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ALBERTA TARIFF REDUCTION AND ELIMINATION PRIORITIES 2002-2004

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Contents

Introduction	1
Section 1 – Agricultural Products (HS 1-24)	2
HS Chapter 1 – Live Animals.....	2
HS Chapter 2 – Meat	2
HS Chapter 3 – Fish and Seafood	5
HS Chapter 4 – Dairy, Eggs, Honey, Etc.....	5
HS Chapter 5 – Other Products of Animal Origin	6
HS Chapter 7 – Vegetables	7
HS Chapter 10 – Cereals	8
HS Chapter 11 – Milling; Malt; Starch	10
HS Chapter 12 – Misc. Grain, Seed, Fruit	11
HS Chapter 13 – Vegetable Sap, Extracts, & Other	12
HS Chapter 15 – Fats and Oils	13
HS Chapter 16, 20, 21, 22, 23 – Prepared Meat, Fish, Etc.; Preserved Food; Beverages; Food Waste; Animal Feed.....	15
Section 2 – Non-Agricultural Products (HS 25-99)	17
HS Chapter 25 – Salt; Sulphur; Earth; Stone	17
HS Chapter 27 – Mineral Fuel, Oil, Etc.	18
HS Chapter 28 – Inorganic Chemicals; Rare Earth Materials	19
HS Chapter 29 – Organic Chemicals	20
HS Chapter 30 – Pharmaceutical Products.....	22
HS Chapter 31 – Fertilizers.....	22
HS Chapter 33 – Essential oils, perfumes, cosmetics, toiletries	23
HS Chapter 34 – Soaps, Lubricants, Waxes, Etc.	23
HS Chapter 36 – Explosives	23
HS Chapter 38 – Misc. Chemical Products	24
HS Chapter 39 – Plastics	24
HS Chapter 40 – Rubber and Articles Thereof.....	26
HS Chapter 41 – Hides and Skins.....	27
HS Chapter 44 – Wood	28
HS Chapter 47 – Wood Pulp, Etc.....	29
HS Chapter 49 – Printed Materials	30
HS Chapter 55 – Manmade Staple Fibres	31
HS Chapter 63 – Misc. Textile Articles.....	31
HS Chapter 68 – Stone, Plaster, Cement, Etc.....	32
HS Chapter 69 – Ceramic Products & HS Chapter 70 – Glass and Glassware	32
HS Chapter 71 – Precious Stones and Metals	32
HS Chapter 72 – Iron and Steel.....	33
HS Chapter 73 – Iron/Steel Products.....	33
HS Chapter 74 – Copper and Articles Thereof	35
HS Chapter 75 – Nickel and Articles Thereof	35
HS Chapter 76 – Aluminum.....	36
HS Chapter 81 – Other Base Metals, Etc.	37

HS Chapter 82 & 83 – Tools, Cutlery, Misc. Base Metals	38
HS Chapter 84 – Machinery and Mechanical Appliances	38
HS Chapter 85 – Electrical Machinery	53
HS Chapter 86 – Railway Equipment	60
HS Chapter 87 – Vehicles, Not Railway	61
HS Chapter 88 – Aircraft, Spacecraft.....	63
HS Chapter 89 – Ships and Boats	64
HS Chapter 90 – Optical and Medical Instruments.....	64
HS Chapter 93 – Arms and Ammunition.....	68
HS Chapter 94 – Furniture and Bedding	68
HS Chapter 95 & 97 – Toys and Sports Equipment; Art and Antiques	69
Export Highlights.....	69

This report provides an overview of Alberta's top exports from 2002 to 2004 and the tariff barriers that these products face when entering other countries. This information is intended to assist in the identification of product categories whose exports are hampered by restrictive tariffs. Thus, this report will assist in prioritizing Alberta's tariff reduction or elimination objectives in multilateral trade negotiations at the World Trade Organization (WTO) or in bilateral agreements between Canada and its major trading partners.

The report, therefore, focuses on exports to countries that do not have a Free Trade Agreement (FTA) with Canada (non-FTA countries). As Canada has an FTA with the United States, Mexico, Costa Rica, Chile, and Israel, export data to these countries is not provided in this report.

Export data is presented in accordance with the Harmonized Tariff Coding System (HS Codes) as maintained by the World Customs Organization (WCO). The report is divided into two sections: Agricultural exports (HS Codes 1-24) and Non-Agricultural exports (HS Codes 25-99). Data is presented at the 6-digit HS level. All Alberta exports at the 6-digit HS level worth CAD\$0.5 million or more in 2002, 2003, or 2004, to any non-FTA market, are presented in detail.

In addition to export values, bound tariff rates from the last round (the Uruguay Round) of WTO negotiations are provided for each export destination, if available. Bound tariffs are the maximum tariffs that a country may impose as a result of commitments made during prior trade negotiations. These bound tariffs are reported for all WTO members. For non-WTO members and countries where tariff information was not available, bound rates are reported as 'n.a.'. Where bound rate information is provided at the 8- or 10-digit level, the tariff range is provided in the report.

The WCO revised its classification of HS Codes in 2001-2002. As a result, new codes have been introduced while others have been discontinued. In some instances, bound tariffs for new codes were not available and are listed as 'n.a.' in the report.

The *Agreement on Trade in Information Technology Products* (ITA), concluded in Singapore in 1996, provided for participants to reduce tariffs on certain information technology products to 0%. The agreement has been signed by over 40 countries and the European Union (EU). Its products are mainly found in HS Chapters 84, 85, and 90. ITA bindings have been included in this report.

Members of the EU are grouped together in two ways: the EU 15 and the EU 25. The EU 15 includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. In 2004, ten more countries acceded to the EU: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia, and Slovakia, forming the EU 25.

When exports to either the EU 15 or EU 25 reach CAD\$0.5 million or more, both EU groupings will be presented to achieve consistency for future reporting periods. The EU 25 export data will always be at least equal to the EU 15 data. When export values for the EU 25 are greater than those for the EU 15, the difference is attributable to the ten countries that acceded to the EU in 2004. It should be noted that while the EU 25 did not exist prior to 2004, the data for the 25 countries prior to 2004 is presented as one total. This method will allow analysis of the EU 15 data both prior to and after 2004, and will allow analysis of the EU 25 data in 2004 and beyond.

Section 1 – Agricultural Products (HS 1-24)

HS Chapter 1 – Live Animals

Table 1. Bound Tariff Summary: Chapter 1 – Selected Markets, 2002 – 2004, Export Values (\$ millions)

HS Code	Description	Market	Tariff	2002	2003	2004
010190	LIVE HORSES, ASSES, MULES AND HINNIES	Japan	0.0%	2.084	4.242	6.700
010210	BOVINE ANIMALS, LIVE PURE-BRED, FOR BREEDING	China	0.0%	1.432	0.000	0.000

Table 2. Chapter 1 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
010190	LIVE HORSES, ASSES, MULES AND HINNIES		0.000	2.195	4.374	6.711
010210	BOVINE ANIMALS, LIVE PURE-BRED, FOR BREEDING		0.034	1.454	0.030	0.000

HS Chapter 2 – Meat

Table 3. Bound Tariff Summary: Chapter 2 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
020120	BOVINE CUTS BONE IN, FRESH OR CHILLED	Korea, South	40.0%	0.131	2.496	0.000
		Japan	50.0%	0.711	0.082	0.000
020130	BOVINE CUTS BONELESS, FRESH OR CHILLED	EU 25	12.8% + € 3034/t	2.973	4.723	5.426
		EU 15	12.8% + € 3034/t	2.973	4.714	4.718
		Macau	0.0%	0.000	0.000	0.871
		Japan	50.0%	14.160	13.704	0.000
		Taiwan	NT \$10/kg	0.981	1.007	0.000
		Korea, South	40.0%	0.075	0.887	0.000
020210	BOVINE CARCASSES AND HALF CARCASSES, FROZEN	Macau	0.0%	0.000	0.000	0.753
020220	BOVINE CUTS BONE IN, FROZEN	Macau	0.0%	0.000	0.226	7.938
		Philippines	40.0%	0.005	0.102	0.500
		Hong Kong	0.0%	1.196	0.130	0.019
		Korea, South	40.0%	26.176	12.303	0.000
		Taiwan	NT \$10/kg	12.387	5.845	0.000
		Japan	50.0%	0.551	0.379	0.000
020230	BOVINE CUTS BONELESS, FROZEN	Macau	0.0%	0.000	0.000	13.102
		Philippines	35.0%	0.101	0.167	0.506
		EU 25	12.8% + € 2211 – 3041/t	0.522	0.561	0.447
		EU 15	12.8% + € 2211 – 3041/t	0.000	0.038	0.447
		Hong Kong	0.0%	0.641	0.126	0.267
		Japan	50.0%	26.319	8.273	0.000
		Korea, South	40.0%	11.408	4.795	0.000
		Taiwan	NT \$10/kg	4.546	2.653	0.000
		China	12.0%	0.789	0.319	0.000
020319	SWINE CUTS, FRESH OR CHILLED, NES*	Japan	0 – 4.3% OR 482 ¥/kg	41.671	36.948	81.638
		Singapore	10.0%	0.000	0.000	0.545

HS Code	Description	Market	Tariff	2002	2003	2004
020322	HAMS, SHOULDERS AND CUTS, OF SWINE, BONE IN, FROZEN	Romania	333.0%	0.000	0.682	3.989
		Russia	n.a.	2.698	2.515	0.463
		Philippines	40.0%	0.548	0.040	0.134
		Japan	0 – 4.3% OR 482 ¥/kg	0.121	0.591	0.045
		Australia	0.0%	0.000	0.768	0.000
020329	SWINE CUTS, FROZEN NES	Japan	0 – 4.3% OR 482 ¥/kg	73.191	133.430	114.940
		Australia	0.0%	5.483	8.705	14.369
		Korea, South	25.0%	3.456	2.991	6.897
		Taiwan	12.5 – 50%	1.499	2.714	1.876
		China	12.0%	0.233	0.523	0.734
		Russia	n.a.	2.195	0.700	0.573
		Hong Kong	0.0%	0.112	0.360	0.559
		Philippines	40.0%	0.345	0.847	0.491
020500	HORSE, ASS, MULE, HINNY MEAT, FRESH, CHILLED OR FROZEN	EU 15	5.0%	26.288	22.201	20.632
		EU 25	5.0%	26.288	22.201	20.632
		Japan	0.0%	12.952	11.347	13.825
		Switzerland	Fr 1459/100kg	11.710	9.105	10.734
020610	BOVINE EDIBLE OFFAL, FRESH OR CHILLED	Japan	12.8 – 50%	1.904	1.549	0.000
020621	BOVINE TONGUES, FROZEN	Japan	12.8%	12.291	4.604	0.000
020622	BOVINE LIVERS, FROZEN	Moldova	15.0%	0.000	0.067	1.403
		EU 25	0.0%	0.040	0.273	0.766
		Kazakhstan	n.a.	0.000	0.000	0.742
		Russia	n.a.	3.448	1.514	0.049
		EU 15	0.0%	0.040	0.000	0.009
		Peru	30.0%	2.139	1.077	0.000
		Colombia	90.0%	0.563	0.097	0.000
020629	BOVINE EDIBLE OFFAL, FROZEN EXCEPT LIVERS AND TONGUES	EU 25	0% OR 12.8% + € 3041/t	1.394	1.726	1.376
		Macau	0.0%	0.000	0.000	0.637
		China	12.0%	3.005	0.942	0.203
		Japan	12.8 – 50%	11.711	5.028	0.000
		Korea, South	18.0%	4.797	1.884	0.000
		Taiwan	15 – 30%	0.872	0.585	0.000
		EU 15	0% OR 12.8% + € 3041/t	1.394	0.011	0.000
020649	SWINE EDIBLE OFFAL, FROZEN EXCEPT LIVERS	Malaysia	0.0%	0.007	0.474	1.894
		Japan	4.3 – 8.5% OR 482 ¥/kg	8.833	0.639	1.806
		Taiwan	15 – 265%	0.057	0.233	1.272
		China	12.0%	0.356	0.117	1.271
		Korea, South	18.0%	0.744	0.553	0.029
020714	FOWLS, CUTS & OFFAL, FROZEN	Russia	n.a.	0.631	0.079	0.102
020890	MEAT AND EDIBLE OFFAL NES FRESH, CHILLED OR FROZEN	EU 25	0 – 9%	0.000	0.000	0.505
		EU 15	0 – 9%	0.000	0.000	0.483
020900	PIG AND POULTRY FAT, UNRENDERED	Japan	6.0%	4.125	5.493	8.091
		Philippines	40.0%	0.015	0.016	0.587

* NES = Not Elsewhere Specified.

Table 4. Chapter 2 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
020120	BOVINE CUTS BONE IN, FRESH OR CHILLED		2.738	0.959	2.650	0.216
020130	BOVINE CUTS BONELESS, FRESH OR CHILLED		36.148	18.828	20.925	7.432
020210	BOVINE CARCASSES AND HALF CARCASSES, FROZEN		0.216	0.114	0.208	0.852
020220	BOVINE CUTS BONE IN, FROZEN		23.454	40.352	19.236	8.776
020230	BOVINE CUTS BONELESS, FROZEN		55.999	44.622	17.046	14.362
020319	SWINE CUTS, FRESH OR CHILLED, NES		55.253	41.714	37.324	82.920
020322	HAMS, SHOULDERS AND CUTS, OF SWINE, BONE IN, FROZEN		1.441	3.608	4.890	5.833
020329	SWINE CUTS, FROZEN NES		62.270	86.849	150.951	141.169
020500	HORSE, ASS, MULE, HINNY MEAT, FRESH, CHILLED OR FROZEN		64.573	51.044	42.693	45.267
020610	BOVINE EDIBLE OFFAL, FRESH OR CHILLED		4.093	2.076	1.573	0.000
020621	BOVINE TONGUES, FROZEN		35.890	12.292	4.704	0.477
020622	BOVINE LIVERS, FROZEN		8.364	6.873	3.184	3.369
020629	BOVINE EDIBLE OFFAL, FROZEN EXCEPT LIVERS AND TONGUES		13.248	24.002	11.775	3.129
020649	SWINE EDIBLE OFFAL, FROZEN EXCEPT LIVERS		5.043	10.550	2.980	7.704
020714	FOWLS, CUTS & OFFAL, FROZEN		2.292	2.957	0.512	0.821
020890	MEAT AND EDIBLE OFFAL NES FRESH, CHILLED OR FROZEN		0.119	0.000	0.005	0.944
020900	PIG AND POULTRY FAT, UNRENDERED		2.235	4.414	5.570	8.868

Meat accounted for Alberta's fifth-largest export category in 2004 at the two-digit level of the Harmonized System, with total exports of \$1.96 billion, more than \$1.62 billion of which was shipped to FTA countries. Among non-FTA partners, Asian countries were the primary destination of meat exports. Bovine (beef) exports declined sharply over 2002 to 2004, due to worldwide fears over bovine spongiform encephalopathy (or "mad cow disease"). In particular, Japan, South Korea, and Taiwan all completely eliminated imports of Alberta beef products by 2004. These countries also impose high tariffs on beef imports, such as 50% in Japan and 40% in South Korea. Swine (pork) exports experienced strong growth in the wake of low beef exports; these tariffs are considerably lower (0 – 4.3% in Japan and 25% in South Korea). As beef exports have declined significantly in recent years, tariff reduction might be beneficial to spur growth in Alberta's meat exports once markets are re-opened.

HS Chapter 3 – Fish and Seafood

Table 5. Bound Tariff Summary: Chapter 3 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
030380	FISH LIVERS AND ROES, FROZEN	China	10.0%	0.000	0.000	0.950

Table 6. Chapter 3 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
030380	FISH LIVERS AND ROES, FROZEN		0.000	0.000	0.000	0.950

China emerged as the sole significant export destination for Alberta's fish and seafood products in 2004. China accounted for 74% of total exports of fish and seafood, applying a 10% tariff to frozen fish livers and roes.

HS Chapter 4 – Dairy, Eggs, Honey, Etc.

Table 7. Bound Tariff Summary: Chapter 4 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
040210	MILK POWDER <1.5% FAT	Vietnam	n.a.	0.000	0.000	1.962
		Philippines	18 – 20%	0.000	1.130	1.366
		Thailand	216.0%	0.000	6.782	1.007
		China	10.0%	0.000	0.339	0.721
		Japan	21.3 – 29.8% + 396 ¥/kg	0.396	0.682	0.050
040900	HONEY, NATURAL	Japan	25.5%	1.461	0.756	1.258
		EU 15	17.3%	3.068	2.094	1.095
		EU 25	17.3%	3.068	2.094	1.095

Table 8. Chapter 4 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
040210	MILK POWDER <1.5% FAT		1.064	0.396	9.423	5.240
040900	HONEY, NATURAL		1.907	4.529	2.858	2.410

Milk powder of less than 1.5% fat has been the dominant product category of Alberta's Chapter 4 exports over the last few years. Thailand, which has a very high tariff of 216%, has seen export values fall from \$6.8 million in 2003 to \$1.0 million in 2004. With a 21.3 – 29.8% + 396 ¥/kg tariff in Japan, Alberta's exports to Japan have also decreased over this same time period. Reduction of these tariffs may restore Alberta's exports of dairy products.

HS Chapter 5 – Other Products of Animal Origin

Table 9. Bound Tariff Summary: Chapter 5 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
050400	GUTS, BLADDERS AND STOMACHS OF ANIMALS EXCEPT FISH	Macau	0.0%	0.000	0.000	0.559
		EU 25	0.0%	0.294	0.728	0.348
		China	18 – 20%	0.457	1.460	0.149
		Malaysia	0.0%	1.354	0.035	0.060
		Japan	0.0%	1.372	0.702	0.000
		Hong Kong	0.0%	1.715	0.476	0.000
		EU 15	0.0%	0.000	0.000	0.000
050690	BONES AND HORN-CORES UNWORKED OR SIMPLY WORKED NES	EU 15	0.0%	0.002	0.000	1.767
		EU 25	0.0%	0.002	0.000	1.767
		Thailand	30.0%	2.343	0.914	0.000
		Japan	0.0%	3.090	0.827	0.000
050790	WHALEBONE, HORNS, ETC UNWORKED OR SIMPLY PREPARED NES	Hong Kong	0.0%	1.262	0.828	1.294
		China	3 – 11%	1.968	1.666	0.491
051110	SEMEN BOVINE	EU 25	0.0%	1.843	1.663	2.407
		EU 15	0.0%	1.730	1.585	2.400
		Japan	0.0%	0.441	0.679	0.988
		Iran	n.a.	0.582	0.411	0.490
051199	ANIMAL PRODUCTS AND DOMESTIC ANIMAL CARCASS (NON-FOOD)	EU 25	0.0%	1.060	3.824	5.752
		EU 15	0.0%	0.872	3.782	5.719

Table 10. Chapter 5 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
050400	GUTS, BLADDERS AND STOMACHS OF ANIMALS EXCEPT FISH		6.064	5.566	3.529	1.537
050690	BONES AND HORN-CORES UNWORKED OR SIMPLY WORKED NES		4.569	5.434	1.741	1.794
050790	WHALEBONE, HORNS, ETC UNWORKED OR SIMPLY PREPARED NES		3.305	3.236	2.494	1.785
051110	SEMEN BOVINE		1.624	3.571	2.999	4.067
051199	ANIMAL PRODUCTS AND DOMESTIC ANIMAL CARCASS (NON-FOOD)		0.545	2.577	4.438	5.921

The composition of Chapter 5 exports has changed significantly in recent years. Exports of guts, bladders, bones and horns have decreased steadily, even to nations such as Japan with no tariffs. The EU, with 0% tariffs on many products of animal origin, has emerged as an important export market for products such as animal carcasses. Overall, exports to the EU 25 have gone from less than 7% of total Chapter 5 exports in 2002 to 37% in 2004. Reduction of Chinese tariffs (18 – 20% on guts and bladders and 3 – 11% on whalebone and horns) and Thailand's 30% tariff on bones and horns may be beneficial for Alberta's exports, which have declined in these categories over 2002-2004.

