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.

Ninety to ninety-five percent of the potash produced worldwide is used as agricultural fertilizer. Potash, along with 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 located 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

The Industry

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 with 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 mines and two solution mines with a total work force of 3300.

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

IMC Global Inc. (IMC), whose head office is located in Lake Forest, Illinois, operates four mines in Saskatchewan: IMC Potash Belle Plaine (a solution mine), IMC Potash Colonsay Inc., and IMC Esterhazy Canada Limited Partnership (the K1 and K2 mines).

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

Canpotex Ltd., owned by the three potash producers, Agrium, IMC and PCS Inc., is an exclusive offshore marketing company that markets Canadian potash to overseas markets such as Asia, Latin America, Europe, Australia

 s_{ask} Man. Ont. U.S.A. ▲ Underground potash mines ■ Solution potash mines Potash shipping terminals

Figure 1 Location of Potash Mines in Canada and Shipping Terminals, 2002

Numbers refer to locations on map above.

UNDERGROUND POTASH MINES

- 1. Agrium Inc., Vanscoy, Saskatchewan
- 2. Potash Corporation of Saskatchewan Inc., Cory Division, Saskatchewan
- 4. Potash Corporation of Saskatchewan Inc., Allan Division, Allan, Saskatchewan
- 5. IMC Potash Colonsay Inc., 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 Potash Belle Plaine, 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

and Africa. Canpotex's sales are currently in the range of 5-6 Mt/y. A Singapore-based subsidiary, Canpotex International Pte. Ltd., is handling the company's marketing activities worldwide. It also has offices in Hong Kong and Tokyo. A corporate office in Saskatoon, Saskatchewan, is responsible for all operational functions, including inland transportation, ocean transportation, and terminals.

PRODUCTION

Canada produced 8.5 Mt $\rm K_2O^1$ in 2002, accounting for 32% of world production of 26.5 Mt $\rm K_2O$. All producers saw a moderate increase compared with the previous year's output of 8.2 Mt $\rm K_2O$. However, Canada's production was still below the 2000 level of 9.2 Mt $\rm K_2O$. This was mainly due to weather conditions limiting increases in fertilizer usage in the agricultural sector worldwide.

Saskatchewan, with 10 potash mines, produced 7.9 Mt K_2O in 2002, accounting for 95% of Canadian output and for about 30% of world production. The largest Canadian producer, PCS Inc., produced 6.4 Mt KCl, an increase of 5% from the previous year's 6.1 Mt. IMC's Canadian operations produced 5.9 Mt KCl, a 3% increase from the previous year. Agrium produced 1.5 Mt KCl, a 7% increase from the previous year.

New Brunswick's only potash mine, New Brunswick Division, located near Sussex, produced 600 000 t KCl in 2002, 76% of its capacity. PCS Inc. announced that it has discovered a potential significant, new high-grade ore zone adjacent to the existing mine for future development.

Manitoba's potash project, a joint venture between Entreprise minière et chimique of France and the Government of Manitoba, is still on hold. The 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 at a grade of 24.5% K₂O.

PRODUCTION CAPACITY AND USAGE

In 2002, Canada's production capacity was 22.7 Mt KCl, or 13.7 Mt $\rm K_2O$ equivalent, the world's largest, accounting for 37% of the total world capacity of 37.3 Mt $\rm K_2O$. However, Canada's capacity usage rate was only at 62% in 2002, lower than the world average of 70%. This was mainly due to the lack of demand for fertilizer worldwide. PCS Inc. has an annual production capacity of 12.1 Mt KCl. Its utilization rate was only 53% in 2002. IMC's Canadian operations, with a capacity of 8.6 Mt/y KCl, used 69% in 2002. Agrium had a best capacity use rate of 75% for the year 2002 with an annual capacity of 2 Mt KCl.

