Potash

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Potash is a generic term to describe a variety of mined minerals and manufactured chemicals, all containing the element potassium. Potash includes potassium chloride (sylvite), potassium magnesium chloride (carnallite), potassium magnesium sulphate (langbeinite), potassium sulphate, and potassium nitrate. The dominant potash product is potassium chloride (KCl) or muriate of potash (MOP), a naturally occurring pink, salty mineral of which Canada is the leading producer and exporter.

Potash as agricultural fertilizer accounts for 90-95% of the production worldwide. Potash, nitrogen and phosphorus are the three basic and important nutrients for plants. Potash supports plant growth and enhances the absorption of other nutrients. There is no substitute for potash. Smaller amounts are used for the manufacture of potassium-bearing chemicals, detergents, ceramics and pharmaceuticals; as water conditioners; or as an alternative to de-icing salt.

Potash is a limited resource that is only found in a few places in the world. Canada has the world's largest known potash resource, conservatively estimated at 56 billion t, or sufficient to mine for several thousands years at the current production level. The second largest deposit is found in Russia and Belarus. The brine of the Dead Sea in the Middle East is also very rich in potassium. The majority of potash is mined by conventional underground or solution mining. A portion of potash is also recovered from brines by solar evaporation.

Canadian Developments

Potash was discovered in Saskatchewan in the early 1940s. This deposit, the largest in the world, lies underneath the southern plains of Saskatchewan and western Manitoba and extends into northeastern Montana and North Dakota.

Canadian potash mining began in the 1960s when the first potash mine opened in Saskatchewan in 1962. Subsequently, a solution mine opened in 1964 and more conventional mines joined production. By the mid-1980s, New Brunswick began producing potash. There are currently eleven underground mines in operation: nine conventional and two solution mines with an approximate work force of 3500.

Potash Corporation of Saskatchewan Inc. (PCS), based in Saskatoon, Saskatchewan, is one of the world's largest publicly owned potash producers with six Canadian operations: PCS Allan Division, PCS Cory Division, PCS Lanigan Division, PCS New Brunswick Division, PCS Rocanville Division, and PCS Patience Lake Division (a solution mine). PCS owns 25% of the reserves at Esterhazy, Saskatchewan, which are mined by IMC Esterhazy Canada Limited Partnership under a long-term agreement.

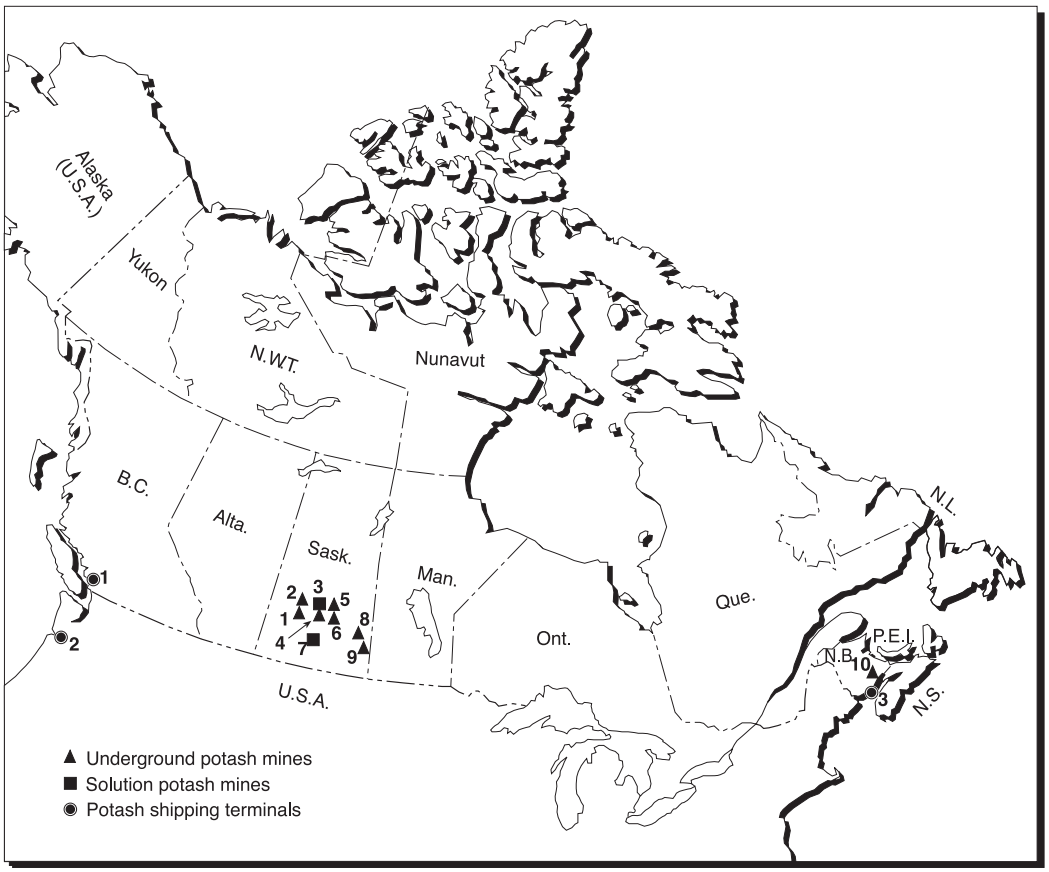
PCS's potash operation in Chile, PCS Yumbes S.C.M. (PCS Yumbes), which lost approximately US$23 million in 2003, was sold to Sociedad Quimica y Minera de Chile S.A. (SQM) for US$35 million in November 2003. PCS is confident that the deal will have a positive impact on its margin and anticipates completing the sale before the end of 2004.