HS Chapter 7 – Vegetables

Table 11. Bound Tariff Summary: Chapter 7 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
071310	PEAS DRIED, SHELLLED	EU 25	0.0%	0.783	0.041	10.959
		EU 15	0.0%	0.725	0.041	10.945
		Cuba	40.0%	3.702	9.245	6.900
		Colombia	15 – 70%	0.944	0.073	3.414
		India	100.0%	15.204	10.139	1.644
		Bangladesh	200.0%	0.000	3.737	1.209
		Japan	0 – 6% OR 354 ¥/kg	0.716	0.671	0.733
		China	0 – 5%	0.234	0.093	0.686
071320	CHICKPEAS, DRIED, SHELLLED	EU 15	0.0%	0.323	0.560	0.568
		EU 25	0.0%	0.323	0.560	0.568
		India	100.0%	4.456	4.748	0.074
071332	BEANS, SMALL RED (ADZUKI) DRIED, SHELLLED	Columbia	178.0%	2.141	0.000	0.000
071333	KIDNEY BEANS AND WHITE PEA BEANS DRIED, SHELLLED	Cuba	40.0%	0.028	0.000	1.512
071339	BEANS DRIED, SHELLLED, NES	EU 15	0.0%	6.405	4.535	7.378
		EU 25	0.0%	6.405	4.535	7.378
		Dom. Republic	40.0%	0.000	2.606	6.701
		Angola	15.0%	0.000	0.833	4.153
		Cuba	40.0%	0.084	0.000	0.707
		Algeria	n.a.	0.098	0.238	0.706
		Turkey	19.3%	0.637	0.000	0.000
071340	LENTILS DRIED, SHELLLED	Colombia	15 – 70%	0.743	0.000	4.129
		India	100.0%	1.164	0.073	0.000

Table 12. Chapter 7 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
071310	PEAS DRIED, SHELLLED		100.612	22.410	24.980	26.555
071320	CHICKPEAS, DRIED, SHELLLED		1.150	5.546	5.920	1.233
071332	BEANS, SMALL RED (ADZUKI) DRIED, SHELLLED		2.285	2.157	0.035	0.015
071333	KIDNEY BEANS AND WHITE PEA BEANS DRIED, SHELLLED		0.244	0.099	0.005	1.827
071339	BEANS DRIED, SHELLLED, NES		7.136	7.481	8.445	20.095
071340	LENTILS DRIED, SHELLLED		6.864	3.147	1.530	5.051

Total Chapter 7 exports have decreased from \$154.7 million in 2001 to \$92.6 million in 2004. Shipments to FTA countries have grown from a proportion of 23.2% of total vegetable exports to 40.6% from 2001 to 2004. Lower shipments to high tariff countries such as India (100% tariff) and Bangladesh (200% tariff) comprise much of the decrease to non-FTA countries. Shipments of peas (HS 071310) to Bangladesh fell from \$22.1 million in 2001 to zero in 2002, and have only rebounded to \$1.2 million in 2004. Similarly, shipments of peas to India fell from \$37.4 million in 2001 to \$15.2 million in 2002, and fell

further to \$1.6 million in 2004. Reduction of the current high tariffs in this category could revitalize a shrinking export market.

HS Chapter 10 – Cereals

Table 13. Bound Tariff Summary: Chapter 10 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
100110	DURUM WHEAT	EU 25	€ 148/t	5.818	88.269	75.628
		EU 15	€ 148/t	4.963	86.487	73.639
		Morocco	34 – 170%	23.492	22.424	26.991
		Venezuela	117.0%	13.393	19.239	21.205
		Algeria	n.a.	54.503	53.874	20.005
		Japan	55 ¥/kg	8.778	14.920	12.727
		Libya	n.a.	3.475	0.000	10.929
		Peru	30 – 68%	3.929	2.804	3.221
		Tunisia	80.0%	19.025	19.387	2.609
		China	65.0%	0.000	0.000	1.485
		U.A.Emirates	n.a.	0.410	0.000	1.376
		Indonesia	27.0%	0.490	1.034	1.243
		Guatemala	112.0%	0.577	2.121	0.876
		Colombia	124.0%	0.815	0.593	0.666
		Dom. Republic	40.0%	0.760	0.406	0.175
		Switzerland	Fr 0.5 – 74/100kg	3.379	0.050	0.033
		Romania	240.0%	0.000	1.364	0.000
		Jamaica	100.0%	0.901	0.805	0.000
		El Salvador	30.0%	0.959	0.000	0.000
		Brazil	0 – 55%	0.502	0.000	0.000
100190	WHEAT EXCEPT DURUM WHEAT, AND MESLIN	China	65.0%	13.160	12.657	183.670
		EU 25	12.8% OR € 95/t	58.205	82.165	79.437
		EU 15	12.8% OR € 95/t	57.323	82.165	78.299
		Japan	55 ¥/kg	91.391	59.014	63.676
		Indonesia	27.0%	39.007	18.435	38.112
		Philippines	30.0%	32.697	33.706	36.229
		Colombia	124.0%	30.598	17.978	29.801
		Venezuela	117.0%	27.876	14.772	22.331
		Korea, South	1.8 – 9%	11.175	6.361	21.316
		Algeria	n.a.	0.000	0.000	20.520
		Ecuador	5 – 36%	13.388	16.794	19.612
		Jamaica	100.0%	12.630	4.018	15.341
		Peru	30 – 68%	14.685	9.443	12.747
		Guatemala	106.0%	10.427	8.955	12.589
		U.A.Emirates	15.0%	8.194	11.111	12.324
		Malaysia	0.0%	16.318	11.137	11.552
		Ghana	40.0%	12.916	7.129	10.754
		Sudan	n.a.	13.376	9.075	10.480
		Thailand	27.0%	15.748	5.928	10.190
		Nigeria	150.0%	15.538	7.292	9.205
		Turkey	180.0%	0.000	7.315	8.135

		Bangladesh	200.0%	6.913	7.532	7.007
HS Code	Description	Market	Tariff	2002	2003	2004
	WHEAT EXCEPT DURUM WHEAT, AND MESLIN (continued)	Sri Lanka	50.0%	0.000	6.626	6.381
		Mozambique	100.0%	1.294	1.674	4.210
		South Africa	72.0%	0.755	0.000	2.322
		Morocco	34 – 170%	2.938	4.921	2.221
		New Zealand	0.0%	1.575	2.280	2.201
		Tanzania	120.0%	0.856	0.000	2.089
		Cameroon	80.0%	3.167	3.460	1.977
		Panama	3.0%	0.000	1.135	1.961
		Romania	45 – 240%	0.000	11.772	1.954
		Singapore	10.0%	0.865	0.765	1.586
		Ethiopia	n.a.	0.107	3.705	1.571
		Vietnam	n.a.	2.438	2.146	1.466
		Norway	347% + 2.1 NOK	1.567	1.433	1.052
		Togo	80.0%	2.970	2.165	0.942
		Korea, North	n.a.	0.000	1.735	0.702
		Cote d'Ivoire	15.0%	2.069	0.463	0.679
		Cuba	40.0%	1.478	0.000	0.634
		Nicaragua	40 – 60%	0.000	0.000	0.598
		Switzerland	Fr 0 – 76/100kg	1.646	0.466	0.189
		Iran	n.a.	10.408	17.575	0.031
		Taiwan	6.5%	1.263	0.000	0.029
		Jordan	0.0%	0.515	0.000	0.028
		Dom. Republic	40.0%	0.004	2.473	0.000
		Brazil	0 – 55%	3.722	10.976	0.000
		Egypt	5.0%	0.000	7.699	0.000
		Ukraine	n.a.	0.000	7.626	0.000
		Bulgaria	50.0%	0.000	0.561	0.000
		Senegal	30.0%	1.704	0.000	0.000
		Haiti	16.0%	0.808	0.000	0.000
100200	RYE	Japan	0 – 4.2%	0.062	0.020	2.916
100300	BARLEY	China	3.0%	12.010	7.801	40.093
		Saudi Arabia	n.a.	0.000	16.712	23.508
		Japan	39 ¥/kg	1.842	11.343	14.154
		Colombia	144.0%	3.833	1.794	6.772
		EU 15	€ 93/t	0.494	0.013	1.776
		EU 25	€ 93/t	0.494	0.013	1.776
		South Africa	41.0%	8.886	6.421	1.212
		Peru	30.0%	0.000	0.000	0.912
		Iran	n.a.	0.000	0.000	0.507
		Korea, North	n.a.	0.000	1.638	0.000
		Tunisia	75.0%	1.748	0.000	0.000
		U.A.Emirates	15.0%	0.750	0.003	0.000
100830	CANARY SEED	EU 15	€ 14/t	0.950	0.239	0.055
		EU 25	€ 14/t	0.950	0.239	0.055

Table 14. Chapter 10 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
100110	DURUM WHEAT		130.195	141.447	227.741	179.851
100190	WHEAT EXCEPT DURUM WHEAT, AND MESLIN		794.353	487.262	443.256	671.255
100200	RYE		0.539	0.261	0.157	3.058
100300	BARLEY		79.243	29.622	45.786	89.260
100830	CANARY SEED		1.219	1.381	0.364	0.375

Cereals represent Alberta's ninth-largest export category with total exports of \$1.08 billion in 2004, of which only 12.3% went to Canada's FTA partners. Non-durum and durum wheat are the two largest product categories in Chapter 10 by a significant margin. China has driven strong growth in the non-durum category with exports up from \$13.2 million in 2002 to \$183.7 million in 2004 despite a 65% tariff. Overall, tariffs are relatively high in the cereal category and reach 200% in Bangladesh, 124% in Colombia, 117% in Venezuela, and 80% in Tunisia. Reduction of these high tariffs may be a target for future trade negotiations.

HS Chapter 11 – Milling; Malt; Starch

Table 15. Bound Tariff Summary: Chapter 11 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
110100	WHEAT OR MESLIN FLOUR	Hong Kong	0.0%	2.103	2.556	3.856
		Korea, South	4.2 – 13.1%	0.000	0.471	3.707
		Japan	90 ¥/kg	2.461	1.046	0.174
110319	CEREAL GROATS OR MEAL EXCEPT WHEAT, MAIZE, RICE, OATS	Dom. Republic	40.0%	0.304	0.668	0.872
		Dominica	100.0%	0.000	0.534	0.750
		Jamaica	100.0%	0.780	0.737	0.720
		Venezuela	117.0%	1.467	0.728	0.262
		Guatemala	40.0%	1.485	0.337	0.113
110520	POTATO FLAKES, GRANULES AND PELLETS	Philippines	20.0%	0.170	0.790	0.202
110710	MALT, NOT ROASTED	Japan	21.3 ¥/kg	66.043	53.153	43.544
		South Africa	33 – 99%	5.805	5.893	14.099
		Korea, South	269.0%	8.246	0.705	7.261
		China	10.0%	0.317	1.188	4.196
		Guatemala	10.0%	1.394	0.649	4.123
		Venezuela	119.0%	0.000	0.000	3.406
		Brazil	9 – 35%	2.024	0.000	2.443
		Dom. Republic	40.0%	0.000	0.000	0.550
		Thailand	27.0%	2.038	0.000	0.000
		Nicaragua	40.0%	0.524	0.000	0.000

Table 16. Chapter 11 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
110100	WHEAT OR MESLIN FLOUR		4.214	4.616	4.357	8.252
110319	CEREAL GROATS OR MEAL EXCEPT WHEAT, MAIZE, RICE, OATS		0.000	4.524	3.230	2.811
110520	POTATO FLAKES, GRANULES AND PELLETS		1.203	0.979	1.352	0.991
110710	MALT, NOT ROASTED		95.201	86.931	62.089	80.211

Malt is the most important export product from Alberta in Chapter 11. Japan is the top worldwide destination for Alberta's malt, with Canada's FTA partners next in the ranking. Shipments to Japan have been decreasing each year since 2001, and thus a reduction in the tariff of 21.3 ¥/kg may prove beneficial to Alberta's exports. Tariffs vary significantly in the malt category, with tariffs of 33 – 99% in South Africa, 269% in South Korea, and only 10% in China.

HS Chapter 12 – Misc. Grain, Seed, Fruit

Table 17. Bound Tariff Summary: Chapter 12 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
120400	LINSEED	EU 25	0.0%	5.648	3.798	2.878
		EU 15	0.0%	5.648	3.798	2.877
120510	LOW ERUCIC ACID CANOLA SEED, WHETHER OF NOT BROKEN	Japan	0.0%	268.618	178.102	170.321
		China	0 – 9%	10.831	29.605	24.471
		Bangladesh	n.a.	0.000	1.714	1.918
		Pakistan	n.a.	0.000	41.720	0.400
		EU 15	0.0%	1.857	0.244	0.092
		EU 25	0.0%	1.857	0.244	0.092
		India	n.a.	0.000	1.002	0.018
		Iran	n.a.	1.333	0.000	0.000
120590	CANOLA SEED, WHETHER OR NOT BROKEN, NES	Pakistan	n.a.	0.000	0.000	4.517
		China	0 – 9%	0.000	0.000	2.799
		Japan	n.a.	8.340	0.001	2.072
120750	MUSTARD SEEDS	Japan	0.0%	1.169	1.368	3.382
		Thailand	30.0%	0.000	0.149	1.017
		EU 15	0.0%	3.324	0.925	0.864
		EU 25	0.0%	3.324	0.925	0.864
		Bangladesh	200.0%	0.691	0.000	0.000
120890	FLOUR OR MEAL OF OILSEED / FRUIT, EXCEPT MUSTARD, SOY	Japan	4.2%	0.312	0.920	0.095
120923	SEED, FESCUE, FOR SOWING	EU 25	0 – 2.5%	0.081	0.620	4.500
		EU 15	0 – 2.5%	0.081	0.620	3.750
121410	LUCERNE (ALFALFA) MEAL AND PELLETS	Japan	0.0%	9.072	8.395	20.067
		Taiwan	0.0%	3.908	2.233	1.442
121490	OTHER FODDER AND FORAGE PRODUCTS, ROOTS, ETC.	Japan	0.0%	84.255	66.614	85.927
		Korea, South	18 – 100.5%	6.224	1.789	4.973
		Taiwan	0.0%	2.228	1.658	0.812
		EU 15	0 – 5.8%	0.386	0.539	0.312
		EU 25	0 – 5.8%	0.386	0.539	0.312

**Table 18. Chapter 12 Export Values to Non-FTA Countries
2001 – 2004, \$ millions – Selected Products**

HS Code	Description		2001	2002	2003	2004
120400	LINSEED		5.273	6.264	4.139	3.245
120510	LOW ERUCIC ACID CANOLA SEED, WHETHER OF NOT BROKEN		0.000	282.668	253.247	197.503
120590	CANOLA SEED, WHETHER OR NOT BROKEN, NES		0.000	8.387	0.566	9.606
120750	MUSTARD SEEDS		7.366	5.445	3.004	5.753
120890	FLOUR OR MEAL OF OILSEED / FRUIT, EXCEPT MUSTARD, SOY		2.744	0.312	0.920	0.102
120923	SEED, FESCUE, FOR SOWING		0.464	0.185	0.886	4.795
121410	LUCERNE (ALFALFA) MEAL AND PELLETS		39.303	13.390	10.723	21.571
121490	OTHER FODDER AND FORAGE PRODUCTS, ROOTS, ETC.		76.456	93.790	71.500	92.642

Japan accounted for 58.6% of total Chapter 12 exports from Alberta from 2002 to 2004. Low erucic acid canola seed (HS 120510) is the dominant export product in this category, followed by other fodder and forage products (HS 121490). Low erucic acid canola seed exports to Japan have fallen from \$268.6 million in 2002 to \$170.3 million in 2004 despite a 0% tariff.

