electricity generated using these other methods cannot be stored. It is more or less a “use it or lose it” situation. This allows BC Hydro, through its subsidiary Powerex, to purchase power from these sources in off-peak periods when the spot price is lower and “store” its own electricity by shutting off the flow of water through its dams, then sell the excess stored power in the high-peak periods when prices are higher.

*With the flexibility of hydro-electric power, BC Hydro is able to buy low and sell high*

This system of arbitrage is employed not only in trade with the United States, but also with Alberta. Nevertheless, with the exception of a few years, BC has generally had a surplus in trade of electricity over most of the last decade. In other words, the amount of electricity exported has exceeded electricity imports in most years.

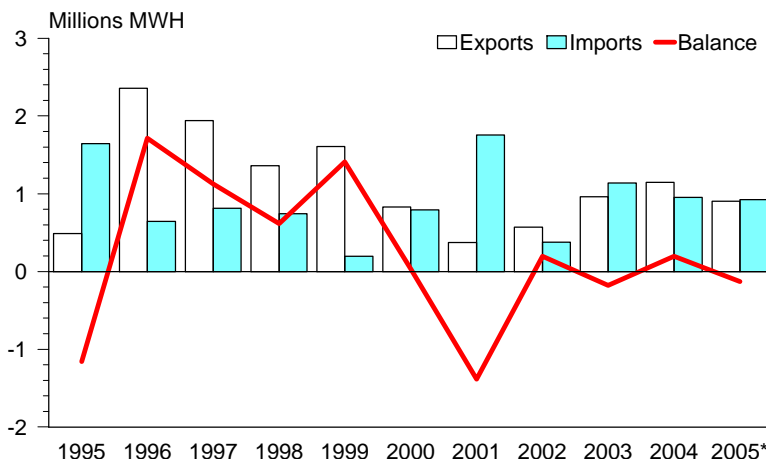
After a deficit in 2004, BC electricity trade with the US moved back into a surplus in 2005



*British Columbia exported more electricity to the United States in 2005 than it imported from that country...*

Source: Statistics Canada

BC interprovincial trade in electricity appears to be headed for a deficit in 2005



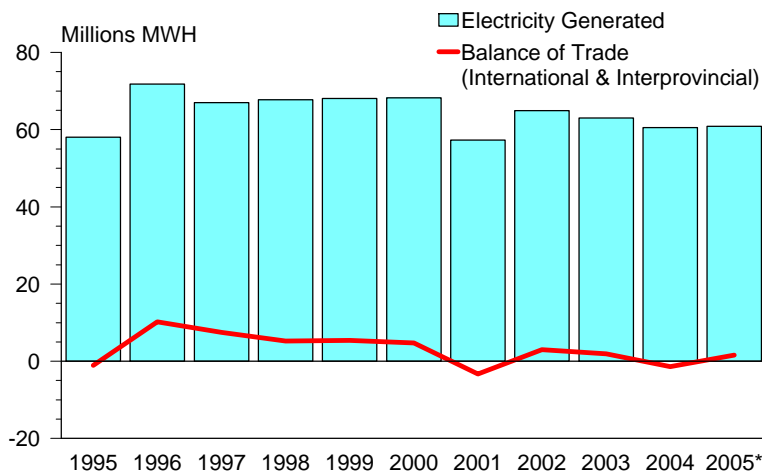
*...but given the data available through November, it appears that imports from Alberta will exceed exports to that province in 2005*

Source: Statistics Canada

\*January-November year-to-date

Those years in which imports exceeded exports coincided with years in which the province had lower than average water levels. In other words, when there was not sufficient precipitation to adequately generate enough electricity to meet the needs of BC residents and businesses, it was necessary to import power not only during low-peak times, but also high-peak periods.<sup>1</sup> This was the case in 1995, 2001 and 2004 when electricity generated in the province was below average. In each of these years, the amount of electricity imported exceeded exports.