In October 2003, PCS obtained 26% of the shares of Arab Potash Company (APC), which the Jordan government decided to sell as part of its privatization process. As a result of the acquisition, PCS became the second major owner of APC. Other owners are Jordan Investment Corporation, 26.9%; Arab Mining Company, 21%; and the remaining 26.1% is owned by different Arab governments, banks and individuals. APC produces potash from the Dead Sea with an annual production capacity of 2 Mt KCl.

In 2002, PCS announced the discovery of a potential significant high-grade ore zone adjacent to the existing potash mine in New Brunswick for future development. PCS did not proceed with any mine development in 2003.

IMC Global Inc. (IMC), whose head office is located in Lake Forest, Illinois, in the United States, has four operations in Saskatchewan: IMC Canada Ltd. for the mine at Belle Plaine (a solution mine), IMC Esterhazy Canada Limited Partnership for the two mines at Esterhazy

Figure 1
Location of Potash Mines in Canada and Shipping Terminals, 2003



Numbers refer to locations on map above.

UNDERGROUND POTASH MINES

1. Agrium Inc., Vanscoy, Saskatchewan
2. Potash Corporation of Saskatchewan Inc., Cory Division, Saskatoon, Saskatchewan
4. Potash Corporation of Saskatchewan Inc., Allan Division, Allan, Saskatchewan
5. IMC Potash Colonsay ULC, Colonsay, Saskatchewan
6. Potash Corporation of Saskatchewan Inc., Lanigan Division, Lanigan, Saskatchewan
8. IMC Esterhazy Canada Limited Partnership (K1 and K2 mines), Esterhazy, Saskatchewan
9. Potash Corporation of Saskatchewan Inc., Rocanville Division, Rocanville, Saskatchewan
10. Potash Corporation of Saskatchewan Inc., New Brunswick Division, Sussex, New Brunswick

SOLUTION MINING OPERATIONS

3. Potash Corporation of Saskatchewan Inc., Patience Lake Division, Patience Lake, Saskatchewan
7. IMC Canada Ltd., Belle-Plaine, Saskatchewan

POTASH SHIPPING TERMINALS

1. Neptune Bulk Terminals, Vancouver, British Columbia
2. Portland Bulk Terminals, Portland, Oregon
3. Barrack Point Terminal, Saint John, New Brunswick

(K1 and K2), and IMC Potash Colonsay ULC for the mine at Colonsay.

In January 2004, IMC and Cargill signed an agreement to combine IMC and Cargill Crop Nutrition to form a new fertilizer company. The new company will have significant assets in Saskatchewan, including IMC's four potash mines and Cargill's 50% stake in the Saskferco Products Inc. plant at Belle Plaine. The deal is not expected to have any impact on IMC's four potash operations in Saskatchewan. The merger is subject to regulatory approval in the United States, Canada and several other countries. Approval from IMC's shareholders is expected. The two parties are expecting to complete the deal in the summer of 2004.

Agrium Inc., based in Calgary, Alberta, has one mine in Vanscoy, Saskatchewan.

Canpotex Ltd., owned by potash producers Agrium, IMC and PCS, is an exclusive offshore marketing and distribution company to handle Canadian potash destined for overseas markets. Canpotex's sales are currently in the range of 6-7 Mt of potash (K_2O) per year. A corporate office in Singapore directs Canpotex's international marketing activities and ocean transportation functions worldwide. Offices in Hong Kong and Tokyo maintain direct contact with Asian buyers. A corporate office in Saskatoon, Saskatchewan, directs operational functions, including product supply, inland transportation, terminal services, corporate finance, and administration. An office in Vancouver, British Columbia, oversees the operations of Canpotex's terminals.

Manitoba's potash project, a joint venture between Entreprise minière et chimique of France and the Government of Manitoba, is still on hold. Manitoba Potash Corporation holds the rights to the deposit in the Russell-Binscarth area adjacent to the Saskatchewan border. The deposit, discovered in the 1980s, contains an estimated 120 Mt of potash grading 24.5% K_2O.