HS Chapter 13 – Vegetable Sap, Extracts, & Other

Table 19. Bound Tariff Summary: Chapter 13 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
130219	VEGETABLE SAPS AND EXTRACTS NES	EU 25	0.0%	0.024	0.149	0.530
		EU 15	0.0%	0.024	0.149	0.530

Table 20. Chapter 13 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description		2001	2002	2003	2004
130219	VEGETABLE SAPS AND EXTRACTS NES		0.129	0.052	0.175	0.530

HS Chapter 15 – Fats and Oils

Table 21. Bound Tariff Summary: Chapter 15 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
150200	BOVINE, SHEEP AND GOAT FATS, RAW OR RENDERED	Korea, South	18.0%	0.000	0.000	1.603
		Japan	0.0%	0.000	0.725	1.418
		El Salvador	20.0%	0.000	0.000	1.293
		China	8.0%	0.000	4.161	0.000
		Pakistan	100.0%	0.000	2.327	0.000
		Taiwan	0.0%	0.000	1.173	0.000
151411	CANOLA OIL AND ITS FRACTIONS, LOW ERUCIC ACID, CRUDE, NOT CHEMICALLY MODIFIED	China	30.7%	0.000	0.000	33.351
		Malaysia	n.a.	0.000	0.000	3.946
		Taiwan	n.a.	0.064	0.000	2.998
		Hong Kong	0.0%	1.290	0.000	1.968
		Korea, South	36%	0.000	0.000	1.812
		Japan	10.90 – 13.20 ¥/kg	1.102	0.078	1.095
		Singapore	n.a.	0.000	0.000	0.632
		EU 15	3.2 – 6.4%	2.164	4.104	0.000
151419	CANOLA OIL AND ITS FRACTIONS, LOW ERUCIC ACID, NOT CHEMICALLY MODIFIED, NES (REFINED)	EU 25	3.2 – 6.4%	2.164	4.104	0.000
		Taiwan	n.a.	4.272	0.880	5.639
		Singapore	n.a.	0.671	0.484	0.951
		Hong Kong	0.0%	2.627	1.167	0.618
		Malaysia	n.a.	0.000	1.583	0.000
		Korea, South	36%	8.059	0.000	0.000
151491	CANOLA OR MUSTARD OIL, AND FRACTIONS THEREOF, CRUDE, NES	China	30.7%	1.580	0.000	0.000
		Japan	10.90 – 13.20 ¥/kg	0.000	1.897	3.785
		Philippines	n.a.	0.000	0.466	1.142
		U.A.Emirates	n.a.	0.000	0.424	0.849
		Taiwan	n.a.	0.000	2.226	0.251
151499	CANOLA OR MUSTARD OIL, AND FRACTIONS THEREOF, NES (REFINED)	Pakistan	n.a.	0.000	7.836	0.000
		Japan	13.20 ¥/kg	0.546	0.986	4.490
		Colombia	n.a.	0.065	0.356	0.900
151620	VEG FATS, OILS OR FRACTIONS HYDROGENATED, ESTERIFIED	Singapore	n.a.	0.239	0.847	0.686
151620	VEG FATS, OILS OR FRACTIONS HYDROGENATED, ESTERIFIED	New Zealand	0 – 12.5%	0.402	0.546	0.488
151710	MARGARINE, EXCEPT LIQUID MARGARINE	Japan	29.8%	0.658	1.557	0.752
151790	EDIBLE MIX & PREPARATIONS OF ANIMAL & VEG FAT, OIL NES	New Zealand	14 – 21%	0.353	0.694	0.443

**Table 22. Chapter 15 Export Values to Non-FTA Countries
2001 – 2004, \$ millions – Selected Products**

HS Code	Description		2001	2002	2003	2004
150200	BOVINE, SHEEP AND GOAT FATS, RAW OR RENDERED		2.125	0.000	8.418	4.799
151411	CANOLA OIL AND ITS FRACTIONS, LOW ERUCIC ACID, CRUDE, NOT CHEMICALLY MODIFIED		0.000	4.783	4.228	45.828
151419	CANOLA OIL AND ITS FRACTIONS, LOW ERUCIC ACID, NOT CHEMICALLY MODIFIED, NES (REFINED)		0.000	18.097	4.115	7.239
151491	CANOLA OR MUSTARD OIL, AND FRACTIONS THEREOF, CRUDE, NES		0.000	0.082	13.884	7.589
151499	CANOLA OR MUSTARD OIL, AND FRACTIONS THEREOF, NES (REFINED)		0.000	2.168	3.241	6.501
151620	VEG FATS, OILS OR FRACTIONS HYDROGENATED, ESTERIFIED		0.006	0.769	0.773	0.556
151710	MARGARINE, EXCEPT LIQUID MARGARINE		0.430	0.993	2.026	1.546
151790	EDIBLE MIX & PREPARATIONS OF ANIMAL & VEG FAT, OIL NES		0.960	0.674	0.904	0.918

Alberta's Chapter 15 exports account for \$191.2 million in total exports, \$116.2 million of which is shipped to FTA countries. Shipments to China, Taiwan, and Japan make up the majority of non-FTA oil and fat exports from Alberta, with crude canola oil as the top exported product (HS 151411). China did not import any HS 151411 in 2002 or 2003 but imported \$33.4 million of the product category in 2004 despite a 30.7% tariff. This tariff could be targeted for reduction to maintain exports of rapeseed and canola oil to China.

Table 23. Bound Tariff Summary: Chapter 16, 20, 21, 22, 23 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
160100	SAUSAGES, SIMILAR PRODUCTS OF MEAT, MEAT OFFAL & BLOOD	Japan	10.0%	1.330	1.062	0.859
160249	SWINE MEAT OR OFFAL NES, PREPARED, PRESERVED	Japan	0 – 20% OR 1035 ¥/kg	6.279	0.924	0.000
200410	POTATOES, PREPARED, FROZEN	Japan	8.5 – 13.6%	9.378	8.355	35.141
		Korea, South	18.0%	0.000	0.561	7.575
		Philippines	35.0%	0.625	0.776	6.778
		China	13.0%	0.515	0.784	6.770
		Taiwan	12.5 – 20%	1.203	1.693	4.489
		Indonesia	40.0%	0.421	1.587	4.391
		Saudi Arabia	n.a.	1.770	1.480	3.068
		Guatemala	40.0%	0.000	0.686	2.413
		Singapore	10.0%	1.476	1.355	2.389
		Kuwait	100.0%	0.339	0.862	1.555
		Malaysia	10 – 20% OR 5%+ \$14.96	0.802	1.171	1.208
		Panama	20 – 40%	0.000	0.266	0.731
200490	VEGETABLES NES AND MIXTURES, PREPARED, FROZEN	Japan	7.5 – 23.8%	0.080	0.703	0.145
200520	POTATOES, PREPARED OR PRESERVED, NOT FROZEN, NO VINEGAR	Philippines	35.0%	0.115	0.167	0.714
210330	MUSTARD FLOUR OR MEAL AND PREPARED MUSTARD	Japan	7.5 – 9%	1.788	0.929	2.118
		EU 15	0 – 9%	1.552	0.378	0.000
		EU 25	0 – 9%	1.552	0.378	0.000
210500	ICE CREAM AND OTHER EDIBLE ICE	Japan	21 – 29.8%	0.663	0.000	0.000
210690	FOOD PREPARATIONS NES	China	3 – 35%	0.000	0.298	0.713
220720	ETHYL ALCOHOL AND OTHER SPIRITS, DENATURED	South Africa	597.0%	0.000	0.000	2.020
		Japan	27.2% OR 38 ¥/l	0.000	0.000	1.428
		EU 15	€ 10.2/hl	0.000	0.000	1.404
		EU 25	€ 10.2/hl	0.000	0.000	1.404
220830	WHISKIES	South Africa	67 – 121%	0.961	1.865	0.743
		Japan	9.8 – 11.2% + 137 – 163 ¥/kg	0.508	0.535	0.693
		EU 25	€ 0.16/%/vol/hl + € 1.2/hl	2.728	2.065	0.499
		EU 15	€ 0.16/%/vol/hl + € 1.2/hl	2.439	1.906	0.455
230110	FLOUR, MEAL OR PELLETS OF MEAT OR OFFAL FOR ANIMAL FEED	Indonesia	40.0%	3.163	3.372	0.280
		Taiwan	0.0%	7.670	4.984	0.000
		China	2 – 5%	1.421	0.090	0.000
		Thailand	30.0%	0.779	0.149	0.000
230320	BEET-PULP, BAGASSE & OTHER WASTE OF SUGAR MANUFACTURE	Japan	0.0%	1.658	1.751	4.354
230649	CANOLA SEED OILCAKE, OTHER SOLID RESIDUES, NES, FROM EXTRACTION OF SEED OIL, IN PELLETS	Philippines	n.a.	0.000	0.000	2.812
230910	DOG OR CAT FOOD (RETAIL)	EU 25	€ 23 – 948/t	3.944	6.405	10.086
		EU 15	€ 23 – 948/t	0.721	1.321	2.327
		Turkey	8.5%	0.326	0.172	0.938
		Japan	0% OR 36 – 59.5 ¥/kg	0.453	0.526	0.492
		Taiwan	2.0%	1.218	0.493	0.402
		Korea, North	n.a.	0.000	0.614	0.337
		Korea, South	18.0%	0.868	0.028	0.017
230990	ANIMAL FEED PREPARATIONS NES	Indonesia	40.0%	0.551	0.516	1.906
		Taiwan	0.0%	0.095	2.317	0.196

	Japan	0 – 12.8%	1.157	0.003	0.015
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Table 24. Chapter 16, 20, 21, 22, 23 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
160100	SAUSAGES, SIMILAR PRODUCTS OF MEAT, MEAT OFFAL & BLOOD	0.711	1.330	1.115	0.859
160249	SWINE MEAT OR OFFAL NES, PREPARED, PRESERVED	6.912	6.279	0.924	0.000
200410	POTATOES, PREPARED, FROZEN	14.309	17.848	20.613	78.816
200490	VEGETABLES NES AND MIXTURES, PREPARED, FROZEN	0.000	0.080	0.703	0.163
200520	POTATOES, PREPARED OR PRESERVED, NOT FROZEN, NO VINEGAR	0.107	0.249	0.209	0.844
210330	MUSTARD FLOUR OR MEAL AND PREPARED MUSTARD	0.919	3.605	1.523	2.482
210500	ICE CREAM AND OTHER EDIBLE ICE	0.000	0.663	0.000	0.000
210690	FOOD PREPARATIONS NES	0.277	0.276	0.600	1.289
220720	ETHYL ALCOHOL AND OTHER SPIRITS, DENATURED	0.625	0.000	0.000	5.290
220830	WHISKIES	4.025	4.426	5.013	2.008
230110	FLOUR, MEAL OR PELLETS OF MEAT OR OFFAL FOR ANIMAL FEED	5.998	13.032	8.676	0.340
230320	BEET-PULP, BAGASSE & OTHER WASTE OF SUGAR MANUFACTURE	0.000	1.707	1.935	4.934
230649	CANOLA SEED OILCAKE, OTHER SOLID RESIDUES, NES, FROM EXTRACTION OF SEED OIL, IN PELLETS	0.000	0.014	0.000	2.981
230910	DOG OR CAT FOOD (RETAIL)	4.668	7.244	8.911	13.317
230990	ANIMAL FEED PREPARATIONS NES	0.888	1.951	3.131	2.985

Alberta's exports of various processed food and drink to non-FTA countries is dominated by frozen potatoes, followed in 2004 by pet food, spirits and whiskies, beet pulp, oilseed cake, and other animal feed. The major export destination for frozen potatoes is Japan, although South Korea, the Philippines, China, Taiwan, and Indonesia have all gained prominence. Bound tariffs to all these countries are high, ranging from a low of 8.5 – 13.6% in Japan to a high of 40% in Indonesia. These tariffs could, therefore, be a focus for tariff reduction in the future.

Section 2 – Non-Agricultural Products (HS 25-99)

HS Chapter 25 – Salt; Sulphur; Earth; Stone

Table 25. Bound Tariff Summary: Chapter 25 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
250300	SULPHUR, EXCEPT SUBLIMATED, PRECIPITATED, COLLOIDAL	China	3.0%	60.792	50.503	122.997
		Brazil	0.0%	31.678	35.844	32.422
		Cuba	n.a.	13.337	18.633	23.957
		Russia	n.a.	0.000	0.000	8.861
		Indonesia	40.0%	3.658	5.931	8.483
		Morocco	40.0%	1.916	6.160	6.150
		Philippines	10.0%	0.000	0.000	6.127
		South Africa	0.0%	11.897	16.258	3.307
		New Zealand	0.0%	0.000	0.000	2.391
		Australia	0.0%	1.173	1.672	0.000
250510	SILICA SANDS AND QUARTZ SANDS	Australia	1.0%	0.041	0.731	0.000
251990	MAGNESIA, FUSED, DEAD-BURNED ETC & MAGNESIUM OXIDE PURE OR NOT	EU 25	0 – 1.7%	2.468	2.048	0.756
		Singapore	n.a.	0.314	0.316	0.732
		EU 15	0 – 1.7%	2.092	1.753	0.467
		Korea, South	10.0%	0.553	0.410	0.325

Table 26. Chapter 25 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
250300	SULPHUR, EXCEPT SUBLIMATED, PRECIPITATED, COLLOIDAL	118.896	124.516	135.012	214.696
250510	SILICA SANDS AND QUARTZ SANDS	0.005	0.054	0.783	0.000
251990	MAGNESIA, FUSED, DEAD-BURNED ETC & MAGNESIUM OXIDE PURE OR NOT	4.828	3.721	2.994	2.079

Alberta's total Chapter 25 exports were \$296.7 million in 2004, up from \$191.6 million in 2002. Trade with non-FTA countries makes up approximately 73% of Chapter 25 exports. Sulphur is the dominant product in this category, and China has widened its gap as Alberta's largest sulphur trading partner. With a low tariff of 3% on sulphur, exports to China have more than doubled from 2002 to 2004. Other important export destinations include Indonesia, Morocco, and the Philippines, all of whom have seen their export values increase despite high tariffs of 40%, 40%, and 10%, respectively. Reduction of these tariffs may prove beneficial to Alberta's future exports.

Table 27. Bound Tariff Summary: Chapter 27– Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
270112	BITUMINOUS COAL, WHETHER OR NOT PULVERISED BUT NOT AGGLOMERATED	Japan	0.0%	95.970	12.799	28.081
		EU 15	0.0%	44.721	7.993	0.000
		EU 25	0.0%	44.721	7.993	0.000
		Brazil	15.0%	30.096	2.142	0.000
		Korea, South	1.0%	45.936	1.553	0.000
		Egypt	5.0%	13.920	0.000	0.000
		Taiwan	0.0%	12.612	0.000	0.000
270300	PEAT (INCLUDING PEAT LITTER), WHETHER OR NOT AGGLOMERATED	Japan	0.0%	0.566	0.519	0.670
		Korea, South	1.0%	0.361	0.532	0.652
270900	PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	China	0.0%	0.000	27.618	0.000
271011	LIGHT PETROLEUM OIL PREPARATIONS (INCLUDING GASOLINE)	Ecuador	n.a.	0.000	3.435	0.000
271019	LIGHT PETROLEUM DISTILLATES NES	Guatemala	n.a.	22.673	13.575	3.627
		Ecuador	n.a.	0.000	10.362	0.000
		Peru	n.a.	0.041	6.985	0.000
		Panama	n.a.	0.000	3.204	0.000
		El Salvador	n.a.	2.289	0.000	0.000
271311	PETROLEUM COKE, NOT CALCINED	Japan	0.0%	0.000	0.000	25.471
		China	3.0%	0.000	1.577	0.000

Table 28. Chapter 27 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
270112	BITUMINOUS COAL, WHETHER OR NOT PULVERISED BUT NOT AGGLOMERATED	309.940	243.254	24.488	28.081
270300	PEAT (INCLUDING PEAT LITTER), WHETHER OR NOT AGGLOMERATED	1.056	1.418	1.604	2.274
270900	PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	0.000	0.000	27.618	0.000
271011	AVIATION SPIRIT	0.000	0.044	3.574	0.642
271019	LIGHT PETROLEUM DISTILLATES NES	0.000	25.842	34.959	4.563
271311	PETROLEUM COKE, NOT CALCINED	0.011	0.000	1.577	25.471

Mineral fuel and oil accounted for 67.1% of total Alberta exports over the period 2002 to 2004, making it Alberta's single largest export category. Of the \$46.2 billion in mineral fuel and oil exports from Alberta in 2004, less than 0.2% was to non-FTA countries. Bituminous coal, a large export category as recently as 2002, has fallen sharply to only \$28 million in 2004 among non-FTA countries. Japan has reduced its Alberta bituminous coal imports from \$96 million in 2002 to \$28 million in 2004 despite a 0% tariff; the EU and South Korea have reduced their imports of Alberta bituminous coal to zero despite tariffs of 0% and 1%, respectively. Brazil, with a 15% tariff, also reduced its coal imports to zero in 2004. Petroleum coke, not calcined, ranked second in export value to non-FTA countries in 2004 due entirely to \$25.47 million in 0% tariff exports to Japan.

Table 29. Bound Tariff Summary: Chapter 28 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
280200	SULPHUR, SUBLIMED OR PRECIPITATED; COLLOIDAL SULPHUR	South Africa	10.0%	0.000	0.000	1.949
280300	CARBON (CARBON BLACKS AND OTHER FORMS OF CARBON, NES)	EU 25	0.0%	14.735	18.320	18.802
		EU 15	0.0%	14.608	18.242	18.639
		Taiwan	2.5%	2.984	2.690	2.903
		Japan	0 – 3.9%	2.215	2.274	2.897
		Korea, South	5.5%	1.327	1.039	1.870
		China	5.5%	1.143	1.380	1.745
		Thailand	n.a.	0.717	0.503	0.785
281410	ANHYDROUS AMMONIA	Korea, South	5.0%	0.000	0.000	2.790
281512	SODIUM HYDROXIDE (CAUSTIC SODA) IN AQUEOUS SOLUTION	Russia	n.a.	0.000	0.000	0.558
282540	NICKEL OXIDES AND HYDROXIDES	China	5.5%	1.203	0.846	0.000
		Hong Kong	0.0%	2.193	0.300	0.000
		Singapore	5.5%	0.587	0.099	0.000
282911	SODIUM CHLORATE	Japan	3.3%	6.227	6.383	9.795
		Brazil	35.0%	0.000	2.946	5.437
		Korea, South	5.5%	1.067	0.723	0.935
		Thailand	30.0%	2.134	1.095	0.279
		Australia	10.0%	2.240	2.828	0.000

Table 30. Chapter 28 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
280200	SULPHUR, SUBLIMED OR PRECIPITATED; COLLOIDAL SULPHUR	0.000	0.000	0.000	1.950
280300	CARBON (CARBON BLACKS AND OTHER FORMS OF CARBON, NES)	16.629	25.059	27.858	30.853
281410	ANHYDROUS AMMONIA	0.000	0.000	0.000	2.790
281512	SODIUM HYDROXIDE (CAUSTIC SODA) IN AQUEOUS SOLUTION	0.000	0.000	0.000	0.558
282540	NICKEL OXIDES AND HYDROXIDES	6.309	4.060	1.454	0.000
282911	SODIUM CHLORATE	7.243	12.167	14.180	16.703

Europe remains the primary destination for carbon exports, the major product of Chapter 28 sent from Alberta to non-FTA countries. Other major destinations are Taiwan, Japan, South Korea and China, all of which impose tariffs ranging from 0% to 5.5%. Brazil has become the second-largest non-FTA importer of sodium chlorate despite a 35% tariff, which is significantly higher than others in the product category, such as Japan's 3.3% tariff and South Korea's 5.5% tariff. Reducing this tariff may help Alberta's sodium chlorate exports to Brazil increase.