EXPORTS

Canada remained the world's largest potash exporter for 2002. It exported 8.1 Mt K₂O, an increase of 4.3% from the 2001 level of 7.7 Mt K₂O. Exports to Asia, Latin America and Western Europe increased while exports to the United States remained constant. The United States remained Canada's largest export market, accounting for

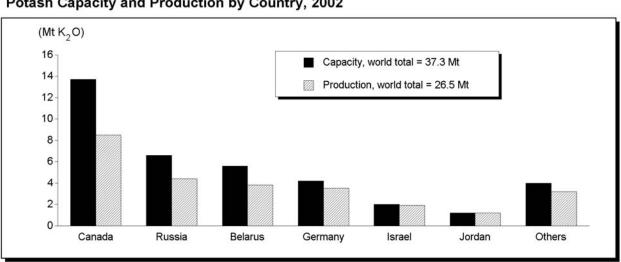


Figure 2
Potash Capacity and Production by Country, 2002

Sources: Natural Resources Canada; International Fertilizer Industry Association.

¹ Unless noted otherwise, statistical data refer to potassium oxide (1 t KCl = 0.6 t K₂O).

55% of total exports. Asia, including China, was Canada's second largest export market, accounting for 29%. Other destinations were Latin America (11%), Australia (3.5%) and Western Europe (1.5%). Most Canadian potash exports were shipped out of ocean terminals in Vancouver, British Columbia, and Portland, Oregon. PCS New Brunswick Division's production was shipped from the Barrick Point terminal in Saint John, New Brunswick.

WORLD DEVELOPMENTS

The 14 countries that produce potash had a total output of 26.5 Mt K₂O in 2002, a moderate increase of 4.4% from the previous year. Six countries (Canada, Russia, Belarus, Germany, Israel and Jordan) dominate production with 88% of the 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. Ukraine also produces a small amount.

Russia produced 4.4 Mt K_2O in 2002, a 4.1% increase from 2001. Russia's Verkhnekamskoye deposit is situated in the Western Urals in the Perm region. JSC Uralkali and JSC Silvinit have a combined annual production capacity of 6.6 Mt K_2O and operated at 67% of their capacity in 2002.

Belarus produced 3.8 Mt K_2O in 2002, a 2.8% increase from the previous year. Belarus's Starobinskoye deposit is located near the city of Soligorsk. The only producer, Belaruskali, is state owned and has an annual capacity of 5.6 Mt K_2O . It operated at 68% of its capacity in 2002.

Western Europe

France produced 128 000 t in 2002, a 47.7% decrease from 2001. The reduction relates to the scheduled closing of Mines de Potasse d'Alsace (MDPA) in 2003.

Spain produced 406 600 t K_2O in 2002, down 13.6% from the previous year's 470 700 t. This was mainly due to poor weather conditions. The producer, IBERPOTASH S.A., is a subsidiary of the Dead Sea Works Ltd. (DSW) of Israel. IBERPOTASH supplies potash to European markets.

Germany's production slid by 2.8% to 3.45 Mt K₂O in 2002. The industry also had some changes in 2002. Kali und Salz GmbH merged with its parent company K+S Aktiengesellschaft (K+S Group) and was formed into two subsidiaries: K+S Kali GmbH and K+S Salz GmbH. K+S Kali GmbH is producing potash and magnesium. K+S Kali's new sylvinite project is scheduled to produce potash

in the Werra-Ulster region between Hessen and Thüringen states in 2003.

The United Kingdom's production was stable in 2002 with output of 540 100 t K₂O. The only potash mine, Cleveland, was sold to DSW by Cleveland Potash Ltd. in May 2002.

North America

The **United States** produced about 1.2 Mt of potash in 2002. Production of potassium chloride was 862 600 t K₂O, a 6.7% increase from the 2001 level of 808 700 t. Most of the United States' production came from southeastern New Mexico where two companies operate three mines. One is operated by IMC Global Inc.'s (IMC) subsidiary, IMC Potash Carlsbad, which produces a variety of potash products. The other two are owned by Mississippi Chemical Corporation whose subsidiaries, Mississippi Potash East and Mississippi Potash West, produce MOP. In Michigan, IMC's subsidiary, IMC Potash Hersey, has a solution mine. In Utah, there are three companies producing potash with no significant output.

Latin America

Brazil is the third largest potash user in the world with average use of 3 Mt/y. Its only potash mine, the Taquari-Vassouras mine, belongs to Companhia Vale do Rio Doce (CVRD). It produced 363 800 t K₂O in 2002, operating at full capacity. The production was sold to the domestic market, accounting for 11% of the country's potash use. The remainder of the potash used comes from imports. CVRD is scheduled to increase production capacity to 510 000 t/y K₂O by 2005.