**In years where low water levels resulted in below average electricity generation, BC was a net importer of electricity**



Source: Statistics Canada

\*January-November year-to-date

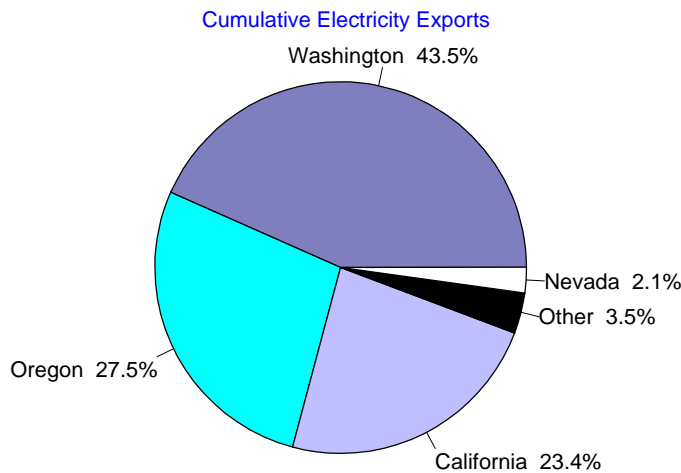
*When water levels are low, BC imports more electricity than it exports*

Most of this two-way trade in electricity is with the United States. While BC does have a significant electricity trade relationship with Alberta, the quantity of two-way trade with that province is only about 10 to 15 percent of the magnitude of trade with the US. Within the US, by far most of the trade is with just two states: Washington and Oregon. Given the proximity of these states to BC, this makes sense. Oregon has increased its imports from BC substantially in the last few years, such that it has been the top destination state for BC electricity exports for the last two years running, displacing Washington. During the energy crisis in California in 2000 and 2001, that state was the top destination state for BC exports of electricity, but exports to California have dropped considerably since then. One of the reasons for the decline could be that equipment upgrades necessitated removing some of the lines to California off the grid for a period of time, which restricted BC's access to the market.

*Most international exports of electricity from BC are transmitted to one of two states: Washington or Oregon*

<sup>1</sup> In actual fact, it may not strictly have been necessary, as BC Hydro may have been able to boost electricity production from other non-hydro sources, but the cost of doing this would probably have exceeded the cost of importing the power. For example, BC Hydro has the option of running the natural gas-fired Burrard Generating Station, but may choose not to do so when the cost of natural gas is too high.

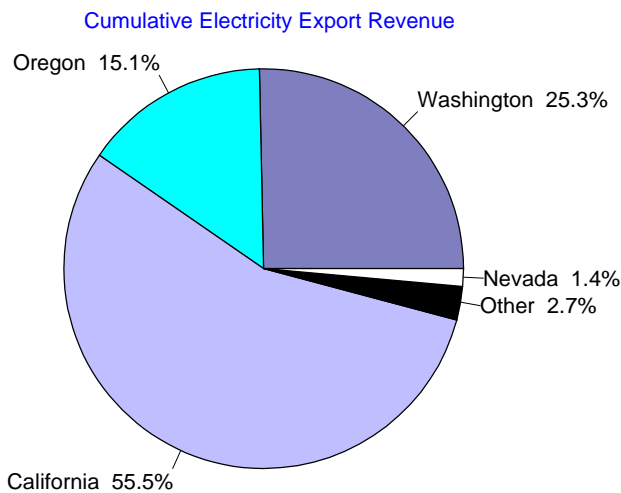
From 2000 through 2005, over 94% of BC international exports of electricity were transmitted to only three US states



*Over the last six years, Washington has been the most significant destination for BC electricity exports in terms of quantity...*

Source: Statistics Canada

California leads as revenue generator for BC electricity exporters, 2000-2005



*...but California has generated the most revenue for BC exporters of electricity*

Source: Statistics Canada

Over the last six years, Washington State has been the top destination for international exports of electricity from BC in terms of quantity, but California tops the scales in terms of revenue generated from sales. This is because the majority of exports to California were during the period when prices were sky high.