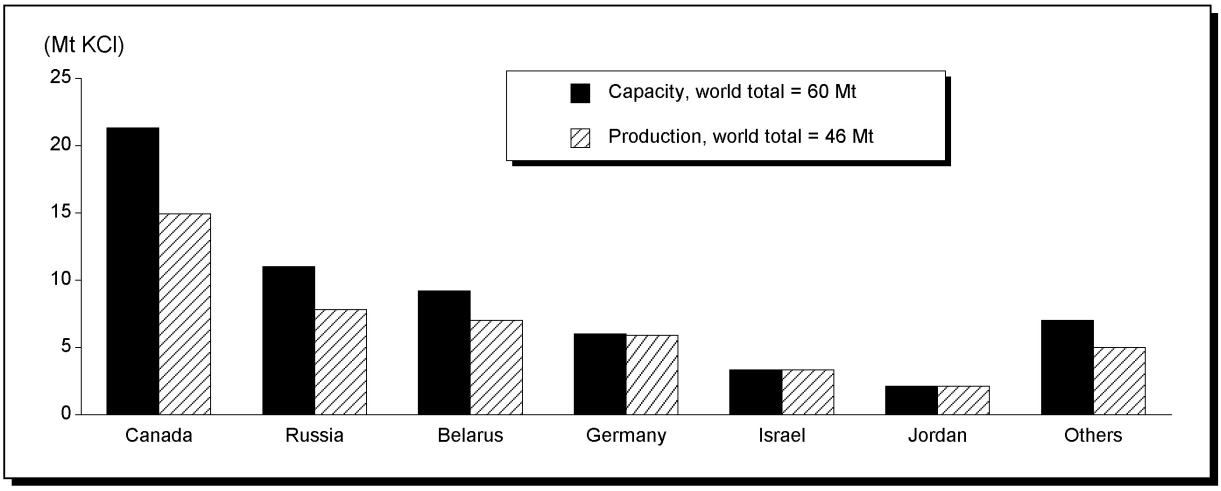
Production

Canada's potash production increased 7% from 13.9 Mt KCl in 2002 to 14.9 Mt in 2003, accounting for 32% of the world production of 46.3 Mt KCl. All producers saw production increases thanks to the worldwide demand increase for potash. The largest Canadian producer, PCS, achieved a 10% increase in its output from 6.4 Mt to 7.1 Mt KCl in 2003. IMC's Canadian operations produced 6.1 Mt KCl, an increase of 3% from the previous year's 5.9 Mt. Agrium produced 1.7 Mt KCl, an increase of 8.6% from the previous year's production of 1.5 Mt. By province, Saskatchewan, with 10 potash mines, produced 14.2 Mt KCl in 2003, accounting for 95% of Canadian output and for about 30% of world production. New Brunswick's only potash mine, PCS New Brunswick Division, located near Sussex, produced 750 000 t KCl in 2003, a 25% increase from the previous year's production.

Capacity and Usage

In 2003, Canada's production capacity was 21.3 Mt KCl, the world's largest, accounting for 35% of total world capacity of 60 Mt KCl. The average capacity usage rate increased from the previous year's 62% to 70% in 2003. PCS has an annual production capacity of 12.1 Mt KCl.

Figure 2
Potash Capacity and Production, by Country, 2003



Sources: Natural Resources Canada; International Fertilizer Industry Association.

The utilization rate improved in 2003 to 58% from the previous year's 53%. IMC's Canadian potash operations, with an annual capacity of 7.3 Mt KCl, used 83% in 2003. Agrium had a best capacity use rate of 93% for the year 2003 with an annual capacity of 1.8 Mt KCl. However, Canadian usage is well below the average usage rate of 80% enjoyed by the rest of the world's potash producers.

Canada's capacity use rate is on the rise and is expected to go upward. As demand for potash worldwide keeps rising, and as some of the world's potash producers are already operating at close to full capacity, the world will turn to Canada, which has for a long time built up its production capacity and has the largest potash reserves to support production.

Exports

Canada remained the world's largest potash exporter for 2003. Preliminary reports show that Canada exported 14.8 Mt KCl in 2003, an increase of 10% from the 13.4 Mt exported in 2002. The increases were mainly in exports to Asia and Latin America, both with an export volume increase of 700 000 t. Exports to Latin America jumped up 46% to 2.2 Mt KCl from 1.5 Mt in 2002. Exports to Brazil increased to 1.6 Mt KCl from the previous year's 1.1 Mt. Exports to Asia increased 18% from 3.9 Mt to 4.6 Mt KCl in 2003. The increases were mainly in exports to India, Indonesia and Malaysia. Exports to India increased 138% to 532 000 t from 223 000 t in 2002. Exports to Indonesia increased 47% and exports to Malaysia were up 14%. Exports to the United States increased 5%, and the United States remained the largest export market for Canada, accounting for half of Canada's total exports. Exports to Oceania countries such as Australia, New Zealand, Fiji and others were down to 333 000 t KCl from the previous year's 482 000 t due to decreased demand in the region. Exports to Europe were at almost the same level as the previous year, sliding just 0.5%.

Most Canadian potash exports were shipped out of ocean terminals in Vancouver, British Columbia, and Portland, Oregon, in the northwestern United States. PCS New Brunswick Division's production was shipped from the Barrack Terminal in Saint John, New Brunswick.

In 2003, Canadian potash output and exports both increased as a result of the increase in demand worldwide. However, the producers' margin did not match the volume increases of production and exports due to the ocean freight rate increase and a strong Canadian dollar. The ocean freight rates for dry bulk, including potash, began an upward swing in the fourth quarter of 2002. The rates kept rising during 2003 except for a few breaks. In late September and through October 2003, the ocean freight rates for dry bulk doubled from US$20/t to US$40/t in a little over one month due to a shortage of vessels and ongoing demand for raw materials from China. This had an impact on the producers' and exporters' margin as some contracts sold at Cost and Freight (CFR) term. It had a more severe impact on importers as the cost of imports increased significantly, and it might also have an impact on consumption. The freight rates eased up in February and began to decline in April 2004. Several factors that contributed to the freight rates' tumble were high commodity prices, tight credit availability in China, the Chinese government's limitation on iron and ore imports, the tightening supplies of coking coal, and increased contract deals.

WORLD REVIEW

The world's total potash output was 46 Mt KCl in 2003, an increase of 5.2% from the previous year's level. The potash industry operated at 77% of its production capacity globally, up from 73% in 2002. Most of the 12 producing countries saw a production increase. Six countries (Canada, Russia, Belarus, Germany, Israel and Jordan) dominate production with 90% of the world's total.

Eastern Europe

Two countries of the former Soviet Union, Russia and Belarus, are the second and third leading potash producers in the world behind Canada. In the last decade, both countries' potash production has been trending upward. In 2003, Russia produced 7.8 Mt KCl, a 5% increase from 2002. Belarus produced 7 Mt KCl, an increase of 12% from the previous year's level.