Chile's production increased 5% to $409~000~t~K_2O$ in 2002. Chile's major producer, Sociedad Quimica y Minera de Chile S.A. (SQM), extracts potash using solar evaporation from 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. SQM has a production capacity of $400~000~t/y~K_2O$. The company has been in talks to purchase Compania de Saltire y Yodo (Cosayach), which has a capacity of $120~000~t/y~K_2O$. PCS Yumbes has a capacity of $200~000~t/y~K_2O$.

Middle East

Israel's production reached 1.9 Mt K₂O in 2002, an increase of 8.1% from the previous year's 1.8 Mt. With the purchase of Cleveland Potash in May 2002, DSW now controls the 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 was unchanged in 2002 at 1.17 Mt K₂O. Arab Potash Company (APC) is currently in the process of being privatized as part of a macroeconomic privatization program being conducted by the Government of Jordan. A 26% stake in APC is for sale. Four bidders in the running are PCS Inc. of Canada, K+S Group of Germany, Mitsubishi Corporation of Japan, and Sinochem of China. The transaction is expected to be closed in 2003.

Asia

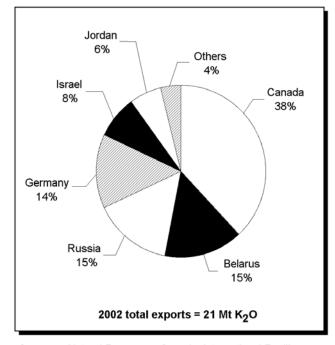
China joined the World Trade Organization (WTO) in December 2001, an important step to trade liberalization. China agreed to eliminate quantitative restrictions on fertilizer imports and to implement a tariff rate quota system. This action, however, has not had a significant impact on potash imports in 2002. China itself is a small potash producer with an output of 430 000 t K₂O in 2002, an increase of 8.9% from 395 000 t $K_2\overline{O}$ a year earlier. China's production comes from Qinghai Province where the Qaidam Basin is home to 97% of China's potash reserves and an ambitious 1-Mt project is under development. Phase I of the project is expected to add 300 000 t/y K₂O to Qinghai Yanhu Potash Fertilizer Ltd.'s capacity in 2003/04; the company will eventually become the largest potash producer in China. China's capacity is projected to reach 600 000 t/y K₂O in 2004 and 800 000 t/y K₂O in 2006.

Vancouver-based Asia Pacific Resources Ltd. (APR) seems to be a step closer in its effort to mine potash in **Thailand**. The company owns 90% of its subsidiary, Asia Pacific Potash Corporation (APPC), while the Government of Thailand owns the remaining 10%. APPC owns the Udon Thani South and North potash deposits in northeastern Thailand. A 1998 study concluded that a potash mine with output of 2 Mt/y and a 25- to 30-year mine life at the South deposit would be feasible. In August 2002, the Parliament of Thailand passed amendments to the *Minerals* Act that bring Thailand's legislation in line with international standards. The amendments permit mining at a depth greater than 100 metres below the surface without requiring the specific consent of the holder of the surface rights. On May 29, 2003, APPC applied to the Government of Thailand for a mining lease to mine potash in the Udon Thani South deposit. ASEAN Potash Mining Company Ltd.'s project at Bamnet Narong is still on hold pending the arrangement of financing.

TRADE

With many users but only a few producers, international trade is significant. In 2002, 21 Mt $\rm K_2O$, or 80% of the total production, was traded internationally. Six major producing countries accounted for 96% of total potash exports as follows: Canada, 8.1 Mt $\rm K_2O$; Belarus, 3.2 Mt $\rm K_2O$; Russia, 3.2 Mt $\rm K_2O$; Germany, 2.9 Mt $\rm K_2O$; Israel 1.8 Mt $\rm K_2O$; and Jordan, 1.1 Mt $\rm K_2O$.

Figure 3
Percentage of Potash Exports by Country, 2002



Sources: Natural Resources Canada; International Fertilizer Industry Association.