The electricity price inflation that has occurred in recent years has been a source of lucrative revenues for Powerex. Even in years where BC was a net importer of power, the trade balance in terms of revenue earned from electricity sales to the United States, less expenses from electricity purchases from the US, has been positive for BC. In other words, since Powerex is able to buy low and sell high given the flexibility of hydro-electric power, it has managed to achieve a positive revenue stream from international electricity trade even in years when it was importing more power than it exported.

The lucrative nature of these power sales has caused some controversy in BC, particularly in the district municipality of Kitimat, where the large aluminum smelter operated by Alcan is located. The District of Kitimat has attempted to sue Alcan for alleged breach of its 1950 agreement with the province that provided Alcan with the water resources needed to produce aluminum in return for the jobs and tax revenue that the aluminum smelter would provide. According to Kitimat's complaint, Alcan has curtailed aluminum production in order to take advantage of high prices for electricity and increase power sales. Alcan has always had an agreement to make surplus power available to BC Hydro, but in recent years, this "surplus" has become larger as poor aluminum prices made it far more economical for Alcan to reduce production and sell the power instead. So far Kitimat's efforts in court have failed, but the district is continuing its legal battle.

*The District of Kitimat is arguing that Alcan is selling power at the expense of aluminum production, in breach of its agreement with the province*

BC Hydro is facing similar opposition with regard to its proposals for additional generating facilities, such as the Site C dam in the Peace River area and the Duke Point natural gas-fired generating station on Vancouver Island. The opposition ranges from concerns over environmental impacts to doubts over whether the projects are even needed.

Whatever the outcomes of these disputes, electricity will undoubtedly remain a significant aspect of BC's trade as energy demand in both Canada and the United States continues to expand. The flexibility offered by hydro-electric power and British Columbia's abundance of water give the province an advantage in producing clean, inexpensive power and should ensure that electricity will continue to contribute to BC's trade balance.

**Recent Feature Articles in British Columbia Origin Exports Release  
Listed By Statistical Reference Date of Issue**

<b>05-12</b>	<i>Electricity Puts a Charge into BC Exports</i> (released February 2006)	<b>04-09</b>	<i>Canada is Hoping Trade with Brazil will Take Off</i> (released November 2004)
<b>05-11</b>	<i>Pulp Friction: Challenging Times for BC's Pulp Industry</i> (released January 2006)	<b>04-08</b>	<i>Border Congestion Threatens Trade</i> (released October 2004)
<b>05-10</b>	<i>Japan Aims for Free Trade with Canada</i> (released December 2005)	<b>04-07</b>	<i>NAFTA Panel Finds in Favour of Canada in Softwood Lumber Dispute</i> (released September 2004)
<b>05-09</b>	<i>China's Growth Both an Opportunity and a Threat for Exporters</i> (released November 2005)	<b>04-06</b>	<i>Canada's Trade with Greece</i> (released August 2004)
<b>05-08</b>	<i>Booming Energy Sector May Give Rise to "Dutch Disease" for Other Exporters</i> (released October 2005)	<b>04-05</b>	<i>Hollywood North Thrives in 2003</i> (released July 2004)
<b>05-07</b>	<i>Laying on the Lumber</i> (released September 2005)	<b>04-04</b>	<i>Port of Prince Rupert: Down, But Not Out</i> (released June 2004)
<b>05-06</b>	<i>Removal of Textile Quotas Tailor-Made for Protectionist Fervour</i> (released August 2005)	<b>04-03</b>	<i>Expanded European Union Could be Both Good and Bad for BC</i> (released May 2004)
<b>05-05</b>	<i>Comparative Trade Numbers Don't Add Up</i> (released July 2005)	<b>04-02</b>	<i>BC's Animal Agriculture Exports Facing Trade Restrictions</i> (released April 2004)
<b>05-04</b>	<i>South Korea Seeks Trade Deal with Canada</i> (released June 2005)	<b>04-01</b>	<i>China Offers Considerable Opportunities for Trade</i> (released March 2004)
<b>05-03</b>	<i>Any BC Port in a Trade Storm</i> (released May 2005)	<b>03-12</b>	<i>Rising Commodity Prices Could Signal Turnaround for BC Exports</i> (released February 2004)
<b>05-02</b>	<i>American Protectionism: Backfiring on All Cylinders</i> (released April 2005)	<b>03-11</b>	<i>The Lows of High Tech Trade</i> (released January 2004)
<b>05-01</b>	<i>Commodity Prices, Exchange Rates and Exports</i> (released March 2005)	<b>03-10</b>	<i>Is Global Free Trade Possible?</i> (released December 2003)
<b>04-12</b>	<i>The Internet Pharmacy Debate</i> (released February 2005)	<b>03-09</b>	<i>Relatively Few Small Businesses in BC are Exporters</i> (released November 2003)
<b>04-11</b>	<i>Canada's Trade With China</i> (released January 2005)	<b>03-08</b>	<i>Where's the Beef?</i> (released October 2003)
<b>04-10</b>	<i>Legitimate Border Threat or Reefer Madness?</i> (released December 2004)	<b>03-07</b>	<i>A Summary of the NAFTA Panels' Decisions on Lumber Duties</i> (released September 2003)