HS Chapter 29 – Organic Chemicals

Table 31. Bound Tariff Summary: Chapter 29 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
290531	ETHYLENE GLYCOL (ETHANEDIOL)	China	5.5%	230.049	185.451	797.176
		Korea, South	5.5%	37.392	27.910	127.971
		Hong Kong	n.a.	0.000	0.000	43.796
		Taiwan	1.0%	9.227	15.382	29.197
		Japan	5.5%	0.000	0.000	9.638
		Indonesia	40.0%	0.000	1.639	4.109
		Thailand	n.a.	5.897	15.125	3.983
290941	2,2'-OXYDIETHANOL (DIETHYLENE GLYCOL)	China	5.5%	2.163	4.795	13.749
293090	ORGANO-SULPHUR COMPOUNDS, NES	EU 15	0 – 6.5%	1.421	0.000	0.013
		EU 25	0 – 6.5%	1.421	0.000	0.013
293329	HETEROCYCLIC COMPDS CNTG AN UNFUSED IMIDAZOLE RING IN THE STRUCTURE, NES	EU 15	0 – 6.5%	0.302	0.560	0.026
		EU 25	0 – 6.5%	0.302	0.560	0.026
		Japan	3.0%	1.346	0.000	0.000
293339	HETEROCYCLIC COMPDS CNTG AN UNFUSED PYRIDINE RING IN THE STRUCTURE, NES	India	40.0%	0.000	0.000	2.583
293359	HETEROCYCLIC COMPDS CNTG A PYRIMIDINE OR PIPERAZINE RING, NES	Japan	0 – 3.1%	0.018	0.000	0.744
		EU 15	0 – 6.5%	1.111	0.269	0.031
		EU 25	0 – 6.5%	1.111	0.269	0.031
293399	OTHER HETEROCYCLIC COMPOUNDS WITH NITROGEN HETERO-ATOM(S) ONLY, NES	Japan	3.1 – 3.3%	0.706	3.121	7.918
		Kyrgyzstan	n.a.	0.000	0.000	0.836
		EU 15	0 – 6.5%	0.000	1.092	0.000
		EU 25	0 – 6.5%	0.000	1.092	0.000
293499	OTHER HETEROCYCLIC COMPOUNDS NES (INCLUDING MORPHOLINE, SULTONES, SULTAMS AND NUCLEIC ACIDS)	EU 15	0 – 6.5%	1.805	0.000	1.347
		EU 25	0 – 6.5%	1.805	0.000	1.347
293500	SULPHONAMIDES IN BULK	EU 15	6.5%	1.671	1.579	5.116
		EU 25	6.5%	1.671	1.579	5.116
293621	VITAMINS A AND THEIR DERIVATIVES, UNMIXED	EU 15	0.0%	4.326	0.000	0.000
		EU 25	0.0%	4.326	0.000	0.000
294200	ORGANIC COMPOUNDS NES	EU 15	6.5%	0.019	0.686	0.000
		EU 25	6.5%	0.019	0.686	0.000

Table 32. Chapter 29 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
290531	ETHYLENE GLYCOL (ETHANEDIOL)	324.929	282.565	245.510	1,015.882
290941	2,2'-OXYDIETHANOL (DIETHYLENE GLYCOL)	0.000	2.163	4.795	13.749
293090	ORGANO-SULPHUR COMPOUNDS, NES	0.368	1.421	0.000	0.013
293329	HETEROCYCLIC COMPDS CNTG AN UNFUSED IMIDAZOLE RING IN THE STRUCTURE, NES	1.277	1.733	0.869	0.504
293339	HETEROCYCLIC COMPDS CNTG AN UNFUSED PYRIDINE RING IN THE STRUCTURE, NES	0.023	0.103	0.000	2.583
293359	HETEROCYCLIC COMPDS CNTG A PYRIMIDINE OR PIPERAZINE RNG, NES	0.244	1.135	0.269	0.775
293399	OTHER HETEROCYCLIC COMPOUNDS WITH NITROGEN HETERO-ATOM(S) ONLY, NES	0.000	0.706	4.213	8.754
293499	OTHER HETEROCYCLIC COMPOUNDS NES (INCLUDING MORPHOLINE, SULTONES, SULTAMS AND NUCLEIC ACIDS)	0.000	1.805	0.082	1.347
293500	SULPHONAMIDES IN BULK	0.000	1.671	1.579	5.116
293621	VITAMINS A AND THEIR DERIVATIVES, UNMIXED	0.000	4.326	0.000	0.000
294200	ORGANIC COMPOUNDS NES	0.000	0.019	0.802	0.000

Organic chemicals were Alberta's third-largest export category in 2004 with \$2.16 billion in exports, a 50% increase over 2002's exports of \$1.44 billion. The percentage of total organic chemical exports to non-FTA countries increased from 20.8% in 2002 to 48.6% in 2004. This increase is almost entirely attributable to increased exports of ethylene glycol to Asia. China, South Korea, Hong Kong, Taiwan and Japan have all significantly increased their imports of ethylene glycol. Tariffs to these major destinations range from a low of 1.0% in Taiwan to 5.5% in China, South Korea, and Japan. Combined, China and South Korea account for 83% of Alberta's total ethylene glycol exports of \$1.11 billion.

HS Chapter 30 – Pharmaceutical Products

Table 33. Bound Tariff Summary: Chapter 30 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
300450	VITAMINS AND THEIR DERIVATIVES, IN DOSAGE	EU 15	0.0%	1.301	0.032	9.363
		EU 25	0.0%	1.301	0.032	9.363
300490	MEDICAMENTS NES, IN DOSAGE	EU 15	0.0%	0.321	0.398	0.510
		EU 25	0.0%	0.321	0.398	0.510
300590	DRESSINGS & SIMILAR ARTICLES, IMPREG OR COATD OR PACKAGD FOR MD USE, NES	EU 15	0.0%	2.258	4.131	4.877
		EU 25	0.0%	2.258	4.131	4.877

Table 34. Chapter 30 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
300450	VITAMINS AND THEIR DERIVATIVES, IN DOSAGE	1.973	1.382	0.287	9.414
300490	MEDICAMENTS NES, IN DOSAGE	0.266	0.376	0.517	0.970
300590	DRESSINGS & SIMILAR ARTICLES, IMPREG OR COATD OR PACKAGD FOR MD USE, NES	0.417	2.258	4.131	5.010

The EU, with 0% tariffs on the selected pharmaceutical products, has significantly increased its imports of Alberta's Chapter 30 products. Vitamins, vitamin derivatives, and dressings make up the majority of the increase.

HS Chapter 31 – Fertilizers

Table 35. Bound Tariff Summary: Chapter 31 – Selected Markets, – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
310221	AMMONIUM SULPHATE, IN PACKAGES > 10 KG	New Zealand	0.0%	5.509	1.109	2.517
		Brazil	0.0%	1.138	0.000	0.000
310230	AMMONIUM NITRATE, WHETHER OR NOT IN AQUEOUS SOL IN PACKAGES > 10 KG	Australia	10.0%	0.000	0.000	1.538
310420	POTASSIUM CHLORIDE, IN PACKAGES > 10 KG	Korea, South	6.5%	0.000	0.000	5.241
		Thailand	n.a.	0.000	0.766	0.000

Table 36. Chapter 31 Export Values to Non-FTA Countries. 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
310221	AMMONIUM SULPHATE, IN PACKAGES > 10 KG	8.008	6.646	1.109	2.601
310230	AMMONIUM NITRATE, WHETHER OR NOT IN AQUEOUS SOL IN PACKAGES > 10 KG	0.000	0.000	0.000	1.538
310420	POTASSIUM CHLORIDE, IN PACKAGES > 10 KG	0.000	0.000	0.956	5.585

HS Chapter 33 – Essential oils, perfumes, cosmetics, toiletries

Table 37. Bound Tariff Summary: Chapter 33 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
330499	BEAUTY OR MAKE-UP PREPARATIONS NES; SUNSCREEN OR SUN TAN PREPARATIONS	EU 15	0.0%	0.000	0.119	2.193
		EU 25	0.0%	0.000	0.119	2.193
		Nigeria	n.a.	0.000	0.000	0.660

Table 38. Chapter 33 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
330499	BEAUTY OR MAKE-UP PREPARATIONS NES; SUNSCREEN OR SUN TAN PREPARATIONS	0.065	0.117	0.207	2.902

HS Chapter 34 – Soaps, Lubricants, Waxes, Etc.

Table 39. Bound Tariff Summary: Chapter 34 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
340212	CATIONIC SURFACE-ACTIVE AGENTS	Russia	n.a.	0.000	0.000	0.529
340290	SURFACE-ACTIVE PREPARATIONS, WASHING AND CLEANING PREPARATIONS, NES	Cuba	n.a.	1.173	0.424	0.030

Table 40. Chapter 34 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
340212	CATIONIC SURFACE-ACTIVE AGENTS	0.000	0.000	0.000	0.529
340290	SURFACE-ACTIVE PREPARATIONS, WASHING AND CLEANING PREPARATIONS, NES	0.239	1.517	0.515	0.133

HS Chapter 36 – Explosives

Table 41. Bound Tariff Summary: Chapter 36 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
360200	PREPARED EXPLOSIVES, O/T PROPELLENT POWDERS	EU 15	6.5%	0.014	0.202	0.653
		EU 25	6.5%	0.014	0.202	0.653

Table 42. Chapter 36 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
360200	PREPARED EXPLOSIVES, O/T PROPELLENT POWDERS	0.135	0.014	0.202	1.250

HS Chapter 38 – Misc. Chemical Products

Table 43. Bound Tariff Summary: Chapter 38 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
381190	PREPARED ADDITIVES FOR MINERAL OILS OR FOR OTHER SIMILAR LIQUIDS, NES	Cuba	n.a.	0.340	1.524	0.931
381519	SUPPORTED CATALYSTS, NES	Venezuela	n.a.	0.000	0.000	4.066
		EU 15	6.5%	1.986	1.263	0.000
		EU 25	6.5%	1.986	1.263	0.000
		Kazakhstan	n.a.	1.755	0.000	0.000
382440	PREPARED ADDITIVES FOR CERAMICS, MORTARS, CONCRETES	Cuba	n.a.	0.546	0.129	1.397
382490	CHEMICAL/ALLIED INDUSTRY PREPARATIONS/PRODS NES	Russia	n.a.	0.171	1.024	2.259
		Australia	n.a.	0.572	0.256	0.081
		Cuba	n.a.	1.365	0.231	0.026

Table 44. Chapter 38 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
381190	PREPARED ADDITIVES FOR MINERAL OILS OR FOR OTHER SIMILAR LIQUIDS, NES	0.090	0.341	1.595	1.238
381519	SUPPORTED CATALYSTS, NES	2.395	4.211	1.705	4.165
382440	PREPARED ADDITIVES FOR CERAMICS, MORTARS, CONCRETES	1.184	0.546	0.129	1.403
382490	CHEMICAL/ALLIED INDUSTRY PREPARATIONS/PRODS NES	3.921	2.874	1.878	3.364

HS Chapter 39 – Plastics

Table 45. Bound Tariff Summary: Chapter 39 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
390110	POLYETHYLENE HAVING A SPECIFIC GRAVITY OF LESS THAN 0.94	Malaysia	30.0%	2.001	2.813	3.837
		EU 15	6.5%	1.375	1.509	3.584
		EU 25	6.5%	1.375	1.509	3.584
		Australia	10.0%	0.098	0.112	3.155
		New Zealand	10.0%	0.042	0.044	2.209
		Trin. & Tobago	50.0%	1.631	1.680	1.974
		Iceland	n.a.	1.610	1.808	1.882
		Nigeria	n.a.	0.000	0.127	0.929
		Colombia	35.0%	0.163	1.011	0.305
		China	6.5%	0.634	0.126	0.177
		Uzbekistan	n.a.	1.482	0.000	0.000
390120	POLYETHYLENE HAVING A SPECIFIC GRAVITY OF 0.94 OR MORE	China	6.5%	18.729	12.247	9.330
		EU 15	6.5%	0.000	0.629	1.941
		EU 25	6.5%	0.000	0.629	1.941
		Indonesia	40.0%	0.000	0.170	1.201
		Vietnam	n.a.	0.000	0.275	0.573
		Hong Kong	0.0%	2.047	0.000	0.183
		Australia	10.0%	0.759	0.000	0.146
		Thailand	30% OR 6B/kg	0.842	0.000	0.000
		Japan	6.5%	0.581	0.000	0.000

HS Code	Description	Market	Tariff	2002	2003	2004
390190	POLYMERS OF ETHYLENE NES, IN PRIMARY FORMS	China	6.5%	57.492	55.228	90.823
		Australia	10.0%	0.633	11.142	24.175
		EU 15	6.5%	33.610	26.085	15.667
		EU 25	6.5%	33.610	26.085	15.667
		Malaysia	30.0%	4.385	3.788	7.357
		Indonesia	40.0%	5.113	3.984	4.998
		Taiwan	2.5%	5.200	4.246	4.823
		New Zealand	10.0%	0.168	4.740	4.480
		Brazil	20.0%	2.336	1.195	3.028
		Thailand	30.0%	1.975	1.148	2.311
		Japan	2.8%	2.473	6.067	2.172
		Colombia	5 – 35%	0.410	2.068	2.117
		Philippines	20.0%	0.871	0.382	1.866
		India	40.0%	0.140	0.550	1.555
		Hong Kong	0.0%	2.852	1.893	1.377
		Singapore	6.5%	0.469	0.355	0.700
		Macau	0.0%	0.000	0.069	0.561
		El Salvador	40.0%	0.000	0.002	0.509
		Guatemala	n.a.	0.791	2.183	0.507
		Korea, South	6.5%	0.087	0.520	0.103
		Peru	30.0%	0.000	1.436	0.082
390410	POLYVINYL CHLORIDE, NOT MIXED WITH ANY OTHER SUBSTANCES	China	6.5%	4.063	4.044	1.328
		Australia	10.0%	0.064	0.841	0.816
391390	NATURAL POLYMERS, MODIFIED NATURAL POLYMERS NES, IN PRIMARY FORMS	Cuba	n.a.	0.000	0.000	0.776
391590	PLASTICS WASTE AND SCRAP NES	Hong Kong	n.a.	0.924	0.396	0.485
391910	SELF-ADHESIVE PLATES, SHEETS, FILM, ETC, OF PLASTIC IN ROLLS <20 CM WIDE	Iran	n.a.	0.548	0.000	0.440
392010	FILM AND SHEET ETC, NON-CELLULAR ETC, OF POLYMERS OF ETHYLENE	New Zealand	20.0%	1.522	1.771	1.353
		Australia	10.0%	0.841	1.003	0.545
392310	BOXES, CASES, CRATES & SIMILAR ARTICLES OF PLASTIC	EU 15	6.5%	0.017	0.096	0.898
		EU 25	6.5%	0.017	0.096	0.898
392321	SACKS AND BAGS (INCLUDING CONES) OF POLYMERS OF ETHYLENE	EU 15	6.5%	0.026	0.158	0.535
		EU 25	6.5%	0.026	0.158	0.535
392690	ARTICLES OF PLASTICS OR OF OTHER MATERIALS OF NOS 39.01 TO 39.14 NES	EU 25	0 – 6.5%	0.514	0.460	0.520
		EU 15	0 – 6.5%	0.437	0.322	0.458

Table 46. Chapter 39 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
390110	POLYETHYLENE HAVING A SPECIFIC GRAVITY OF LESS THAN 0.94	76.050	10.108	10.289	18.957
390120	POLYETHYLENE HAVING A SPECIFIC GRAVITY OF 0.94 OR MORE	23.325	24.008	13.383	13.637
390190	POLYMERS OF ETHYLENE NES, IN PRIMARY FORMS	55.824	120.143	127.960	171.425
390410	POLYVINYL CHLORIDE, NOT MIXED WITH ANY OTHER SUBSTANCES	0.531	4.723	4.934	2.580
391390	NATURAL POLYMERS, MODIFIED NATURAL POLYMERS NES, IN PRIMARY FORMS	0.000	0.000	0.000	0.818
391590	PLASTICS WASTE AND SCRAP NES	0.458	1.529	0.915	0.786
391910	SELF-ADHESIVE PLATES, SHEETS, FILM, ETC, OF PLASTIC IN ROLLS <20 CM WIDE	0.136	0.590	0.167	0.660
392010	FILM AND SHEET ETC, NON-CELLULAR ETC, OF POLYMERS OF ETHYLENE	3.839	2.443	2.807	1.931
392310	BOXES, CASES, CRATES & SIMILAR ARTICLES OF PLASTIC	0.083	0.065	0.124	1.020
392321	SACKS AND BAGS (INCLUDING CONES) OF POLYMERS OF ETHYLENE	0.021	0.036	0.175	0.602
392690	ARTICLES OF PLASTICS OR OF OTHER MATERIALS OF NOS 39.01 TO 39.14 NES	0.598	0.782	1.905	2.626

Chapter 39 exports, once dominated by low-density polyethylene, have been led in most recent years by polymers of ethylene. The growth of this category has been led by high export volume to China, although another thirteen countries imported more than \$1 million worth of polymers from Alberta in 2004. Even though China and the EU both imposed 6.5% tariffs in this category, China's volume from 2002 to 2004 increased from \$57.5 million to \$90.8 million while the EU's fell from \$33.6 million to \$15.7 million. Numerous countries import various products of polyethylene and polymers of ethylene, with wide-ranging tariff restrictions. Trinidad & Tobago's 50% tariff, Indonesia's 40% tariff, Malaysia's 30% tariff, and Australia's 10% tariff can all be targeted for tariff reduction to benefit Alberta's exports.