The major potash users depend on imports. In 2002, the United States used 5.8 Mt K₂O of which 4.8 Mt was imported, including 4.4 Mt from Canada. China, the second largest potash user, consumed 3.8 Mt K₂O in 2002, of which 3.3 Mt was imported. Brazil used 3 Mt K₂O in 2002 of which 2.6 Mt was imports. India's potash use was 1.6 Mt K₂O, all from imports. France used 1.1 Mt K₂O in 2002, of which close to 1 Mt was from imports. These five countries accounted for 63% of world imports of potash in 2002.

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 US\$115-\$130/t for 2000, US\$105-\$130/t for 2001, and US\$110-\$115/t for 2002. Prices for KCl granular grade f.o.b. Vancouver were steady at US\$128-\$132/t. Prices for KCl standard grade f.o.b. U.S. Gulf were US\$120-\$125/t and for KCl granular grade were US\$125-\$134/t. In Eastern Europe, the price for KCl standard grade f.o.b. Baltic was US\$90-\$110/t during 2000 and 2001 and US\$93-\$103/t during 2002. 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

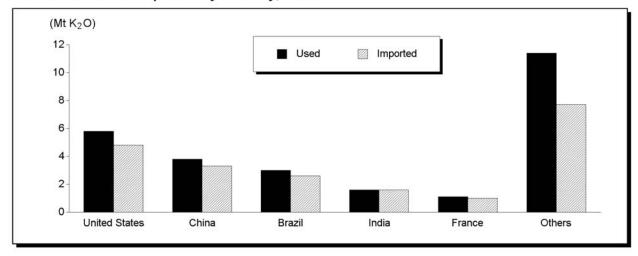


Figure 4 Potash Used and Imported by Country, 2002

Source: Natural Resources Canada.

Middle East were US\$105-\$120/t during 2000, US\$100-\$120/t during 2001, and US\$100-\$120/t during 2002. In North America, Canadian producers also sell potash directly to U.S. customers. One producer's f.o.b. mine price for KCl standard grade averaged US\$94/short ton in 2000, US\$89/short ton in 2001 and US\$88/short ton in 2002.

OUTLOOK

The primary driver for the fertilizer industry is the demand for foods, which in turn is driven by the population. The world population, estimated at 6.3 billion at the beginning of 2003, is expected to grow at a rate of 1.3% per year, 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 2002, the world grain inventory was at the lowest level since 1976 and prompted grain prices to move upwards. The key indicators, wheat and corn prices, rose to US\$3.38/bushel and US\$2.32/ bushel, respectively, in the first quarter of 2003 from the average 2002 prices of US\$3.22/bushel and US\$2.17/ bushel. The potash industry worldwide viewed this as a driver for grain producers to raise production, which would translate into more demand for fertilizer.

Canadian potash producers are optimistic about the outlook for 2003 because of improved market conditions and rising demand in Asia and Latin America in 2002. In the first quarter of 2003, PCS Inc.'s sales increased 13% in the domestic market and 11% in offshore markets. IMC

Global Inc. had a 7% sales increase. The producers predict the trend will continue for the rest of the year. The non-fertilizer use of potash is expected to remain unchanged. The Canadian potash industry welcomed the federal government's corporate tax rate reduction from 28% to 21% over a five-year period (Budget 2003).

In conclusion, the outlook is positive for production and sales increases in 2003, likely in the 2-3\% range, with production reaching over 27 Mt K₂O. In the long term, growth in potash demand is expected from agricultural upgrading and expansion, particularly in developing countries.

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 June 1, 2003. (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

			Canada	United States		
Item No.	Description	MFN	GPT	USA	Canada	
2104.00	Data saisum ablavida	Гиаа		Гиал		
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 2003, Canada Customs and Revenue Agency; *Harmonized Tariff Schedule of the United States*, 2003.