Russia has been mining potash from the Verkhnekamskoye deposit in the Western Urals in the Perm Region since the 1940s. JSC Uralkali and JSC Silvinit combined have an annual production capacity of 11 Mt KCl and operated at 72% of their capacity in 2003. Belarus's production comes from the Starobinskoye deposit located near the city of Soligorsk. The country's only producer, PA Belaruskali, is state-owned and has an annual capacity of 9.2 Mt KCl. It operated at 76% of its capacity in 2003.

In the last decade, both Russia and Belarus emerged from supplying potash to only East European countries to become major suppliers to the world market. In 2003, Russia exported 80% of its production, or 6.2 Mt KCl, worldwide. Belarus exported 88% of its production, or 6.2 Mt KCl. Production and transportation facilities have both been improved over the last decade. Uralkali is modernizing its production facilities with a loan of US$75 million from the European Bank for Reconstruction and Development. Belaruskali is constructing two new shafts to replace old ones with an investment of US$180 million. Potash export terminals at major ports of the Baltic Sea (Ventspils, St-Petersburg, Klaipeda), the Black Sea (Nikolaev, Illichevsk) and the Far East (Vostochny) have been significantly improved or have been newly constructed to handle increased volume. JSC International Potash

Company in Moscow, founded in 1992, handles exports of potash produced by JSC Silvinit and Belarus's PA Belaruskali. Russian producer JSC Uralkali briefly marketed potash with Canpotex through a joint venture from 2000 to 2003, but is now marketing its own production.

Western Europe

Germany produced 5.9 Mt KCl in 2003, an increase of 3.3% from 5.8 Mt in 2002. Germany's producer, K+S Kali GmbH, operated at near full capacity. Its sylvinite project in the Werra-Ulster region in Hessen and Thuringen states is on schedule and is projected to produce potash in 2005.

Spain produced 844 000 t KCl in 2003, a 25% increase from the previous year's 678 000 t, thanks to the new investment in the mine. The producer, Iberpotash S.A., is a subsidiary of the Dead Sea Works (DSW) of Israel. Iberpotash supplies potash to European markets.

The United Kingdom's production increased 15% in 2003 to 1 Mt KCl. The only potash mine, Cleveland, is owned by DSW of Israel.

France closed its Mines de Potasse d'Alsace (MDPA) in October 2002.

North America

The United States produced all forms of potash equivalent to 1.1 Mt K_2O in 2003. Production of potassium chloride was 1.2 Mt KCl, or 711 000 t K_2O, a drop of 18% from 2002's level. The decline was mainly due to the four-month shut-down of Mississippi Potash Inc., whose parent company, Mississippi Chemical Corporation, filed for bankruptcy protection under Chapter 11 in May 2003. Mississippi Potash was eventually sold to Intrepid Mining LLC (Intrepid), a private company headquartered in Denver, Colorado. U.S. production was coming mainly from three states: New Mexico, Michigan and Utah. In New Mexico, IMC Potash Carlsbad produces a variety of potash. Mississippi Potash's East and West operations, now under the ownership of Intrepid, produce both white and red potash. In Michigan, IMC Potash Hersey has a solution mine producing potash. In Utah, Moab Potash and Reilly Industries Inc.'s Wendover operation produce potash without a large output. IMC's two operations in Carlsbad and Hersey operated at full capacity in 2003.

The U.S. potash industry is currently restructuring. In March 2004, Intrepid, who also owns the Moab Potash operation in Utah, acquired Mississippi Potash's assets in Carlsbad, New Mexico, and Reilly Industries Inc.'s potash assets in Wendover, Utah. The two acquisitions will make Intrepid a larger-variety potash producer in the United States. As noted before, IMC also signed a merger agreement with Cargill but no impact on potash operations is expected.

Latin America

Brazil became the second largest potash consumer in the world in 2003 with total consumption of 6.9 Mt KCl. Brazil's potash consumption relies on imports, which account for 91% of the country's total consumption. Brazil's only potash mine, the Taquari-Vassouras mine of Companhia Vale do Rio Doce (CVRD), produced 636 000 t KCl in 2003. It operated at full capacity. Its production contributed 9% of the country's potash consumption. CVRD has been undergoing a production capacity expansion since 2002 and is expected to complete it by 2005 when its production capacity will increase to 820 000 t/y KCl from the current 600 000 t/y.

Chile's production decreased 5% to 650 000 t KCl in 2003. Its major producer, Sociedad Quimica y Minera de Chile S.A. (SQM), extracts potash using solar evaporation from the brines of Salar de Atacama, an underground lake measuring 2900 km^2 in the desert of Atacama. The products derived from the Salar de Atacama brines include potassium chloride, potassium sulphate and other chemicals. As noted earlier, SQM acquired the PCS Yumbes operation from PCS and is anticipating to take it over once the sale is completed.

Middle East

Israel's production was up slightly by 2% with output of 3.3 Mt KCl in 2003 and operated at full capacity. The Dead Sea Works, Israel's sole producer, also has control of potash production in Spain and the United Kingdom in addition to its own potash production, making it a player in the world potash industry.

Jordan's production increased 5% to 2.1 Mt KCl in 2003 and also operated at full capacity. Arab Potash Company (APC) produces potash from the Dead Sea with an annual production capacity of 2 Mt KCl. APC's major market is in Asia.

Asia

Asia, the world's largest consumer of potash, is ambitious to produce potash to supply its own region.