HS Chapter 40 – Rubber and Articles Thereof

Table 47. Bound Tariff Summary: Chapter 40 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
400942	TUBES, PIPES AND HOSES OF VULCANIZED RUBBER – REINFORCED WITH MATERIALS NES – WITH FITTINGS	Cuba	n.a.	0.031	0.070	0.536
401693	GASKETS, WASHERS AND OTHER SEALS OF VULCANISED RUBBER	EU 25	0 – 2.5%	0.068	0.289	0.671
		EU 15	0 – 2.5%	0.068	0.254	0.661
		U.A.Emirates	n.a.	0.028	0.207	0.646
401699	ARTICLES OF VULCANISED RUBBER NES, OTHER THAN HARD RUBBER	Australia	15.0%	0.000	0.815	1.151

Table 48. Chapter 40 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
400942	TUBES, PIPES AND HOSES OF VULCANIZED RUBBER – REINFORCED WITH MATERIALS NES – WITH FITTINGS	0.000	0.153	0.193	0.777
401693	GASKETS, WASHERS AND OTHER SEALS OF VULCANISED RUBBER	0.374	0.684	1.375	3.526
401699	ARTICLES OF VULCANISED RUBBER NES, OTHER THAN HARD RUBBER	0.082	0.108	1.252	1.483

HS Chapter 41 – Hides and Skins

Table 49. Bound Tariff Summary: Chapter 41 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
410120	WHOLE HIDES AND SKINS – BOVINE/EQUINE ANIMALS – UNTANNED, PRESERVED, WEIGHT 16KG OR LESS	China	5 – 8.4%	5.336	0.000	0.222
		Thailand	n.a.	2.328	0.000	0.000
		Taiwan	n.a.	1.292	0.446	0.000
410150	WHOLE HIDES AND SKINS – BOVINE/EQUINE ANIMALS – UNTANNED, PRESERVED, WEIGHT MORE THAN 16KG	Taiwan	n.a.	31.177	44.338	24.613
		China	5 – 8.4%	15.547	15.129	10.235
		Hong Kong	0.0%	10.686	7.468	7.742
		Japan	0 – 30%	2.133	2.503	1.639
		Korea, South	5 – 10%	8.018	0.735	0.195
		EU 15	0.0%	1.129	0.288	0.018
		EU 25	0.0%	1.129	0.288	0.018
		Thailand	n.a.	4.337	5.397	0.000
410190	OTHER HIDES/SKINS NES BOVINE/EQUINE ANIMALS – UNTANNED, PRESERVED (INCL BUTTS, BENDS, BELLIES)	Hong Kong	0.0%	1.043	6.790	23.045
		Taiwan	n.a.	7.257	17.718	18.826
		China	5 – 8.4%	5.892	5.360	10.822
		Japan	0 – 30%	0.185	2.891	2.345
		Korea, South	5 – 10%	7.903	4.039	1.075
		Thailand	n.a.	5.329	3.264	0.337
410210	SHEEP OR LAMB SKINS, RAW, WITH WOOL ON, NES	Thailand	15.0%	0.549	0.000	0.000
410330	RAW HIDES AND SKINS OF SWINE	China	9.0%	0.000	0.421	3.556
		Taiwan	n.a.	0.489	1.068	0.330
410390	RAW HIDES AND SKINS OF ANIMALS, NES	Taiwan	0.0%	1.566	0.691	0.000

Table 50. Chapter 41 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
410120	WHOLE HIDES AND SKINS – BOVINE/EQUINE ANIMALS – UNTANNED, PRESERVED, WEIGHT 16KG OR LESS	0.000	9.396	0.488	0.259
410150	WHOLE HIDES AND SKINS – BOVINE/EQUINE ANIMALS – UNTANNED, PRESERVED, WEIGHT MORE THAN 16KG	0.000	73.027	75.953	44.554
410190	OTHER HIDES/SKINS NES BOVINE/EQUINE ANIMALS – UNTANNED, PRESERVED (INCL BUTTS, BENDS, BELLIES)	0.000	27.609	40.062	56.958
410210	SHEEP OR LAMB SKINS, RAW, WITH WOOL ON, NES	0.000	0.926	0.092	0.049
410330	RAW HIDES AND SKINS OF SWINE	0.000	0.872	1.489	3.886
410390	RAW HIDES AND SKINS OF ANIMALS, NES	2.378	1.778	1.185	0.262

Eighty percent of Alberta's exports of hides and skins are to non-FTA countries. Hides and skins have experienced fluctuating levels of trade in recent years, but the export destinations have been consistently the Asian countries of China, Taiwan, and Hong Kong. Low tariffs may be beneficial for Alberta to attain a level of consistent exports to these countries.

HS Chapter 44 – Wood

Table 51. Bound Tariff Summary: Chapter 44 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
440710	LUMBER, CONIFEROUS (SOFTWOOD) 6 MM AND THICKER	Japan	0 – 6%	47.399	65.596	74.248
		Korea, South	10.0%	1.186	1.585	1.807
		China	1.0%	0.344	0.755	1.606
		EU 15	0.0%	0.788	0.567	0.596
		EU 25	0.0%	0.788	0.567	0.596
		Hong Kong	0.0%	0.019	0.630	0.044
441021	PARTICLE BOARD – ORIENTED STRANDBOARD / WAFERBOARD – UNWORKED, SANDED	Japan	5 – 6%	8.681	7.086	3.031
		Korea, South	n.a.	0.511	0.327	0.488
441029	PARTICLE BOARD – ORIENTED STRANDBOARD / WAFERBOARD – OTHER NES	Japan	5 – 6%	1.282	0.098	0.078
441121	FIBREBOARD >0.5 G/CM2 <0.8 G/CM2 NOT WORKED OR SURFACE COVERED	Japan	2.6%	0.507	0.073	0.097
441890	BUILDER'S JOINERY AND CARPENTRY OF WOOD NES	China	4.0%	0.000	0.447	1.147

Table 52. Chapter 44 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
440710	LUMBER, CONIFEROUS (SOFTWOOD) 6 MM AND THICKER	58.282	50.155	69.846	78.775
441021	PARTICLE BOARD – ORIENTED STRANDBOARD / WAFERBOARD – UNWORKED, SANDED	0.000	9.265	7.856	3.560
441029	PARTICLE BOARD – ORIENTED STRANDBOARD / WAFERBOARD – OTHER NES	0.000	1.282	0.098	0.087
441121	FIBREBOARD >0.5 G/CM2 <0.8 G/CM2 NOT WORKED OR SURFACE COVERED	0.721	0.621	0.430	0.097
441890	BUILDER'S JOINERY AND CARPENTRY OF WOOD NES	0.938	0.725	0.851	1.549

Wood was Alberta's seventh-largest export category over the period 2002-2004, but was ranked sixth in 2004 due to a 42.4% increase in total wood exports from 2003 to 2004.

Only 4.4% of Alberta's total wood exports went to non-FTA countries. Softwood lumber is the main driver of Chapter 44 export values. Japan is the main export destination with a tariff of 0 – 6%. Other top importers had tariff rates ranging from 0% to 10% among all 6-digit codes.

HS Chapter 47 – Wood Pulp, Etc.

Table 53. Bound Tariff Summary: Chapter 47 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
470321	CHEMICAL WOOD PULP, CONIFEROUS	Japan	0.0%	57.146	49.605	50.066
		Taiwan	0.0%	14.322	15.316	14.570
		Korea, South	0.0%	14.109	12.876	13.367
		Australia	0.0%	4.737	4.650	11.847
		China	0.0%	3.180	6.203	9.418
		EU 15	0.0%	20.615	34.853	6.243
		EU 25	0.0%	20.615	34.853	6.243
		Malaysia	5.0%	2.100	3.028	4.228
		Thailand	n.a.	2.622	3.230	3.611
		Philippines	10.0%	2.161	1.585	1.802
		Indonesia	40.0%	0.878	0.120	0.762
		Bangladesh	n.a.	0.000	0.000	0.675
		Hong Kong	0.0%	0.000	1.308	0.000
		India	25.0%	0.732	0.000	0.000
470329	CHEMICAL WOOD PULP, NON-CONIFEROUS	Korea, South	0.0%	174.642	150.724	129.039
		Japan	0.0%	116.238	101.375	100.152
		China	0.0%	14.641	42.487	69.747
		EU 15	0.0%	66.098	60.281	52.809
		EU 25	0.0%	66.098	60.281	52.809
		Taiwan	0.0%	3.555	3.236	3.943
		Indonesia	40.0%	0.090	1.065	0.537
		Hong Kong	0.0%	2.859	1.907	0.000
		Nepal	20.0%	0.896	0.000	0.000
470500	SEMI-CHEMICAL WOOD PULP	China	0.0%	82.408	98.254	98.258
		EU 15	0.0%	79.975	67.110	52.321
		EU 25	0.0%	80.074	67.110	52.321
		Indonesia	40.0%	22.065	20.716	26.141
		Korea, South	0.0%	12.855	16.039	22.298
		Japan	0.0%	19.627	14.798	20.614
		Taiwan	0.0%	9.217	11.095	9.552
		Korea, North	n.a.	12.096	4.706	1.844
		Australia	0.0%	0.146	0.517	0.294
		India	25.0%	0.793	0.000	0.000

Table 54. Chapter 47 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
470321	CHEMICAL WOOD PULP CONIFEROUS	144.390	122.603	133.249	116.588
470329	CHEMICAL WOOD PULP, NON-CONIFEROUS	388.925	379.271	361.076	356.504
470500	SEMI-CHEMICAL WOOD PULP	210.048	239.869	233.519	231.466

Wood pulp was the eighth-largest export category over the period 2002-2004 with 56.6% of Alberta's \$1.2 billion of exports shipped to non-FTA countries. Major importers including Japan, Taiwan, South Korea, the EU, Australia, and China all imposed 0% tariffs on wood pulp products. Other major importers, such as Indonesia, the Philippines, and Malaysia, had tariff rates of 40%, 10%, and 5%, respectively. These tariffs could be lowered to help increase Alberta's exports to these countries.

HS Chapter 49 – Printed Materials

Table 55. Bound Tariff Summary: Chapter 49 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
490110	BROCHURES, LEAFLETS AND SIMILAR PRINTED MATTER, IN SINGLE SHEETS	China	0.0%	0.000	0.000	1.208
		Taiwan	0.0%	0.002	0.902	0.514
490199	BOOKS, BROCHURES, LEAFLETS AND SIMILAR PRINTED MATTER, NES	EU 25	0.0%	0.774	0.557	0.367
		EU 15	0.0%	0.773	0.556	0.367
		Russia	n.a.	0.015	1.222	0.005
490700	UNUSED POSTAGE, REVENUE STAMPS; CHEQUE FORMS, BANKNOTES, ETC	EU 25	0.0%	1.668	2.298	1.879
		EU 15	0.0%	1.668	2.298	1.879

Table 56. Chapter 49 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
490110	BROCHURES, LEAFLETS AND SIMILAR PRINTED MATTER, IN SINGLE SHEETS	0.440	0.020	1.364	1.765
490199	BOOKS, BROCHURES, LEAFLETS AND SIMILAR PRINTED MATTER, NES	1.609	1.872	4.102	1.149
490700	UNUSED POSTAGE, REVENUE STAMPS; CHEQUE FORMS, BANKNOTES, ETC	0.111	2.180	3.461	2.467

HS Chapter 55 – Manmade Staple Fibres

Table 57. Bound Tariff Summary: Chapter 55 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
550200	ARTIFICIAL FILAMENT TOW	China	3 – 5%	97.542	72.131	23.741
		Philippines	12.5%	3.173	5.654	4.392
		Hong Kong	0.0%	13.140	9.030	4.120
		Indonesia	40.0%	5.327	5.056	3.405
		Malaysia	5.0%	6.112	4.093	1.681
		Korea, South	7.5%	5.565	6.213	1.035
		Pakistan	40.0%	1.671	1.380	0.649
		EU 15	4.0%	0.528	1.241	0.605
		EU 25	4.0%	0.528	1.241	0.605
		Australia	0.0%	1.885	3.286	0.555
		Thailand	30.0%	1.878	0.967	0.525
		India	40.0%	3.276	3.704	0.206
		Singapore	10.0%	0.000	1.047	0.201
		Bangladesh	2.5%	0.112	2.788	0.000
		Vietnam	n.a.	0.898	0.040	0.000

Table 58. Chapter 55 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
550200	ARTIFICIAL FILAMENT TOW	144.219	141.107	116.630	41.115

Chapter 55 exports consisted almost entirely of artificial filament tow. Of Alberta's \$42.1 million of total exports in this chapter, over 97% were to non-FTA countries. Shipments of artificial filament tow to non-FTA countries have fallen substantially from 2002 to 2004 (\$141.1 million to \$41.1 million). Export values fell during this period to most major export destinations.

HS Chapter 63 – Misc. Textile Articles

Table 59. Bound Tariff Summary: Chapter 63 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
630539	SACKS & BAGS, FOR PACKING OF GOODS, OF OTHER MAN-MADE TEXTILE MATERIALS	Peru	30.0%	1.639	0.000	0.000
630900	WORN CLOTHING AND OTHER WORN ARTICLES	Tanzania	n.a.	0.325	0.547	0.559
		India	n.a.	0.073	0.430	0.512
		Angola	60.0%	0.013	0.975	0.190

Table 60. Chapter 63 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
630539	SACKS & BAGS, FOR PACKING OF GOODS, OF OTHER MAN-MADE TEXTILE MATERIALS	0.000	1.676	0.000	0.000
630900	WORN CLOTHING AND OTHER WORN ARTICLES	0.970	0.773	3.224	2.301

HS Chapter 68 – Stone, Plaster, Cement, Etc.

Table 61. Bound Tariff Summary: Chapter 68 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
680690	MINERAL MATERIALS (EXCL. ASBESTOS & CERAMIC) FOR HEAT/SOUND INSULATING, NES	Brazil	35.0%	0.623	0.100	0.000

Table 62. Chapter 68 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
680690	MINERAL MATERIALS (EXCL. ASBESTOS & CERAMIC) FOR HEAT/SOUND INSULATING, NES	0.023	0.625	0.101	0.024

HS Chapter 69 – Ceramic Products & HS Chapter 70 – Glass and Glassware

Table 63. Bound Tariff Summary: Chapter 69 & 70 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
691490	ARTICLES OF CERAMICS NES	Algeria	n.a.	0.042	0.529	0.001
701990	GLASS FIBRES (INCLUDING GLASS WOOL) AND ARTICLES THEREOF NES	EU 25	3.0%	0.192	0.523	0.345
		EU 15	3.0%	0.192	0.508	0.345

Table 64. Chapter 69 & 70 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
691490	ARTICLES OF CERAMICS NES	0.010	0.183	0.708	0.036
701990	GLASS FIBRES (INCLUDING GLASS WOOL) AND ARTICLES THEREOF NES	0.160	0.269	0.561	0.829

HS Chapter 71 – Precious Stones and Metals

Table 65. Bound Tariff Summary: Chapter 71 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
710310	PREC/SEMI-PREC STONES (O/T DIAMONDS) UNWORKD/SIMPLY SAWN/ROUGH SHAPD	Hong Kong	n.a.	0.114	0.737	0.000
711319	ARTICLES OF JEWELLRY, OF PRECIOUS METAL (EXCL. SILVER), PLATED OR NOT	EU 15	2.5%	1.293	1.639	0.789
		EU 25	2.5%	1.293	1.639	0.789
		Cayman Islands	n.a.	0.000	0.090	0.761
		Netherlands -Antls.	2.5%	0.000	0.272	0.594

Table 66. Chapter 71 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
710310	PREC/SEMI-PREC STONES (O/T DIAMONDS) UNWORKD/SIMPLY SAWN/ROUGH SHAPD	0.043	0.114	0.774	0.000
711319	ARTICLES OF JEWELLRY, OF PRECIOUS METAL (EXCL. SILVER), PLATED OR NOT	0.320	1.402	2.352	3.073

HS Chapter 72 – Iron and Steel

Table 67. Bound Tariff Summary: Chapter 72 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
720410	WASTE AND SCRAP, CAST IRON	China	2.0%	0.126	0.961	0.010
720449	FERROUS WASTE AND SCRAP, IRON OR STEEL, NES	China	0.0%	0.779	2.724	5.334
		Hong Kong	0.0%	0.000	0.000	0.504

Table 68. Chapter 72 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
720410	WASTE AND SCRAP, CAST IRON	0.000	0.160	1.059	0.010
720449	FERROUS WASTE AND SCRAP, IRON OR STEEL, NES	6.733	0.779	2.774	6.067

Ferrous waste shipments to China have been increasing over the past three years and make up the majority of non-FTA Chapter 72 exports. China's tariff rate for ferrous waste is 0%.

HS Chapter 73 – Iron/Steel Products

Table 69. Bound Tariff Summary: Chapter 73 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
730421	DRILL PIPE (IRON OR STEEL (I/S))	Cuba	n.a.	0.000	0.000	0.503
		U.A.Emirates	n.a.	1.658	0.135	0.002
		Libya	n.a.	1.051	0.000	0.000
730429	CASINGS, TUBING, DRILL PIPE, FOR OIL DRILLING USE	Oman	15.0%	0.000	0.000	0.805
730439	TUBES, PIPE, ETC (EXCL. FOR OIL/GAS) OF IRON / NON-ALLOY STEEL, CIRC. X-SECTION, NES	Cuba	n.a.	0.670	0.009	0.009
730719	FITTINGS, PIPE OR TUBE, CAST, OF IRON OR STEEL, NES	Iran	n.a.	0.078	0.000	0.637
		EU 25	3.7%	0.466	1.156	0.004
		EU 15	3.7%	0.466	1.156	0.004
730799	FITTINGS, PIPE OR TUBE, IRON OR STEEL, NES	Cuba	n.a.	0.101	0.261	1.089
730890	STRUCTURES & PARTS OF STRUCTURES, I/S (EXCL PREFAB BLDGS OF HEADG NO.9406)	New Zealand	27.0%	0.555	0.898	1.051
		Algeria	n.a.	0.032	0.762	0.456
		China	4.0%	0.060	1.052	0.005
		Sudan	n.a.	0.000	0.594	0.000
730900	RESERVOIRS, TANKS, VATS, ETC, >300L, I/S (EXCL. LIQUID/COMPR GAS TYPE)	Libya	n.a.	0.000	0.000	1.845
		Algeria	n.a.	0.000	0.169	0.729
		Russia	n.a.	0.000	0.500	0.003
731010	TANKS, CASKS, DRUMS, CANS, BOXES, ETC, I/S, CAPACITY >=50L BUT <300L	Ecuador	25.0%	0.000	1.990	0.434
731029	CANS, IRON OR STEEL, CAPACITY <50 LITRES NES	Pakistan	n.a.	0.000	0.000	0.870
731100	CONTAINERS FOR COMPRESSED OR LIQUEFIED GAS OF IRON OR STEEL	EU 15	2.7%	0.017	0.000	0.762
		EU 25	2.7%	0.017	0.000	0.762
731816	NUTS, IRON OR STEEL, NES	Sudan	n.a.	0.000	0.007	0.529
HS Code	Description	Market	Tariff	2002	2003	2004

732010	SPRINGS, LEAF AND LEAVES THEREFOR, IRON OR STEEL	China	6 – 10%	0.000	0.171	2.560
732591	BALLS, GRINDING AND SIMILAR ARTICLES OF IRON OR STEEL, CAST FOR MILLS	EU 15	2.7%	0.000	0.681	0.000
		EU 25	2.7%	0.000	0.681	0.000
732690	ARTICLES, IRON OR STEEL, NES	Dom. Republic	40.0%	0.000	0.000	5.756
		EU 25	2.7%	3.273	2.605	4.203
		EU 15	2.7%	2.841	2.593	4.098
		Thailand	n.a.	0.220	4.341	3.551
		Australia	15.0%	0.053	8.944	2.501
		Sudan	n.a.	0.135	0.350	1.488
		U.A.Emirates	n.a.	0.354	0.460	0.932
		Singapore	n.a.	1.042	0.376	0.754
		Venezuela	35 – 40%	0.088	0.133	0.727
		Russia	n.a.	0.164	0.274	0.611
		Cuba	n.a.	1.158	0.277	0.588
		India	n.a.	0.154	0.449	0.569
		Algeria	n.a.	1.083	0.215	0.230

Table 70. Chapter 73 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
730421	DRILL PIPE (IRON OR STEEL)	0.076	2.724	1.289	0.869
730429	CASINGS, TUBING, DRILL PIPE, FOR OIL DRILLING USE	0.741	0.328	0.052	1.425
730439	TUBES, PIPE, ETC (EXCL. FOR OIL/GAS) OF IRON / NON-ALLOY STEEL, CIRC. X-SECTION, NES	0.243	0.674	0.009	0.029
730719	FITTINGS, PIPE OR TUBE, CAST, OF IRON OR STEEL, NES	0.011	0.691	1.402	0.752
730799	FITTINGS, PIPE OR TUBE, IRON OR STEEL, NES	1.794	1.523	1.979	4.478
730890	STRUCTURES & PARTS OF STRUCTURES, I/S (EXCL PREFAB BLDGS OF HEADG NO.9406)	1.636	0.807	3.916	2.804
730900	RESERVOIRS, TANKS, VATS, ETC, >300L, I/S (EXCL. LIQUID/COMPR GAS TYPE)	0.721	0.548	1.136	3.058
731010	TANKS, CASKS, DRUMS, CANS, BOXES, ETC, I/S, CAPACITY >=50L BUT <300L	0.075	0.058	2.134	0.566
731029	CANS, IRON OR STEEL, CAPACITY <50 LITRES NES	0.132	0.070	0.052	0.975
731100	CONTAINERS FOR COMPRESSED OR LIQUEFIED GAS OF IRON OR STEEL	0.436	0.055	0.079	1.461
731816	NUTS, IRON OR STEEL, NES	0.084	0.113	0.376	0.958
732010	SPRINGS, LEAF AND LEAVES THEREFOR, IRON OR STEEL	0.000	0.022	0.390	2.787
732591	BALLS, GRINDING AND SIMILAR ARTICLES OF IRON OR STEEL, CAST FOR MILLS	0.469	0.000	0.681	0.035
732690	ARTICLES, IRON OR STEEL, NES	18.142	8.811	21.422	27.191

Top destinations for Alberta's iron and steel products are the EU, the Dominican Republic, Cuba, Thailand, and Australia. In 2004, the Dominican Republic imported \$5.76 million worth of iron and steel articles, the dominant Chapter 73 product category to non-FTA countries, despite a 40% tariff. Following the Dominican Republic was the EU 25 with imports of \$4.2 million and a tariff of 2.7%. Australia's tariff of 15% should be targeted for reduction as shipments to Australia fell from 2003 to 2004 from \$8.9 million to \$2.5 million. A reduction of the Dominican Republic's 40% tariff may also boost

Alberta's iron and steel exports. Alberta's iron and steel product exports are also sent in low levels to a number of energy-producing countries. Many of these countries have either not made tariff binding commitments under the WTO for these products, or are not yet members of the WTO. The accession and further codification of these tariffs would help to better identify Alberta's tariff reduction priorities.