TABLE 1. CANADIAN POTASH PRODUCED, SHIPPED AND TRADED, 2001 AND 2002

		20	001	2002 (p)		
		(tonnes)	(\$000)	(tonnes)	(\$000)	
PRODUCTION, F	Potassium chloride					
	Gross weight	13 356 517		13 889 375		
	K₂O equivalent	8 181 265	• •	8 549 112	• •	
SHIPMENTS						
	K ₂ O equivalent	8 236 662	1 617 433	8 188 701	1 597 763	
IMPORTS, Fertili	zer potash (1)					
3104.20	Potassium chloride					
	United States	4 969	769	6 290	907	
	France	378	55	187	25	
	Israel	_	_	95	17	
	Germany	267	43	105	15	
	Canada	6	1	50	6	
	United Kingdom	9	1	27	5	
	Spain	_	_	3	1	
	Czech Republic	58	9	_	_	
	Other countries	5	_	1	-	
	Total	5 692	878	6 758	976	
3104.30	Potassium sulphate					
	United States	1 198	435	6 055	2 182	
	Belgium	63	34	337	183	
	Denmark	27	14	44	25	
	Japan	6	7	8	7	
	Germany	67	41	4	4	
	Australia	86	64	_	_	
	China	34	7	_	_	
	France	21	12	_	_	
	Total	1 502	614	6 448	2 401	
3104.90.00.10	Magnesium-potassium sulphate					
	United States	45 606	8 201	57 343	9 480	
3104.90.00.90	Other potassic fertilizer					
	United States	29 996	7 792	23 540	5 684	
	Australia	_	_	2 220	805	
	Israel	127	71	365	212	
	Chile	101	59	102	58	

TABLE 1 (cont'd)

		20	2001		2002 (p)		
		(tonnes)	(\$000)	(tonnes)	(\$000)		
IMPORTS. Fei	rtilizer potash (1) (cont'd)						
	China	40	24	137	26		
	Netherlands	7	2	6	3		
	Norway	562	154	3	2		
	Other countries	2	1	2	1		
	Total	30 835	8 103	26 375	6 791		
	Potash chemicals						
2815.20	Potassium hydroxide (caustic potash)	28 240	13 957	17 343	10 419		
2834.21	Potassium nitrate	9 391	5 301	8 777	4 714		
2835.24	Potassium phosphates	2 191	2 680	2 814	3 089		
2836.40	Potassium carbonates	3 969	2 552	3 269	2 174		
2839.20	Potassium silicates	2 748	1 522	1 576	1 250		
EXPORTS, Fe	rtilizer potash (1)						
3104.20	Potassium chlorides						
	United States	8 186 183	1 055 207	7 998 593	1 113 375		
	China	1 479 906	331 759	1 655 043	377 214		
	Brazil	918 250	165 663	1 032 860	188 918		
	Japan	528 591	118 347	470 434	107 060		
	Malaysia	357 517	80 013	459 506	104 848		
	South Korea	342 682	77 069	370 987	84 514		
	Australia	227 631	51 098	291 853	67 363		
	India	193 431	43 365	218 890	49 683		
	Taiwan	205 431	46 036	180 715	41 137		
	New Zealand	160 200	35 914	171 719	39 254		
	Thailand	150 478	33 875	134 552	30 306		
	Indonesia	150 189	33 524	121 000	27 590		
	Belgium	51 644	11 675	96 415	21 892		
	Italy	73 161	16 589	87 869	20 006		
	Costa Rica	59 372	13 214	64 215	14 652		
	Vietnam	52 309	11 755	60 551	13 828		
	Colombia	54 200	12 226	49 851	11 373		
	Philippines	44 350	10 010	49 089	11 205		
	Guatemala	46 329	9 772	37 086	7 725		
	Ecuador	42 326	9 628	29 613	6 800		
	Mexico	8 000	1 787	24 817	5 662		
	Peru	5 000	1 103	24 223	5 380		
	Chile	81 916	18 354	20 826	4 740		
	Dominican Republic	_	_	34 100	4 649		
	Cuba	33 000	4 163	35 200	4 446		
	Spain	64 960	11 097	20 869	3 205		
	Malawi	_	_	10 000	2 273		
	Fiji	4 954	1 144	8 939	2 043		
	Honduras	12 800	1 696	15 600	1 851		
	Argentina	6 816	1 508	8 009	1 804		
	Singapore	12 154	2 756	5 500	1 222		
	Bangladesh	_	_	200	28		
	Venezuela	16 243	2 062	_	_		
	Jamaica	21	13	_	_		
	Pakistan	18	4	_	-		
	Total	13 570 062	2 212 426	13 789 124	2 376 046		
3104.30	Potassium sulphate						
	United States	16 969	6 829	20 134	8 130		
	Cuba	98	84	79	82		
	Belgium	20	17	48	17		
	Netherlands	12	39	_	_		
	Total	17 099	6 969	20 261	8 229		

Sources: Natural Resources Canada; Statistics Canada.