## NOTES

**Countries Included Within World****Regions:**

**(1) Western Europe:** United Kingdom, Ireland, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland.

**(2) Eastern Europe:** other Europe, including all of Russia, Georgia, Kazakhstan, Kyrgyzstan, Moldova, etc.

**(3) South East Asia:** Malaysia, Brunei Darussalam, Singapore, Myanmar, Kampuchea, Laos, Indonesia, Philippines, Thailand, Vietnam.

**(4) Africa:** continental Africa, excluding Ethiopia, Libya, Somalia, Sudan, Egypt.

**(5) South America:** continental South America from Colombia and Venezuela south to Chile and Argentina, including offshore islands, but not Caribbean.

**(6) Central America and Caribbean:** from Guatemala and Belize to Panama, plus Caribbean Islands.

**(7) Pacific Rim (including Japan):** Japan, Hong Kong, Malaysia, Brunei Darussalam, Singapore, Laos, Mongolia, China, Indonesia, North Korea, South Korea, Philippines, Macau, Taiwan, Thailand, Vietnam, Australia, Fiji, New Zealand.

**(8) Pacific Rim:** as above, but excluding Japan.

**(9) Middle East:** from Turkey and Iran south through the Arabian Peninsula. Excluding Afghanistan and Pakistan, but including Cyprus, Ethiopia, Egypt, Somalia, Sudan and Libya.

The **European Union** is the membership as of May 1, 2004: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta,

Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

**'Selected Value-added Wood Products'** category includes prefabricated houses, doors, windows, furniture, moulding, siding, etc. It does not include panel products, shakes, shingles or any pulp and paper products.

**Revisions**

Statistics Canada revises trade data for the previous three data years with release of the December data. The revision number is indicated in the footer of the tables (e.g., Rev 1 is the first annual revision, etc., and Prelim indicates it is the first release of data to December for that year). In addition to annual revisions, Statistics Canada revises the data for the previous data year every quarter (indicated in the footer by Rev Q1, etc).

**Service Offered for Detailed Trade Statistics**

For B.C. government statistics users requiring more detailed information on exports or imports, a special report service is offered through the address below:

**Dan Schrier**

**BC STATS**

P.O. Box 9410 Stn Prov Govt

Victoria, B.C. V8W 9V1

(250) 387-0376

This service is provided through the Trade Research and Inquiry Package (TRIP) computer reporting system. TRIP offers user-defined tabulations of export or import statistics for British Columbia, Canada, the United States and other countries. Tabulations can include information on commodities, countries, U.S. states, years, months, mode of transport, etc.