HS Chapter 74 – Copper and Articles Thereof

Table 71. Bound Tariff Summary: Chapter 74 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
740400	WASTE AND SCRAP, COPPER OR COPPER ALLOY	China	1.5%	1.133	2.384	3.843

Table 72. Chapter 74 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
740400	WASTE AND SCRAP, COPPER OR COPPER ALLOY	0.230	1.170	2.664	3.924

HS Chapter 75 – Nickel and Articles Thereof

Table 73. Bound Tariff Summary: Chapter 75 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
750120	NICKEL OXIDE SINTERS & OTH INTERMEDIATE PRODUCTS OF NICKEL METALLURGY	China	3.0%	0.000	0.000	1.390
750210	NICKEL UNWROUGHT, NOT ALLOYED	EU 15	0.0%	200.199	286.247	381.956
		EU 25	0.0%	200.199	286.247	381.956
		Japan	44 ¥/kg	11.097	30.255	42.549
		Korea, South	5.0%	12.162	25.717	26.781
		China	3.0%	9.624	10.213	25.615
		Taiwan	0.0%	10.556	14.396	22.209
		Singapore	10.0%	11.063	0.258	12.539
		Switzerland	0.1% + Fr 0.17/100kg	0.387	8.346	2.733
		Gibraltar	n.a.	0.000	2.600	2.326
		Korea, North	n.a.	0.000	0.000	1.376
		Hong Kong	0.0%	0.000	5.453	0.000
		Thailand	12.0%	0.000	0.744	0.000
750400	POWDERS AND FLAKES, NICKEL	EU 25	0.0%	9.346	9.256	15.902
		EU 15	0.0%	9.346	9.256	15.894
		Korea, South	5.0%	3.873	3.991	11.584
		Japan	0 – 3% OR 41 ¥/kg	3.035	5.148	6.191
		Taiwan	0.0%	2.091	2.286	4.821

Table 74. Chapter 75 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
750120	NICKEL OXIDE SINTERS & OTH INTERMEDIATE PRODUCTS OF NICKEL METALLURGY	0.000	0.000	0.000	1.390
750210	NICKEL UNWROUGHT, NOT ALLOYED	219.488	256.109	384.458	518.084
750400	POWDERS AND FLAKES, NICKEL	13.674	19.016	21.075	39.193

Nickel and products thereof is a major export category to non-FTA countries. Of the \$578.5 million of Chapter 75 exports from Alberta, \$559 million (or 96.6%) was to non-FTA countries. The EU was the primary destination for both unwrought, not alloyed nickel and nickel powder and flakes. The EU assigns a 0% tariff on both products. Exports of both unwrought, not alloyed nickel and nickel powder and flakes are growing for most export destinations. Given the large and increasing export values in this category, lower tariffs could prove very beneficial to Alberta's nickel exports. South Korea, China, and Singapore have tariffs of 5%, 3%, and 10%, respectively, while Japan imposes a tariff of 44 ¥/kg. These could be the first tariffs to be considered for reduction.

HS Chapter 76 – Aluminum

Table 75. Bound Tariff Summary: Chapter 76 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
760200	WASTE AND SCRAP, ALUMINIUM	China	1.5%	2.992	3.960	4.291
761090	STRUCTURES & PARTS, ALUMINUM, EXCL PREFAB BLDGS	Kazakhstan	n.a.	0.000	0.747	0.053
		Bahrain	35.0%	0.105	1.061	0.052
		Qatar	n.a.	0.000	0.640	0.000
761699	ARTICLES OF ALUMINIUM, NES	EU 25	6.0%	0.236	0.125	0.658
		EU 15	6.0%	0.236	0.111	0.651

Table 76. Chapter 76 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
760200	WASTE AND SCRAP, ALUMINIUM	1.735	2.992	4.027	4.448
761090	STRUCTURES & PARTS ,ALUMINUM, EXCL PREFAB BLDGS	0.175	0.953	2.859	0.270
761699	ARTICLES OF ALUMINIUM, NES	0.258	0.531	0.517	1.182

The main export product in Chapter 76 from Alberta was aluminum waste and scrap, which was shipped almost entirely to FTA nations. Among the non-FTA export destinations, China is the sole country with substantive waste and scrap imports, applying a tariff of 1.5%.

HS Chapter 81 – Other Base Metals, Etc.

Table 77. Bound Tariff Summary: Chapter 81 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
810520	COBALT – UNWROUGHT, MATTES AND INTERMEDIATE METALLURGICAL PRODUCTS	Japan	0.0%	36.606	44.947	119.933
		EU 15	0.0%	21.545	29.687	68.573
		EU 25	0.0%	21.545	29.687	68.573
		Singapore	n.a.	12.644	20.511	26.724
		Taiwan	n.a.	4.249	5.679	13.258
		China	4.0%	0.205	1.714	3.016
		Thailand	n.a.	0.000	0.000	1.010
		Korea, South	5.0%	0.825	0.141	0.264
		Hong Kong	n.a.	2.171	0.000	0.000
810590	COBALT AND ARTICLES THEREOF, NES	Japan	0.0%	0.000	3.533	0.000
		EU 15	3.0%	0.000	0.622	0.000
		EU 25	3.0%	0.000	0.622	0.000
810890	TITANIUM AND ARTICLES THEREOF, NES	Cuba	n.a.	1.400	0.047	0.560

Table 78. Chapter 81 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
810520	COBALT – UNWROUGHT, MATTES AND INTERMEDIATE METALLURGICAL PRODUCTS	0.000	78.245	102.679	232.778
810590	COBALT AND ARTICLES THEREOF, NES	0.000	0.000	4.359	0.000
810890	TITANIUM AND ARTICLES THEREOF, NES	1.274	1.426	0.047	0.564

Chapter 81 exports are made up primarily of unwrought cobalt, which is shipped almost entirely to non-FTA countries. Japan, the EU, Singapore, Taiwan, and China are the top importers of Alberta's cobalt, and the value of these exports has been increasing steadily each year for each destination. Adoption of 0% tariffs by China and South Korea, equal to those of Japan and the EU, may help to ensure continued high trade volume.

HS Chapter 82 & 83 – Tools, Cutlery, Misc. Base Metals

Table 79. Bound Tariff Summary: Chapter 82 & 83 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
820719	ROCK DRILLING/EARTH BORING TOOLS, NES, PARTS	Cuba	n.a.	1.407	0.514	1.274
		India	n.a.	0.045	0.022	1.140
		EU 25	2.7%	0.589	0.664	1.117
		EU 15	2.7%	0.589	0.656	0.939
		U.A.Emirates	n.a.	0.165	0.203	0.655
		Singapore	n.a.	0.200	0.602	0.547
		Indonesia	n.a.	0.544	0.000	0.101
820750	TOOLS FOR DRILLING, OTHER THAN FOR ROCK DRILLING	India	n.a.	0.580	0.000	0.000
830249	MOUNTINGS, FITTINGS AND SIMILAR ARTICLES OF BASE METAL, NES	Dom. Republic	40.0%	0.000	0.001	1.698

Table 80. Chapter 82 & 83 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
820719	ROCK DRILLING/EARTH BORING TOOLS, NES, PARTS	0.832	3.844	2.966	6.877
820750	TOOLS FOR DRILLING, OTHER THAN FOR ROCK DRILLING	0.094	0.605	0.044	0.352
830249	MOUNTINGS, FITTINGS AND SIMILAR ARTICLES OF BASE METAL, NES	0.001	0.025	0.026	1.760

HS Chapter 84 – Machinery and Mechanical Appliances

Table 81. Bound Tariff Summary: Chapter 84 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
840490	PARTS FOR AUXILIARY PLANT& CONDENSER FOR STEAM/ VAPOUR GENERATG UNIT NES	Iran	n.a.	0.000	4.494	0.000
840510	PRODUCER GAS OR WATER GAS GENERATORS; ACETYLENE & SIMILAR GAS GENERATORS	Pakistan	n.a.	0.877	0.000	0.000
840590	PARTS OF PRODUCER, WATER, ACETYLENE, OR SIMILAR GAS GENERATRS	Pakistan	n.a.	1.876	0.000	0.000
840710	AIRCRAFT ENGINES, SPARK-IGNITION RECIPROCATING OR ROTARY TYPE	EU 15	0 – 1.7%	0.010	0.023	5.000
		EU 25	0 – 1.7%	0.010	0.023	5.000
		Malaysia	5.0%	0.749	0.000	0.000
840991	PARTS FOR SPARK-IGNITION TYPE ENGINES NES	EU 25	2.7%	1.345	3.377	1.797
		EU 15	2.7%	1.333	3.345	1.787
840999	PARTS FOR DIESEL AND SEMI-DIESEL ENGINES	EU 15	2.7%	1.656	0.088	0.061
		EU 25	2.7%	1.656	0.088	0.061
841111	TURBO-JETS OF A THRUST NOT EXCEEDING 25 KN	EU 15	0 – 3.2%	0.000	0.000	1.048
		EU 25	0 – 3.2%	0.000	0.000	1.048
841112	TURBO-JETS OF A THRUST EXCEEDING 25 KN	EU 15	0 – 2.7%	0.622	2.804	0.000
		EU 25	0 – 2.7%	0.622	2.804	0.000
841121	TURBO-PROPELLERS OF A POWER NOT EXCEEDING 1100 KW	Switzerland	0.1% + Fr 60/100kg	9.217	8.435	34.636
		EU 15	0 – 3.6%	17.575	10.430	26.404
		EU 25	0 – 3.6%	20.112	10.430	26.404
		New Zealand	5.0%	2.796	2.885	3.108
		Singapore	10.0%	0.000	0.686	2.394
		Thailand	20.0%	0.000	0.000	1.789
		U.A.Emirates	n.a.	0.000	0.000	1.497
		Australia	0.0%	1.336	0.816	1.242

HS Code	Description	Market	Tariff	2002	2003	2004
	TURBO-PROPELLERS OF A POWER NOT EXCEEDING 1100 KW (continued)	Brazil	35.0%	1.765	0.780	0.821
		Egypt	5.0%	0.000	0.387	0.771
		Brunei-Daruss.	20.0%	0.000	0.000	0.688
		China	2.0%	3.211	0.694	0.679
		Saudi Arabia	n.a.	0.000	1.141	0.372
		Namibia	0.0%	0.000	0.512	0.000
		Korea, South	5 – 13%	3.016	0.000	0.000
		Qatar	n.a.	1.259	0.000	0.000
		Japan	0.0%	0.951	0.000	0.000
		Seychelles	n.a.	0.739	0.000	0.000
841122	TURBO-PROPELLERS OF A POWER EXCEEDING 1100 KW	EU 15	0 – 2.7%	1.037	0.000	0.453
		EU 25	0 – 2.7%	1.037	0.000	0.453
841181	GAS TURBINES NES OF A POWER NOT EXCEEDING 5000 KW	Japan	0.0%	1.579	0.000	3.700
		Brazil	10.0%	0.000	0.000	1.064
841182	GAS TURBINES NES OF A POWER EXCEEDING 5000 KW	EU 15	0 – 4.1%	0.000	1.818	6.740
		EU 25	0 – 4.1%	0.000	1.818	6.740
841191	PARTS OF TURBO-JETS OR TURBO-PROPELLERS	EU 25	0 – 2.7%	0.009	0.082	4.950
		EU 15	0 – 2.7%	0.000	0.082	2.498
		U.A.Emirates	n.a.	0.078	0.781	0.000
841199	PARTS OF GAS TURBINES NES	EU 15	0 – 4.1%	0.476	2.443	1.284
		EU 25	0 – 4.1%	0.476	2.443	1.284
		U.A.Emirates	n.a.	0.013	0.259	0.524
841221	HYDRAULIC POWER ENGINES & MOTORS LINEAR ACTING (CYLINDERS)	Venezuela	35 – 40%	0.034	0.342	0.710
841229	HYDRAULIC POWER ENGINES & MOTORS NES	Singapore	10.0%	3.727	0.414	1.585
		Thailand	30.0%	0.377	0.328	1.384
		U.A.Emirates	n.a.	0.003	1.202	1.176
		Russia	n.a.	0.000	0.623	1.004
		Indonesia	n.a.	0.284	0.053	0.687
		India	25.0%	0.244	0.051	0.681
		EU 15	0 – 4.2%	0.331	0.852	0.633
		EU 25	0 – 4.2%	0.565	0.930	0.633
		Cuba	n.a.	0.000	0.002	0.503
		Iran	n.a.	1.427	0.000	0.347
		Oman	0.0%	0.000	0.794	0.020
		Algeria	n.a.	0.000	3.132	0.000
		Qatar	n.a.	0.000	0.704	0.000
841231	PNEUMATIC POWER ENGINES & MOTORS LINEAR ACTING (CYLINDERS)	Korea, South	13.0%	0.000	0.000	0.620
841239	PNEUMATIC POWER ENGINES & MOTORS NES	EU 25	0 – 4.2%	0.138	0.574	0.942
		EU 15	0 – 4.2%	0.048	0.380	0.929
841280	ENGINES AND MOTORS NES	EU 25	0 – 4.2%	0.019	0.001	1.105
		EU 15	0 – 4.2%	0.019	0.000	1.030
841290	PARTS OF HYDRAULIC & PNEUMATIC & OTHER POWER ENGINES AND MOTORS NES	U.A.Emirates	15.0%	12.521	7.448	7.873
		EU 25	0 – 2.7%	7.995	4.418	3.184
		EU 15	0 – 2.7%	7.158	4.275	3.176
		Singapore	10.0%	1.542	2.484	2.124
		Venezuela	35 – 40%	1.022	0.449	1.784
		Brazil	35.0%	2.450	2.552	1.780
		India	25.0%	0.728	1.064	1.550
		Norway	4.0%	6.841	1.311	1.333
		Indonesia	0.0%	0.331	0.247	1.300
		Thailand	n.a.	1.430	1.074	1.251
		Algeria	n.a.	0.347	2.267	1.195
		Cuba	n.a.	0.829	0.068	1.149

HS Code	Description	Market	Tariff	2002	2003	2004
	PARTS OF HYDRAULIC & PNEUMATIC & OTHER POWER ENGINES AND MOTORS NES (continued)	Argentina	35.0%	0.234	0.612	0.870
		Oman	0.0%	1.256	1.496	0.826
		Australia	0 – 15%	2.013	1.172	0.743
		Egypt	20.0%	1.768	1.002	0.736
		Russia	n.a.	0.321	1.505	0.679
		Iran	n.a.	0.005	0.603	0.658
		Ecuador	20.0%	0.464	1.383	0.593
		Equatrl.Guinea	n.a.	0.676	0.731	0.438
		Nigeria	n.a.	2.333	1.113	0.429
		Saudi Arabia	n.a.	2.747	3.590	0.340
		Colombia	35.0%	0.562	0.515	0.268
		Libya	n.a.	0.027	0.981	0.123
		South Africa	15.0%	0.584	0.013	0.011
841319	PUMPS FITTED OR DESIGNED TO BE FITTED WITH A MEASURING DEVICE NES	Turkmenistan	n.a.	0.000	0.000	0.683
841340	CONCRETE PUMPS	Russia	n.a.	0.000	0.932	0.000
841350	RECIPROCATING POSITIVE DISPLACEMENT PUMPS NES	Saudi Arabia	n.a.	0.015	0.000	1.992
		Pakistan	n.a.	0.847	0.006	1.786
		Egypt	20.0%	0.000	0.000	1.178
		China	10.0%	0.980	0.627	0.748
		Cuba	5.0%	0.003	0.018	0.571
		Russia	n.a.	0.000	5.743	0.000
		Turkey	15.0%	0.000	0.913	0.000
841360	ROTARY POSITIVE DISPLACEMENT PUMPS NES	Russia	n.a.	0.452	0.508	1.545
		Cuba	n.a.	1.322	1.296	1.305
		Kazakhstan	n.a.	0.000	0.601	0.833
		Thailand	20.0%	0.000	0.000	0.511
841370	CENTRIFUGAL PUMPS NES	Singapore	10.0%	1.033	0.000	0.028
		China	8.0%	0.031	0.850	0.000
841381	PUMPS NES	Cuba	5.0%	0.088	0.010	0.712
		Venezuela	35 – 40%	1.362	0.243	0.590
		Russia	n.a.	3.710	1.680	0.518
		U.A.Emirates	n.a.	0.034	0.250	0.514
		EU 25	0 – 1.7%	0.652	0.120	0.194
		EU 15	0 – 1.7%	0.652	0.120	0.192
		Libya	n.a.	1.079	0.001	0.078
		Oman	0.0%	0.978	1.749	0.051
841391	PARTS OF PUMPS FOR LIQUID WHETHER OR NOT FITTED WITH A MEASURG DEVICE	Venezuela	35 – 40%	2.593	1.611	4.379
		EU 25	0 – 1.7%	1.047	0.604	1.715
		Kazakhstan	n.a.	0.068	1.363	1.635
		Iran	n.a.	3.373	3.253	1.503
		EU 15	0 – 1.7%	0.648	0.576	1.380
		Russia	n.a.	0.345	0.466	1.211
		Cuba	5.0%	1.011	0.363	1.099
		Chad	80.0%	0.000	1.530	0.924
		Colombia	35.0%	0.187	0.867	0.899
		Argentina	35.0%	0.292	0.557	0.577
		Oman	0.0%	0.650	0.836	0.337
		Azerbaijan	n.a.	0.000	0.768	0.021
841430	COMPRESSORS OF A KIND USED IN REFRIGERATING EQUIPMENT	Libya	n.a.	0.000	0.000	12.740
		Russia	n.a.	0.000	0.001	1.261
		Australia	19.0%	2.007	0.000	0.000
841459	FANS NES	Singapore	10.0%	0.001	0.363	0.603