– Nil; . . Not available or not applicable; (p) Preliminary.

(1) Countries are ranked in descending order of value for 2002.

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

TABLE 2. WORLD POTASH PRODUCTION, 1996-2002

	1996	1997	1998	1999	2000	2001	2002 (p)
			(0	000 t K ₂ O)			
NORTH AMERICA							
Canada	8 044	9 029	9 195	8 230	9 174	8 152	8 502
United States	1 390	1 400	1 300	1 200	1 300	1 200	1 200
EAST EUROPE							
Belarus	2 716	3 247	3 451	3 613	3 372	3 687	3 791
Russia	2 618	3 403	3 461	4 050	3 716	4 258	4 432
Ukraine	55	52	33	33	85	74	60
WESTERN EUROPE							
France	751	665	417	311	321	244	128
Germany	3 334	3 423	3 582	3 545	3 409	3 551	3 451
Spain	680	640	497	549	522	471	407
United Kingdom	618	565	608	495	601	532	540
MIDDLE EAST							
Israel	1 500	1 488	1 668	1 702	1 748	1 774	1 918
Jordan	1 059	849	916	1 080	1 162	1 177	1 174
LATIN AMERICA							
Brazil	234	280	327	337	340	345	364
Chile	179	235	280	312	330	390	409
ASIA							
China	150	186	168	260	275	395	430
Total world	23 328	25 462	25 903	25 717	26 355	26 250	26 806

Sources: Natural Resources Canada; International Fertilizer Industry Association; United States Geological Survey. (p) Preliminary.

TABLE 3. POTASH SITUATION, 1991-2002

	1991	1992	1993	1994	1995	1996	1997	1998 (r)	1999 (r)	2000 (r)	2001 (r)	2002 (p)
					(0	000 tonnes K ₂	O)					
CANADA												
Capacity	12 045	12 180	12 180	12 235	13 220	13 310	13 390	13 400	13 405	13 460	13 460	13 700
Production	7 402	7 270	6 850	8 182	9 065	8 042	9 030	9 190	8 230	9 202	8 244	8 522
Capacity use (%)	61	60	56	67	69	60	67	69	61	68	60	62
Sales	7 056	7 025	6 863	8 517	8 635	7 970	9 510	8 267	8 290	9 033	8 183	8 332
Domestic	350	370	356	385	345	355	490	449	426	455	426	446
United States	3 610	3 945	4 048	4 560	4 495	4 335	5 295	4 328	4 246	4 570	4 410	4 421
Offshore	3 096	2 710	2 459	3 572	3 795	3 280	3 725	3 490	3 618	4 008	3 347	3 465
WORLD												
Capacity	37 068	36 594	35 512	35 624	36 299	36 529	36 836	36 490	36 663	36 840	36 960	37 320
Production	26 035	24 036	20 407	22 687	24 302	23 331	25 467	25 870	25 360	25 809	25 859	26 468
Capacity use (%)	70	66	57	64	67	64	69	71	69	70	70	71
Sales	24 175	23 175	20 835	23 620	23 375	22 490	25 745	24 259	24 589	25 320	25 176	26 177
Exports	17 765	17 623	15 026	19 768	18 522	17 076	20 397	19 175	19 755	20 410	20 210	21 099
Use	24 610	23 720	20 580	19 080	19 870	20 550	20 730	22 420	21 940	22 210	22 150	(e) 23 000
CANADA/WORLD												
Production (%)	38.4	30.2	33.6	36.1	37.3	34.5	35.5	35.5	32.5	35.7	31.9	32.2
Capacity (%)	32.5	33.3	34.3	34.3	36.4	36.4	36.4	36.7	36.6	36.5	36.4	36.8

Sources: Natural Resources Canada; International Fertilizer Industry Association.

Note: Statistics are for potassium chloride only; other forms of potash are excluded.

⁽e) Estimate; (p) Preliminary; (r) Revised.