China, one of the leading potash consumers and importers in the world, is planning to increase its production by investing in an ambitious 1-Mt project in Qinghai Province where the Qaidam Basin holds 97% of China's potash reserves. Phase 1 of the project is expected to add 300 000 t/y KCl to Qinghai Salt Lake Potash Company Ltd.'s capacity in 2004. Phase 2 is expected to add an additional 500 000 t KCl to its capacity in 2007/08. China's capacity is projected to reach 1 Mt/y KCl in 2004. As a leading agriculture-producing country, China's potash consumption has been steadily increasing. It consumed 6.7 Mt KCl in 2003. Compared with other countries with

large potash consumption, China produces only a small fraction of its total potash consumption. China's production was estimated at 733 000 t KCl in 2003, accounting for 10% of its consumption. The rest of its consumption relies on imports. China imported 6 Mt KCl with 60% of the imports coming from Russia and Belarus, 25% from Canada, and the remainder from Israel and Jordan.

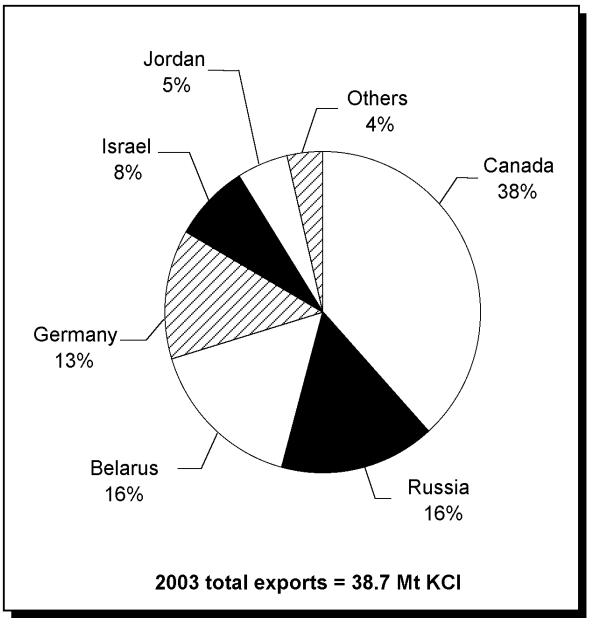
Canadian-registered Asia Pacific Resources Ltd. (APR) has been exploring potash through its subsidiary, Asia Pacific Potash Corporation (APPC), in northeastern Thailand since 1993. APPC discovered two deposits, Udon Thani South and Udon Thani North. In May 2003, APPC applied for a mining lease to the Government of Thailand to mine potash in the Udon South deposit. The company is planning an initial production of 1 Mt/y, increasing to 2 Mt/y through a plant expansion. The cost for the initial stage is estimated at US$300 million and for the second stage at US$200 million. APPC signed a memorandum of understanding with China State-Owned Enterprise Investment Company in November 2003 to secure financing of US$300 million and a commitment for supplying potash to Chinese markets. The company is also projected to offer more than 1000 jobs during the three-year construction phase and 900 jobs over a 22-year mine life. APPC is anxious to receive the mining lease licences. ASEAN Potash Mining Company Ltd., owned by the Thai government and other Asian governments, is anticipating the production of potash within the next six years at Bamnet Narong. This project is expected to deliver 1 Mt/y of potash with a mine life of 20 years.

CONSUMPTION AND TRADE

With many consumers but only a few producers, international trade is significant. In 2003, 39 Mt KCl, or 83% of total production, was traded internationally. Six major producing countries accounted for 96% of total potash exports: Canada, 14 Mt KCl; Belarus, 6 Mt KCl; Russia, 6 Mt KCl; Germany, 5 Mt KCl; Israel, 3 Mt KCl; and Jordan, 2 Mt KCl.

The major potash consumers rely on imports. The United States, the largest consumer, consumed 9.1 Mt KCl in 2003, of which more than 8 Mt KCI was imported, almost all from Canada. Brazil, for the first time overtaking China as the second largest consumer of potash, used 7 Mt KCl in 2003, of which 6.3 Mt KCl was imports. China's consumption fell behind Brazil in 2003. It consumed 6.7 Mt KCl, of which 6 Mt was imported. India's consumption was 2.8 Mt KCl, France consumed 1.8 Mt KCl, and Malaysia used 1.4 Mt KCl in 2003. The top six potash-consuming countries are major agriculture-producing countries with significant demand for potash fertilizer. However, they have a limited or no potash resource and have to rely on imports for the majority of their potash fertilizer.

Figure 3
Percentage of Potash Exports, by Country, 2003



Sources: Natural Resources Canada.