HS Code	Description	Market	Tariff	2002	2003	2004
841480	AIR OR GAS COMPRESSORS, HOODS	Indonesia	0 – 40%	1.250	1.771	4.362
		Macedonia	n.a.	0.000	0.000	3.746
		Australia	10.0%	1.160	15.464	3.371
		China	7 – 8%	1.049	2.773	1.846
		Kazakhstan	n.a.	3.541	0.021	1.829
		Singapore	10.0%	2.547	4.121	1.625
		New Zealand	0 – 25%	0.000	0.000	1.456
		Algeria	n.a.	0.021	2.860	0.282
		EU 25	0 – 2.2%	1.317	0.786	0.104
		Russia	n.a.	0.000	1.837	0.072
		U.A.Emirates	15.0%	0.511	0.073	0.042
		Brazil	35.0%	0.000	5.342	0.022
		Pakistan	n.a.	1.795	2.844	0.007
		India	40.0%	1.256	3.146	0.000
		South Africa	20.0%	0.000	1.461	0.000
		Thailand	30.0%	0.000	0.980	0.000
		Egypt	10 – 60%	0.000	0.957	0.000
		EU 15	0 – 2.2%	0.005	0.786	0.000
		Croatia	n.a.	2.094	0.000	0.000
841490	PARTS OF VACUUM PUMPS, COMPRESSORS, FANS, BLOWERS, HOODS	Gabon	15.0%	0.000	0.000	2.806
		Australia	10 – 15%	0.049	1.753	0.789
		New Zealand	0 – 25%	0.000	0.000	0.740
		Pakistan	n.a.	0.259	0.175	0.661
		Singapore	10.0%	2.131	1.157	0.143
		Russia	n.a.	0.000	1.494	0.004
		Algeria	n.a.	0.000	2.180	0.001
		Korea, South	13.0%	0.008	1.317	0.001
841582	AIR COND MACH NES, INC A REFRIGERATING UNIT	Kazakhstan	n.a.	2.121	0.000	0.000
		Algeria	n.a.	0.000	1.914	0.000
841610	FURNACE BURNERS FOR LIQUID FUEL	Kazakhstan	n.a.	0.000	0.492	1.986
841690	PARTS OF FURNACE BURNERS, INCL MECHANICAL GRATES, ASH DISCHARGERS, ETC	Kazakhstan	n.a.	0.000	0.040	0.673
841780	INDUSTRIAL OR LAB FURNACES & OVENS, INC INCINERATORS NON-ELECTRIC NES	Turkmenistan	n.a.	0.000	0.000	1.345
		Azerbaijan	n.a.	0.000	0.630	0.015
841790	PARTS OF INDUSTRIAL /LAB FURNACES & OVENS INC INCINERATORS NON-ELECTRIC NES	Korea, South	13.0%	0.000	0.000	0.519
841850	REFRIGERATING OR FREEZING DISPLAY COUNTERS, CABINETS, SHOW-CASES, ETC	Libya	n.a.	0.000	0.000	6.564
841869	REFRIGERATING OR FREEZING EQUIPMENT NES	Kazakhstan	n.a.	0.000	0.000	1.177
		EU 15	0 – 2.2%	0.551	0.073	0.102
		EU 25	0 – 2.2%	0.551	0.073	0.102
		Egypt	20 – 60%	0.000	1.911	0.000
		China	15.0%	0.000	0.652	0.000
		Turkmenistan	n.a.	0.715	0.000	0.000
841899	PARTS OF REFRIGERATING OR FREEZING EQUIPMENT, NES	China	10.0%	0.947	0.563	0.093
841939	NON-DOMESTIC, NON-ELECTRIC DRYERS NES	EU 15	1.7%	0.064	0.000	3.553
		EU 25	1.7%	0.160	0.000	3.553
		Gabon	15.0%	0.000	0.000	1.019
		Ecuador	15.0%	0.000	0.000	0.806
		China	9.0%	2.368	0.372	0.693
		Algeria	n.a.	0.000	1.621	0.000
		Egypt	10.0%	0.000	1.426	0.000
		Turkmenistan	n.a.	0.680	0.000	0.000

HS Code	Description	Market	Tariff	2002	2003	2004
841940	DISTILLING OR RECTIFYING PLANT	China	10.0%	1.510	0.000	22.954
		Australia	10.0%	0.000	0.000	6.559
		Iran	n.a.	19.951	0.000	5.943
		Ecuador	15.0%	0.000	1.223	4.233
		Qatar	n.a.	0.000	0.000	2.449
		Kazakhstan	n.a.	4.297	0.115	2.286
		Ukraine	n.a.	0.762	0.000	0.804
		Pakistan	50.0%	2.979	0.115	0.030
841950	HEAT EXCHANGE UNITS, NON-DOMESTIC, NON-ELECTRIC	Turkmenistan	n.a.	0.747	0.000	5.138
		Brazil	35.0%	0.000	1.346	2.328
		Venezuela	35 – 40%	0.000	0.000	0.894
		Pakistan	50.0%	0.088	0.216	0.738
		China	10.0%	0.800	0.000	0.289
		Cuba	n.a.	0.602	0.009	0.212
		EU 25	0 – 1.7%	1.304	0.005	0.026
		EU 15	0 – 1.7%	1.000	0.005	0.026
		Ecuador	15 – 25%	0.000	0.917	0.000
		Malaysia	5 – 20%	0.082	0.716	0.000
		Brunei-Daruss.	20 – 40%	0.000	0.521	0.000
841960	MACHINERY FOR LIQUEFYING AIR OR GAS	Brazil	35.0%	0.000	17.206	11.158
		India	40.0%	0.000	0.000	3.151
		EU 25	1.7%	0.000	4.710	0.162
		EU 15	1.7%	0.000	4.579	0.162
		Azerbaijan	n.a.	0.000	21.907	0.000
		Algeria	n.a.	0.000	0.509	0.000
		Russia	n.a.	2.050	0.000	0.000
841981	MACHINERY FOR MAKG HOT DRINKS OR FOR COOKG OR HEATG FOOD, NON DOMESTIC	Pakistan	50.0%	0.000	0.000	0.964
841989	MACHINERY, PLANT, LAB EQUIP FOR TREATMENT OF MATERIALS BY CHANGE OF TEMP NES	Libya	n.a.	0.000	4.628	4.635
		Bangladesh	200.0%	0.000	0.000	1.344
		Algeria	n.a.	0.000	0.000	0.987
		Sudan	n.a.	0.000	0.000	0.844
		India	0 – 40%	0.000	0.000	0.801
		Pakistan	50.0%	0.753	0.000	0.750
		Congo	30.0%	0.000	0.000	0.708
		Russia	n.a.	0.717	2.235	0.666
		Kazakhstan	n.a.	0.995	0.000	0.593
		EU 25	0 – 2.4%	1.414	0.044	0.064
		EU 15	0 – 2.4%	0.400	0.019	0.056
		Romania	0 – 35%	0.000	2.991	0.010
		China	0.0%	0.866	4.271	0.000
841990	PARTS OF MACHINERY, PLANT AND EQUIPMENT OF HEADING NO 84.19	Ecuador	10 – 15%	0.000	1.404	3.139
		China	0 – 4%	0.046	0.230	3.109
		Russia	n.a.	2.009	7.823	1.347
		Norway	0.0%	0.000	0.000	0.818
		Congo	30.0%	0.000	0.400	0.612
		Brazil	35.0%	0.383	1.094	0.045
		Egypt	0 – 20%	0.000	0.660	0.032
		Romania	0 – 35%	0.000	1.476	0.001
		Iraq	n.a.	1.443	0.000	0.000
842119	CENTRIFUGES NES	Kazakhstan	n.a.	0.000	0.000	3.371
		Singapore	0 – 10%	0.508	0.000	0.000

HS Code	Description	Market	Tariff	2002	2003	2004
842121	FILTERING OR PURIFYING MACHINERY AND APPARATUS FOR WATER	India	25.0%	0.012	0.648	1.383
		China	5 – 25%	0.000	0.000	0.825
		Nigeria	50.0%	0.000	0.730	0.001
		Thailand	20.0%	1.178	0.000	0.000
842129	FILTERING OR PURIFYING MACHINERY AND APPARATUS FOR LIQUIDS NES	Russia	n.a.	0.000	0.005	10.731
		Pakistan	n.a.	0.000	0.000	3.516
		Turkmenistan	n.a.	0.000	0.000	0.524
		China	5.0%	0.005	0.996	0.000
		Norway	4.0%	0.000	0.516	0.000
		Iraq	n.a.	7.860	0.000	0.000
		Libya	n.a.	5.475	0.002	0.000
842139	FILTERING OR PURIFYING MACHINERY AND APPARATUS FOR GASES NES	Russia	n.a.	0.141	0.088	3.233
		Kazakhstan	n.a.	0.000	0.330	2.911
		Turkmenistan	n.a.	1.134	0.000	1.852
		Pakistan	n.a.	0.215	0.000	1.179
		Bangladesh	200.0%	0.000	0.000	1.162
		China	5 – 15%	0.001	0.000	0.727
		EU 25	0 – 1.7%	0.013	0.050	0.711
		India	40.0%	0.000	0.000	0.708
		EU 15	0 – 1.7%	0.011	0.044	0.623
		Singapore	10.0%	0.013	0.764	0.320
		Azerbaijan	n.a.	1.650	0.126	0.094
		Iran	n.a.	0.012	0.664	0.022
		Brazil	35.0%	0.000	2.987	0.001
		Peru	30.0%	0.000	0.711	0.000
842199	PARTS FOR FILTERG OR PURIFYG MCHY & APPARATUS FOR LIQUIDS OR GASES,NES	Russia	n.a.	0.000	0.002	2.378
		China	5 – 10%	0.027	0.000	1.252
		Korea, South	0 – 15%	0.037	0.222	1.020
		Saudi Arabia	n.a.	0.000	0.020	0.614
		Yemen	n.a.	0.000	0.000	0.533
842490	PTS OF MECH APPLIANCES (HAND-OP OR NOT) FOR DISPENSING OR SPRAYING LIQUIDS OR POWDERS	Russia	n.a.	0.000	2.656	1.467
		Australia	0 – 16%	0.000	0.003	1.242
		Iran	n.a.	0.000	2.133	0.003
842539	WINCHES OR CAPTANS NES	Norway	0.0%	1.067	0.000	0.000
842619	TRANSPORTER OR BRIDGE CRANES	U.A.Emirates	10.0%	0.000	0.000	2.161
		Nigeria	45.0%	0.000	0.000	1.213
		Singapore	0.0%	2.508	5.623	0.000
		Ecuador	25.0%	0.000	0.964	0.000
842641	DERRICKS, CRANES OR WORK TRUCKS FITTED W A CRANE, SELF-PROPELLD ON TIRES	Oman	5.0%	0.000	0.000	2.190
842649	DERRICKS, CRANES OR WORK TRUCKS FITTED WITH A CRANE, SELF-PROPELLED, NES	New Zealand	23.0%	0.000	0.000	1.050
842699	CRANES OR DERRICKS NES	Kuwait	100.0%	0.000	0.607	0.000
842839	CONTINUOUS-ACTION ELEVATORS/ CONVEYORS FOR GOODS/MATERIALS NES	Russia	n.a.	0.000	0.922	0.553
		Korea, South	0.0%	0.640	0.000	0.000
842890	LIFTING, HANDLING, LOADING OR UNLOADING MACHINERY NES	EU 25	0.0%	1.632	0.965	5.266
		EU 15	0.0%	0.149	0.852	5.104
		Trin. & Tobago	n.a.	0.000	0.000	3.989
		Algeria	n.a.	0.000	19.837	3.416
		U.A.Emirates	10.0%	1.487	2.172	1.605
		Indonesia	n.a.	0.000	0.118	0.536
		Turkmenistan	n.a.	2.515	0.000	0.498

HS Code	Description	Market	Tariff	2002	2003	2004
	LIFTING, HANDLING, LOADING OR UNLOADING MACHINERY NES (continued)	Egypt	5.0%	0.000	0.830	0.218
		Kuwait	100.0%	5.983	0.000	0.128
		Yemen	n.a.	1.284	0.000	0.002
		Iran	n.a.	0.000	16.232	0.000
842919	BULLDOZERS AND ANGLEDZERS, WHEELED	Kuwait	100.0%	0.000	0.000	0.703
842920	GRADERS AND LEVELLERS, SELF-PROPELLED	U.A.Emirates	10.0%	0.675	0.000	0.417
842951	FRONT END SHOVEL LOADERS	Cuba	6.0%	0.134	0.615	0.089
842952	SHOVELS AND EXCAVATORS WITH A 360 REVOLVING SUPERSTRUCTURE	Russia	n.a.	0.000	0.000	1.132
		Australia	0 – 5%	0.000	1.635	0.000
842959	SELF-PROPELLED EXCAVATING MACHINERY NES	Greenland	n.a.	0.000	1.055	0.000
843041	BORING OR SINKING MACHINERY NES, SELF-PROPELLED	Hong Kong	0.0%	0.000	0.000	1.392
		Egypt	20.0%	0.116	0.000	1.172
		EU 15	0.0%	1.016	0.110	0.393
		EU 25	0.0%	1.016	0.110	0.393
		Singapore	0.0%	6.082	0.076	0.000
843049	BORING OR SINKING MACHINERY NES, NOT SELF-PROPELLED	Kuwait	100.0%	1.318	0.000	8.312
		Algeria	n.a.	4.906	0.000	8.292
		U.A.Emirates	10.0%	6.514	4.390	4.090
		Russia	n.a.	5.808	0.000	2.915
		Singapore	0.0%	3.047	0.008	2.347
		EU 15	0.0%	0.000	0.024	1.943
		EU 25	0.0%	0.000	0.120	1.943
		China	5.0%	0.000	4.637	1.072
		Congo	30.0%	0.000	0.000	0.672
		Pap.New Guinea	30 – 40%	0.000	0.000	0.584
		Iran	n.a.	4.324	0.000	0.063
		Kazakhstan	n.a.	0.013	3.134	0.013
		Brazil	0 – 10%	0.152	2.106	0.011
		Colombia	35.0%	0.780	0.000	0.001
		Oman	5.0%	3.259	1.602	0.000
		India	25.0%	5.515	1.509	0.000
		Syria	n.a.	0.000	1.298	0.000
		Venezuela	35 – 40%	4.307	1.211	0.000
		Japan	0.0%	3.319	0.000	0.000
		Saudi Arabia	n.a.	1.666	0.000	0.000
		Philippines	20.0%	0.866	0.000	0.000
		Libya	n.a.	0.693	0.277	0.000
843069	CONSTRUCTION EQUIPMENT, NOT SELFPROPELLED NES	Libya	n.a.	0.510	0.000	0.000
		Colombia	35.0%	2.449	0.275	0.000
843110	PARTS OF MACHINERY OF HEADING NO 84.25	Iran	n.a.	0.300	0.003	2.275
		EU 15	0.0%	0.127	1.586	0.037
		EU 25	0.0%	0.127	1.586	0.037
843139	PARTS OF LIFTING, HANDLING, LOADING OR UNLOADING MACHINERY NES	Iran	n.a.	0.684	0.017	0.510
		EU 25	0.0%	1.374	0.696	0.309
		EU 15	0.0%	0.956	0.653	0.270
		Russia	n.a.	1.260	1.234	0.176
		Australia	5.0%	1.130	0.010	0.143
		Singapore	0.0%	0.940	0.141	0.057
		Sudan	n.a.	0.911	0.000	0.008
		Oman	0 – 5%	0.826	0.298	0.000
843142	BULLDOZER AND ANGLEDZOZER BLADES	Australia	5.0%	0.177	0.781	0.444
		Japan	0.0%	0.519	0.000	0.037