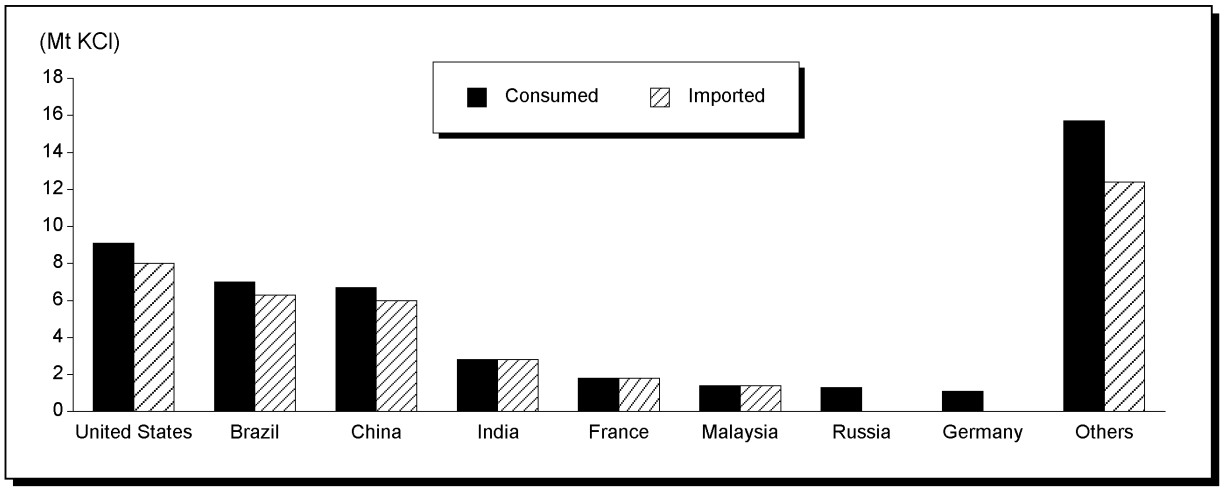
PRICES

World potash market prices have been relatively stable for the past decade. Canpotex sells potash at prices f.o.b. Vancouver, c.i.f. foreign ports, or out of stockpiles in Asia. Quoted prices for KCl standard grade f.o.b. Vancouver were at US$110-$115/t in 2003, unchanged from 2002. Prices for KCl granular grade f.o.b. Vancouver were steady at US$128-$132/t. In Russia and Belarus, quoted prices for KCl standard grade f.o.b. Baltic were US$93-$103/t in 2003, also at the same level as a year earlier. KCl granular grade f.o.b. Baltic prices were steady at US$94-$111/t. In the Middle East, prices for KCl standard grade f.o.b. the Middle East were US$100-$117/t in 2003. In North America, Canadian producers sell potash directly to customers. The quoted prices in 2003 for KCl standard grade f.o.b. Saskatchewan were US$85/short ton, for coarse grade f.o.b. Saskatchewan were US$88/short ton, and for granular grade f.o.b. Saskatchewan were US$90/short ton.

OUTLOOK

The primary driver for the fertilizer industry is the demand for food, which in turn is driven by the population. The world population, estimated at 6.4 billion at the beginning of 2004, is expected to grow at a rate of 1.3% per year,

Figure 4
Potash Consumed and Imported, by Country, 2003



Source: Natural Resources Canada.

reaching 6.9 billion by 2010 and 8 billion by 2020. The agricultural sector will have to meet the needs of this growing population.

Grains, as a major food source, rely heavily on fertilizer usage to increase production. In the 2003/04 marketing year,[1] the world grain inventory continued to decline. The stocks-to-use ratio of the world total grains, including rice, fell to 17%, the lowest in 40 years. One of the key indicators, the stocks-to-use ratio for coarse grains, fell to 13%, the lowest since 1976. According to the U.S. Department of Agriculture's projection, this ratio will likely be going down again in 2004/05 to 11%. It is generally believed that if the ratio falls below 12%, it will trigger a price hike. Coarse grains account for half of the total world grains consumption, and the lower inventory will prompt prices for coarse grains to move upwards. The corn price, the key indicator of the U.S. market, rose to an average of US$2.60 per bushel in the 2003/04 marketing year, the highest price in seven years. As the demand for corn continues to increase, corn prices will likely be pushed further up to an average of US$3.10 per bushel in the coming marketing year 2004/05. Meanwhile, worldwide demand for all types of grains, wheat, coarse grains and rice continues to increase. The potash industry viewed higher grains demand and prices as a driver for grains producers to raise production, which would translate into more demand for fertilizer.

Canadian potash producers are optimistic about the outlook for 2004 because of improved market conditions and continuous rising demand in Latin America and Asia in 2003. All producers are projecting higher production in 2004 to meet the worldwide demand for fertilizer. The non-fertilizer use of potash is expected to remain unchanged.

In conclusion, the outlook for potash production and sales is positive both in Canada and worldwide in 2004. In Canada, the increase in production and sales will likely be in the range of 5-6%, and it is expected that the worldwide increase will be in the same range. In the long term, growth in potash demand is expected from agricultural development and expansion, particularly in developing countries.

CANADIAN POTASH PRODUCERS WEB SITES

Potash Corporation of Saskatchewan:	www.potashcorp.com
IMC Global Inc. Canadian operations:	www.imcglobal.com
Agrium Inc.:	www.agrium.com
Canpotex Ltd.:	www.canpotex.com
Potash and Phosphate Institute of Canada:	www.ppi-ppic.org
Canadian Fertilizer Institute:	www.cfi.ca

[1] The marketing year begins on June 1 and goes to May 31 of the following year.

Notes: (1) For definitions and valuation of mineral production, shipments and trade, please refer to Chapter 64. (2) Information in this review was current as of May 14, 2004. (3) This and other reviews, including previous editions, are available on the Internet at www.nrcan.gc.ca/mms/cmy/com_e.html.

NOTE TO READERS

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TARIFFS

Item No.	Description	Canada			United States
		MFN	GPT	USA	Canada
3104.20	Potassium chloride	Free	Free	Free	Free
3104.30	Potassium sulphate	Free	Free	Free	Free
3104.90.00.10	Magnesium potassium sulphate	Free	Free	Free	Free
3104.90.00.90	Other	Free	Free	Free	Free

Sources: Canadian *Customs Tariff*, effective January 2004, Canada Border Services Agency; *Harmonized Tariff Schedule of the United States*, 2004.

TABLE 1. CANADIAN POTASH PRODUCED, SHIPPED AND TRADED, 2001-03

		2001		2002 (r)		2003	
		(tonnes)	($000)	(tonnes)	($000)	(tonnes)	($000)
PRODUCTION, Potassium chloride							
	Gross weight	13 356 517	..	13 910 874	..	14 934 318	..
	K_2O equivalent	8 181 265	..	8 515 358	..	9 140 135	..
SHIPMENTS							
	K_2O equivalent	8 236 662	1 617 433	8 361 025	1 627 226	9 144 930	1 647 838
EXPORTS, Fertilizer potash (1)							
2815.20	Potassium hydroxide (caustic potash)	130	130	1 028	952	1 179	535
3104.20	Potassium chloride						
	United States	8 186 183	1 055 207	7 998 593	1 113 375	8 423 430	1 072 891
	China	1 479 906	331 759	1 655 043	377 214	1 544 074	255 325
	Brazil	918 250	165 663	1 032 860	188 918	1 353 920	195 488
	India	193 431	43 365	218 890	49 683	522 093	81 963
	Malaysia	357 517	80 013	459 506	104 848	371 389	59 091
	Indonesia	150 189	33 524	121 000	27 590	273 071	44 411
	South Korea	342 682	77 069	370 987	84 514	191 474	31 450
	Thailand	150 478	33 875	134 552	30 306	117 241	18 273
	Vietnam	52 309	11 755	60 551	13 828	113 030	18 067
	Colombia	54 200	12 226	49 851	11 373	111 641	17 512
	New Zealand	160 200	35 914	171 719	39 254	96 622	15 421
	Mexico	8 000	1 787	24 817	5 662	95 105	13 215
	Taiwan	205 431	46 036	180 715	41 137	81 833	12 953
	Philippines	44 350	10 010	49 089	11 205	74 664	11 647
	Belgium	51 644	11 675	96 415	21 892	74 314	11 445
	Japan	528 591	118 347	470 434	107 060	51 215	8 275
	Guatemala	46 329	9 772	37 086	7 725	46 448	7 055
	Spain	64 960	11 097	20 869	3 205	38 928	6 133
	Honduras	12 800	1 696	15 600	1 851	46 649	5 222
	Costa Rica	59 372	13 214	64 215	14 652	31 061	4 975
	Italy	73 161	16 589	87 869	20 006	30 351	4 588
	Chile	81 916	18 354	20 826	4 740	24 109	4 044
	Peru	5 000	1 103	24 223	5 380	25 299	4 019
	Cuba	33 000	4 163	35 200	4 446	30 355	3 664
	Netherlands	–	–	–	–	22 681	3 624
	Ecuador	42 326	9 628	29 613	6 800	17 600	2 822
	Argentina	6 816	1 508	8 009	1 804	14 927	2 320
	Venezuela	16 243	2 062	–	–	19 800	1 823
	El Salvador	–	–	–	–	10 550	1 730
	Singapore	12 154	2 756	5 500	1 222	5 409	1 209
	Dominican Republic	–	–	34 100	4 649	11 055	1 181
	Germany	–	–	–	–	4 815	727
	United Kingdom	–	–	–	–	4 494	678
	Australia	227 631	51 098	291 853	67 363	1 300	311
	Others	4993	1161	19 139	4 344	–	–
	Total	13 570 062	2 212 426	13 789 124	2 376 046	13 880 947	1 923 552
3104.30	Potassium sulphate						
	United States	16 969	6 829	20 134	8 130	25 003	9 196
	Total (2)	17 099	6 969	20 261	8 229	25 369	9 379
3104.90	Other potassic fertilizer						
	United States	1 873	650	1 641	376	6 275	652
	Total (2)	1 893	657	1 641	376	6 441	744
	Total exports	13 589 283	2 220 294	13 812 102	2 385 653	13 913 936	1 934 210

TABLE 1 (cont'd)

		2001		2002 (r)		2003	
		(tonnes)	($000)	(tonnes)	($000)	(tonnes)	($000)
IMPORTS, Fertilizer potash (1)							
2815.20	Potassium hydroxide (caustic potash)						
	United States	26 485	12 619	15 826	9 202	15 197	9 353
	Total (2)	28 245	13 960	17 346	10 420	16 772	10 618
2834.21	Potassium nitrate						
	Israel	784	407	2 689	1 300	4 731	2 261
	Chile	614	411	2 230	1 270	2 405	1 238
	United States	7 091	4 043	3 719	2 065	1 814	918
	Total (2)	9 391	5 301	8 743	4 693	9 412	4 669
2835.24	Potassium phosphates						
	United States	883	1 307	1 009	1 196	1 045	1 062
	Israel	510	485	677	643	994	918
	Total (2)	2 191	2 680	2 814	3 089	2 756	2 818
2836.40	Potassium carbonates						
	United States	3 288	2 110	2 636	1 757	2 731	1 814
	France	401	283	357	273	626	439
	Total (2)	3 969	2 552	3 275	2 179	3 550	2 367
2839.20	Potassium silicates						
	United States	2 742	1 516	1 555	1 228	1 905	1 298
	Total (2)	2 748	1 522	1 576	1 250	1 906	1 300
3104.20	Potassium chloride						
	United States	4 987	771	6 290	907	5 800	796
	Total (2)	5 710	880	6 758	976	6 358	865
3104.30	Potassium sulphate						
	United States	1 198	435	6 234	2 235	10 201	3 688
	Total (2)	1 502	614	6 627	2 454	10 668	3 947
3104.90.00.10	Magesium-potassium sulphate						
	United States	45 606	8 201	57 343	9 480	57 177	6 388
	Total (2)	45 606	8 201	57 343	9 480	57 197	6 395
3104.90.00.90	Other potassic fertilizer						
	United States	29 996	7 792	23 540	5 684	21 723	5 312
	Australia	–	–	2 366	805	1 318	2 091
	Total (2)	30 835	8 103	26 521	6 791	23 777	7 781
	Total imports	130 197	43 813	131 003	41 332	132 396	40 760

Sources: Natural Resources Canada; Statistics Canada.

– Nil; **. .** Not available or not applicable; (r) Revised.

(1) Countries are ranked in descending order of value for 2003. (2) Total includes other countries.

Note: Numbers may not add to totals due to rounding.

TABLE 2. CANADA, POTASSIUM CHLORIDE (KCl) EXPORTS, 1998-2003

		1998	1999	2000 (e)	2001	2002	2003 (p)
		(000 tonnes KCl)					
3104.20	Potassium chloride (KCl)						
	United States	7 214	7 077	7 779	7 351	7 369	7 451
	Brazil	1 036	886	1 188	923	1 117	1 601
	China	1 677	1 582	1 943	1 386	1 518	1 519
	Malaysia	506	504	465	358	478	546
	India	66	250	244	197	223	532
	Japan	492	497	492	544	485	482
	Indonesia	84	255	176	252	289	425
	South Korea	305	440	420	353	382	422
	Australia	285	215	191	231	299	230
	Vietnam	104	123	101	86	104	187
	Taiwan	203	188	164	216	174	176
	Thailand	182	162	138	148	148	175
	Colombia	36	42	61	55	51	119
	Mexico	30	12	20	8	38	103
	New Zealand	166	152	150	163	174	98
	Philippines	38	60	43	79	78	98
	Belgium	100	102	90	53	99	96
	Guatemala	21	38	47	44	38	70
	Costa Rica	23	48	52	60	65	51
	Chile	63	64	62	83	21	45
	Ecuador	0	0	8	43	30	41
	Spain	96	80	84	58	21	40
	Venezuela	11	0	8	27	0	32
	Italy	123	82	61	76	91	31
	Cuba	38	70	36	33	47	30
	Peru	0	0	0	5	25	26
	Honduras	0	0	16	13	16	25
	Netherlands	0	0	0	0	0	23
	Others	131	179	74	40	59	79
	Total	13 030	13 108	14 113	12 885	13 439	14 753

Source: Natural Resources Canada (exports data are from industry sources and some differ from Statistics Canada's numbers).
(e) Estimate; (p) Preliminary.
Note: Countries are ranked in descending order of export volume for 2003.

TABLE 3. WORLD POTASH PRODUCTION, 1998-2003

	1998	1999	2000	2001	2002	2003 (p)
			(000 tonnes KCl)			
Canada	15 325	13 718	15 290	13 587	14 171	15 174
United States	1 454	1 511	1 368	1 348	1 438	1 185
Belarus	5 752	6 027	5 620	6 145	6 318	7 048
Russia	5 768	6 750	6 193	7 096	7 386	7 756
Ukraine (e)	56	55	141	124	100	100
France	695	519	535	407	213	–
Germany	5 970	5 908	5 682	5 918	5 752	5 942
Spain	828	915	870	785	678	844
United Kingdom	1 014	825	1 001	887	900	1 036
Israel	2 780	2 844	2 913	2 957	3 197	3 264
Jordan	1 527	1 800	1 936	1 963	1 956	2 052
Brazil	526	561	567	575	606	636
Chile	467	520	550	650	682	650
China (e)	280	417	458	658	717	733
Total	42 442	42 370	43 124	43 100	44 114	46 420

Source: Natural Resources Canada.
– Nil; (e) Estimate; (p) Preliminary.
Note: Statistics are for potassium chloride only; other forms of potash are excluded. Conversion: 1 t KCl = 0.6 t K_2O.

TABLE 4. POTASH SITUATION, 1993-2003

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 (r)	2003 (p)
						(000 tonnes KCl)					
CANADA											
Capacity	20 300	20 392	22 033	22 183	22 317	22 333	22 342	22 433	22 433	22 833	21 667
Production	11 417	13 637	15 108	13 403	15 050	15 317	13 717	15 337	13 357	13 911	14 934
Capacity use (%)	56	67	69	60	67	69	61	68	60	61	69
Sales	11 438	14 195	14 392	13 283	15 850	13 778	13 817	15 055	13 595	14 181	15 513
Domestic	593	642	575	592	817	748	710	758	71	743	762
United States	6 747	7 600	7 492	7 225	8 825	7 213	7 077	7 617	4 350	7 368	7 450
Offshore	4 098	5 953	6 325	5 467	6 208	5 817	6 030	6 680	5 535	6 070	7 302
WORLD											
Capacity	59 187	59 373	60 498	60 882	61 393	60 817	61 105	61 400	61 600	62 200	62 208
Production	34 000	37 800	40 500	38 885	42 445	43 115	42 266	43 015	43 099	44 144	46 420
Capacity use (%)	57	64	67	64	69	71	72	73	72	73	77
Sales	34 725	39 367	38 958	37 483	42 908	40 432	40 982	42 200	41 960	43 645	46 958
Exports	25 043	32 947	30 870	28 460	33 995	31 958	32 925	34 167	33 683	35 165	38 670
Consumption	34 300	31 800	33 117	34 250	34 550	37 367	36 567	37 017	34 433	37 783	(e) 40 000
CANADA/WORLD											
Production (%)	34	36	37	35	36	36	33	36	32	32	33
Capacity (%)	34	34	36	36	36	37	37	37	36	37	35

Source: Natural Resources Canada.
(e) Estimate; (p) Preliminary; (r) Revised.
Notes: Statistics are for potassium chloride only; other forms of potash are excluded. Conversion: 1 t KCl = 0.6 t K_2O