HS Code	Description	Market	Tariff	2002	2003	2004
843143	PARTS OF BORING OR SINKING MACHINERY, WHETHER OR NOT SELF-PROPELLED	Yemen	n.a.	38.289	24.819	21.632
		U.A.Emirates	10.0%	6.134	4.302	16.150
		Russia	n.a.	7.471	10.290	12.340
		EU 25	0.0%	12.296	7.732	8.744
		EU 15	0.0%	9.026	7.218	8.741
		China	4 – 5%	2.764	3.339	7.750
		Kazakhstan	n.a.	4.187	3.303	6.110
		Venezuela	35 – 40%	9.565	3.477	5.204
		India	25.0%	1.257	2.381	4.947
		Cuba	n.a.	4.805	14.873	4.880
		Australia	5.0%	1.415	2.434	4.771
		Iran	n.a.	14.987	11.496	4.236
		Singapore	0.0%	4.880	1.851	3.346
		Azerbaijan	n.a.	0.158	0.673	2.435
		Ecuador	10.0%	6.743	4.726	1.821
		Algeria	n.a.	3.338	4.466	1.722
		Iceland	5.0%	0.011	0.000	1.582
		Bangladesh	n.a.	0.000	0.000	1.391
		Egypt	10.0%	1.395	0.450	1.098
		Libya	n.a.	6.161	1.031	0.992
		Thailand	20.0%	1.969	0.247	0.952
		Indonesia	40.0%	2.817	2.733	0.744
		Sudan	n.a.	6.390	2.236	0.693
		Colombia	35.0%	0.790	0.646	0.585
		Hong Kong	0.0%	0.158	0.117	0.567
		Oman	n.a.	1.573	1.087	0.550
		Argentina	25.0%	1.124	0.544	0.536
		Syria	n.a.	0.480	0.055	0.527
		Kuwait	100.0%	2.239	0.597	0.431
		Brazil	35.0%	4.327	1.637	0.295
		Equatrl.Guinea	n.a.	0.038	0.640	0.277
		Norway	0.0%	5.317	1.057	0.108
		South Africa	10.0%	0.072	0.770	0.107
		Tunisia	n.a.	0.732	0.282	0.069
		Trin. & Tobago	n.a.	1.448	0.334	0.066
		Nigeria	n.a.	3.464	0.446	0.061
		Pakistan	n.a.	0.712	0.576	0.032
		Greenland	n.a.	0.000	1.629	0.016
		Bahrain	35.0%	1.732	0.145	0.006
		Turkey	4.2%	0.571	0.607	0.000
		Cameroon	n.a.	0.079	0.521	0.000
		Malaysia	10.0%	1.534	0.000	0.000
		Iraq	n.a.	1.126	0.000	0.000
843149	PARTS OF CRANES, WORK-TRUCKS, SHOVELS,AND OTHER CONSTRUCTION MACHINERY	Japan	0.0%	0.825	0.904	1.480
		Russia	n.a.	0.825	0.940	1.446
		Australia	0 – 5%	0.350	0.857	1.085
		Cuba	n.a.	0.097	0.140	1.065
		Korea, South	0.0%	0.023	0.013	0.986
		U.A.Emirates	n.a.	0.339	0.881	0.937
		EU 25	0.0%	0.763	2.736	0.475
		EU 15	0.0%	0.763	2.729	0.475
		Peru	30.0%	0.308	0.617	0.072
		Bosnia-Herz.	n.a.	0.000	0.797	0.000

.HS Code	Description	Market	Tariff	2002	2003	2004
843221	DISC HARROWS	Australia	0.0%	0.000	0.268	0.699
843229	SCARIFIERS, CULTIVATORS, WEEDERS AND HOES	Australia	0.0%	0.330	0.519	1.628
843230	SEEDERS, PLANTERS AND TRANSPLANTERS	EU 15	0.0%	0.357	0.000	2.020
		EU 25	0.0%	0.357	0.000	2.020
		Australia	0.0%	1.450	0.699	0.646
843280	ROLLERS, STONE-REMOVERS & OTHER SOIL PREPARATION OR CULTIVATION MACHINERY	Australia	0.0%	0.220	0.992	0.920
843290	PARTS FOR ROLLERS AND OTHER SOIL PREPARATION OR CULTIVATION MACHINERY	Australia	0.0%	1.764	0.526	0.256
843390	PARTS OF HARVESTING, THRESHING & OTHER AGRICULTURAL & MOWING MACHINERY	Australia	0 – 5%	0.003	0.099	1.482
843610	MACHINERY FOR PREPARING ANIMAL FEEDING STUFFS	EU 15	1.7%	0.315	0.347	0.639
		EU 25	1.7%	0.315	0.347	0.639
843699	PARTS OF AGRIC/HORT/ FOREST/BEE-KEEPG MACH NES	Australia	10.0%	0.626	0.000	0.000
843910	MACHINERY FOR MAKING PULP OF FIBROUS CELLULOSIC MATERIAL	EU 15	1.7%	0.262	0.236	0.809
		EU 25	1.7%	0.262	0.236	0.809
844359	PRINTING MACHINERY NES	EU 15	1.7%	6.081	0.000	0.000
		EU 25	1.7%	6.081	0.000	0.000
845221	AUTOMATIC SEWING MACHINES, OTHER THAN BOOK-SEWING MACHINES, NES	Dom. Republic	40.0%	0.000	0.000	1.148
845610	MACHINE-TOOLS FOR WORKING ANY MATERIAL BY REMOVAL OF MATERIAL, BY LASER/ LIGHT/ PHOTON BEAM	EU 25	0 – 4.5%	1.854	3.405	2.999
		EU 15	0 – 4.5%	0.689	2.731	2.080
		Korea, South	0 – 13%	0.000	0.933	0.068
845620	MACHINE-TOOLS FOR WORKING ANY MATERIAL BY REMOVAL OF MATERIAL, BY ULTRASONIC PROCESSES	EU 15	3.5%	0.857	0.000	0.000
		EU 25	3.5%	0.857	0.000	0.000
845710	MACHINING CENTRES, FOR WORKING METAL	Taiwan	8.0%	0.000	0.000	1.188
845811	HORIZONTAL LATHES NUMERICALLY CONTROLLED FOR REMOVING METAL	EU 15	2.7%	0.566	0.000	0.201
		EU 25	2.7%	0.566	0.000	0.201
846229	BENDING/FOLDING/ FLATTENG MACH (INC PRESSES) NES FOR WORKG METAL	U.A.Emirates	n.a.	0.000	0.000	0.654
846592	PLANING/MILLG OR MOULDG (BY CUTTING) MACH FOR WORKG WOOD/PLASTIC ETC	EU 25	2.7%	0.295	0.259	0.554
		EU 15	2.7%	0.226	0.142	0.504
846599	MACHINE-TOOLS FOR WORKG WOOD AND HARD MATERIALS (INCL RUBBER & PLASTIC), NES	Iran	n.a.	0.000	0.000	3.052
846719	HAND TOOLS, PNEUMATIC TYPE, NES	China	8.0%	0.842	0.000	0.038
846799	HAND TOOLS NES, PARTS OF	EU 25	1.7%	0.712	0.411	0.287
		EU 15	1.7%	0.712	0.302	0.013
847130	PORTABLE DIGITAL COMPUTERS <10KG	EU 25	0.0%	0.268	0.510	0.553
		Cuba	n.a.	0.010	0.057	0.541
		EU 15	0.0%	0.268	0.433	0.311
847141	NON-PORTABLE DIGITAL COMPUTERS, INCL BOTH A CPU & INPUT/OUTPUT (I/O) UNIT	China	0.0%	0.094	0.467	2.599
847149	DIGITAL DATA PROCESSING SYSTEMS, NES	EU 15	0.0%	0.257	0.532	0.404
		EU 25	0.0%	0.257	0.532	0.404
847150	DIGITAL PROCESSING UNITS NOT SOLD AS COMPLETE SYSTEMS	EU 25	0.0%	0.121	0.105	2.889
		EU 15	0.0%	0.121	0.105	2.842
		U.A.Emirates	n.a.	0.009	0.000	0.790
		Singapore	0.0%	0.027	0.081	0.616
		Australia	0.0%	0.006	0.125	0.576
		Saudi Arabia	n.a.	0.009	0.000	0.560
		China	0.0%	0.699	0.713	0.478
		India	0.0%	0.543	0.000	0.077

HS Code	Description	Market	Tariff	2002	2003	2004
847160	COMPUTER INPUT/ OUTPUT UNITS, WITH OR WITHOUT STORAGE UNITS	EU 25	0.0%	0.499	1.211	1.706
		EU 15	0.0%	0.479	1.176	1.652
		China	0.0%	0.791	0.355	0.214
847170	COMPUTER DATA STORAGE UNITS	EU 25	0.0%	0.937	0.864	0.711
		EU 15	0.0%	0.937	0.864	0.701
847180	UNITS OF AUTOMATIC DATA PROCESSING EQUIPMENT NES	EU 15	0.0%	1.205	1.192	1.596
		EU 25	0.0%	1.205	1.192	1.596
847190	AUTOMATIC DATA PROCESSING EQUIPMENT NES	Yemen	n.a.	0.713	0.306	0.712
		EU 25	0.0%	1.313	0.302	0.100
		EU 15	0.0%	1.313	0.296	0.062
		Oman	0.0%	1.384	0.000	0.029
		China	0.0%	4.742	0.524	0.003
		Hong Kong	0.0%	1.012	0.077	0.000
		Qatar	n.a.	0.575	0.017	0.000
847330	PARTS& ACCESSORIES OF AUTOMATIC DATA PROCESSG MACHINES &UNITS THEREOF	China	0.0%	1.969	1.796	2.738
		EU 25	0.0%	1.171	0.795	0.975
		EU 15	0.0%	1.135	0.768	0.821
		Australia	0.0%	0.187	0.521	0.669
847410	SORTING/ SCREENING/ SEPARATG/ WASHG MACHINES FOR STONE, ORES, ETC	Libya	n.a.	0.000	0.000	0.776
		U.A.Emirates	n.a.	0.000	0.000	0.571
847420	CRUSHING/GRINDG MACHINES FOR EARTH, STONE, ORES, ETC	Australia	5.0%	0.000	0.000	0.976
847490	PTS OF SORTING, SCREENG, MIXG, CRUSHG, GRINDG, WASHG, AGGLOMERATG MACHINES	Russia	n.a.	0.015	0.832	0.041
847981	MACH FOR TREATG METAL INCL ELECTRIC WIRE COIL-WINDERS NES HAVG INDIV FUNCTIONS	U.A.Emirates	n.a.	0.682	0.000	0.001
847982	MACH FOR MIXING/ KNEADING/ CRUSHING/ GRINDING ETC, NES HAVG INDIVID FUNCTIONS	Nigeria	150.0%	0.000	0.000	4.753
		Russia	n.a.	0.998	1.681	0.000
		Cuba	n.a.	0.504	0.000	0.000
847989	MACHINES & MECHANICAL APPLIANCES NES HAVING INDIVIDUAL FUNCTIONS	EU 25	0 – 1.7%	4.385	5.399	5.790
		EU 15	0 – 1.7%	4.157	4.500	4.751
		U.A.Emirates	15.0%	1.636	2.129	3.829
		Kazakhstan	n.a.	0.175	1.840	3.561
		Libya	n.a.	1.318	1.041	3.511
		Australia	0 – 15%	0.445	0.824	2.029
		Singapore	n.a.	1.265	0.647	1.969
		Pakistan	n.a.	0.377	0.244	1.682
		Iran	n.a.	0.051	0.003	1.521
		Turkmenistan	n.a.	0.004	0.036	1.461
		Oman	0.0%	0.648	1.504	1.457
		Saudi Arabia	n.a.	0.101	0.078	1.353
		Algeria	n.a.	0.474	0.111	1.191
		India	0 – 40%	0.196	0.640	1.186
		Russia	n.a.	1.044	1.957	1.169
		Thailand	0 – 30%	0.187	0.152	1.108
		China	0.0%	1.274	7.545	0.930
		Venezuela	35 – 40%	0.600	0.322	0.894
		Nigeria	n.a.	0.084	0.163	0.647
		Indonesia	0 – 40%	0.588	0.164	0.636
		Cuba	n.a.	0.093	0.756	0.567
		Vietnam	n.a.	0.000	0.295	0.550
		Norway	0 – 4%	2.471	1.078	0.306
		Malaysia	0 – 5%	0.401	0.519	0.176
		Ukraine	n.a.	0.000	2.070	0.054
		Tunisia	n.a.	0.147	0.702	0.037

HS Code	Description	Market	Tariff	2002	2003	2004
	MACHINES & MECHANICAL APPLIANCES NES HAVING INDIVIDUAL FUNCTIONS (continued)	Iraq	n.a.	0.992	1.421	0.000
		Bahrain	0 – 35%	0.510	0.000	0.000
847990	PARTS OF MACHINES& MECHANICAL APPLIANCES NES HAVG INDIVIDUAL FUNCTIONS	Kazakhstan	n.a.	0.466	0.223	6.289
		U.A.Emirates	15.0%	1.770	2.858	5.399
		Norway	0 – 4%	1.136	5.521	5.291
		EU 25	0 – 1.7%	2.806	4.001	4.868
		Venezuela	35 – 40%	1.543	0.223	4.573
		EU 15	0 – 1.7%	2.751	2.881	4.536
		Iran	n.a.	0.181	0.695	2.745
		Libya	n.a.	0.443	0.723	2.469
		India	0 – 25%	1.200	0.207	1.523
		Algeria	n.a.	0.431	0.316	1.335
		Russia	n.a.	0.529	0.633	1.059
		Cuba	n.a.	0.395	0.077	1.004
		Singapore	n.a.	0.967	0.545	0.922
		Kuwait	100.0%	0.324	0.697	0.774
		Vietnam	n.a.	0.096	0.428	0.710
		Bahrain	0 – 35%	0.129	0.006	0.567
		Oman	0.0%	0.571	0.627	0.524
		Egypt	0 – 10%	0.212	0.654	0.471
		Malaysia	0 – 5%	0.916	0.203	0.335
		Indonesia	0 – 40%	0.528	0.068	0.120
		Japan	0.0%	0.596	0.060	0.106
		China	0.0%	1.078	1.391	0.067
848120	VALVES FOR OLEOHYDRAULIC OR PNEUMATIC TRANSMISSIONS	Cuba	n.a.	1.401	0.443	0.711
848130	VALVES, CHECK	Venezuela	35 – 40%	0.000	3.036	1.329
		EU 25	2.2%	0.217	0.181	0.713
		EU 15	2.2%	0.119	0.169	0.641
		Australia	15.0%	0.025	0.135	0.619
		Thailand	30.0%	0.001	0.034	0.560
		Ecuador	25.0%	0.000	2.096	0.000
848140	VALVES, SAFETY OR RELIEF	EU 25	2.2%	0.355	0.142	1.278
		EU 15	2.2%	0.354	0.140	1.130
		Oman	15.0%	0.728	1.236	0.682
		Kuwait	100.0%	0.013	0.000	0.672
		Russia	n.a.	0.022	0.081	0.569
		U.A.Emirates	15.0%	0.017	0.913	0.364
		Singapore	10.0%	0.530	0.092	0.077
848180	TAPS, COCKS, VALVES AND SIMILAR APPLIANCES, NES	EU 25	2.0%	4.817	2.823	5.792
		Singapore	10.0%	4.008	0.789	5.210
		EU 15	2.0%	3.726	2.178	4.483
		Indonesia	40.0%	0.358	3.775	4.047
		Norway	0 – 4%	2.790	4.566	3.476
		Thailand	30.0%	0.777	0.409	2.014
		U.A.Emirates	n.a.	0.358	1.392	1.750
		Sudan	n.a.	0.184	0.335	1.714
		China	5 – 7%	1.838	0.989	1.691
		Brazil	35.0%	0.335	1.571	1.560
		Cuba	14.0%	0.563	0.386	1.413
		Australia	0 – 19%	1.382	0.401	1.201
		Qatar	15.0%	0.441	1.059	1.091
		Oman	15.0%	0.509	1.207	0.929
		Malaysia	5 – 25%	1.584	0.332	0.874
		Turkmenistan	n.a.	0.168	0.014	0.680

HS Code	Description	Market	Tariff	2002	2003	2004
	TAPS, COCKS, VALVES AND SIMILAR APPLIANCES, NES (continued)	Ecuador	15 – 25%	0.000	0.069	0.633
		Yemen	n.a.	0.117	0.194	0.585
		Algeria	n.a.	3.260	1.093	0.092
		Mozambique	n.a.	0.000	0.745	0.000
848190	PARTS OF TAPS, COCKS, VALVES OR SIMILAR APPLIANCES	EU 25	2.2%	1.213	4.625	1.588
		U.A.Emirates	n.a.	0.215	0.017	1.291
		EU 15	2.2%	1.194	4.526	1.077
		Australia	0 – 15%	0.214	0.622	1.005
		Singapore	10.0%	0.326	0.409	0.877
		Oman	15.0%	0.240	0.284	0.837
		Brazil	25.0%	0.016	0.316	0.555
		Russia	n.a.	0.175	3.122	0.452
848340	GEARS &GEARING, BALL SCREWS, GEAR BOXES, SPEED CHANGERS, TORQUE CONVERTERS	China	8.0%	0.026	0.090	0.801
		EU 15	0 – 3.7%	0.343	0.286	0.731
		EU 25	0 – 3.7%	0.343	0.286	0.731
848360	CLUTCHES AND SHAFT COUPLINGS (INCLUDING UNIVERSAL JOINTS)	Iran	n.a.	0.083	0.000	0.913
848390	PARTS OF POWER TRANSMISSION EQUIPMENT/OTH GOODS USD TO TRANSMIT POWER	EU 25	0 – 5.7%	0.183	0.230	0.973
		Iran	n.a.	0.569	0.991	0.766
		EU 15	0 – 5.7%	0.183	0.047	0.156
848420	MECHANICAL SEALS	Cuba	n.a.	0.144	0.322	0.999
		Norway	0.0%	0.000	0.012	0.614

Table 82. Chapter 84 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
840490	PARTS FOR AUXILIARY PLANT& CONDENSER FOR STEAM/ VAPOUR GENERATG UNIT NES	0.061	0.002	4.497	0.008
840510	PRODUCER GAS OR WATER GAS GENERATORS; ACETYLENE & SIMILAR GAS GENERATORS	0.000	0.996	0.202	0.193
840590	PARTS OF PRODUCER, WATER, ACETYLENE, OR SIMILAR GAS GENERATORS	0.000	1.900	0.000	0.064
840710	AIRCRAFT ENGINES, SPARK-IGNITION RECIPROCATING OR ROTARY TYPE	0.986	0.868	0.058	5.066
840991	PARTS FOR SPARK-IGNITION TYPE ENGINES NES	3.014	1.406	3.597	2.638
840999	PARTS FOR DIESEL AND SEMI-DIESEL ENGINES	0.342	1.884	0.392	0.506
841111	TURBO-JETS OF A THRUST NOT EXCEEDING 25 KN	0.000	0.000	0.000	1.048
841112	TURBO-JETS OF A THRUST EXCEEDING 25 KN	0.000	0.622	2.804	0.000
841121	TURBO-PROPELLERS OF A POWER NOT EXCEEDING 1100 KW	47.406	45.021	28.051	76.136
841122	TURBO-PROPELLERS OF A POWER EXCEEDING 1100 KW	0.000	1.037	0.000	0.453
841181	GAS TURBINES NES OF A POWER NOT EXCEEDING 5000 KW	2.159	1.618	0.656	5.120
841182	GAS TURBINES NES OF A POWER EXCEEDING 5000 KW	0.501	0.000	1.818	6.740
841191	PARTS OF TURBO-JETS OR TURBO-PROPELLERS	1.113	0.209	0.944	5.744
841199	PARTS OF GAS TURBINES NES	2.722	0.763	2.971	2.818
841221	HYDRAULIC POWER ENGINES & MOTORS LINEAR ACTING (CYLINDERS)	0.119	0.167	0.652	1.266
841229	HYDRAULIC POWER ENGINES & MOTORS NES	8.139	8.325	10.281	11.203
841231	PNEUMATIC POWER ENGINES & MOTORS LINEAR ACTING (CYLINDERS)	0.000	0.063	0.176	0.734
841239	PNEUMATIC POWER ENGINES & MOTORS NES	0.329	0.954	1.040	1.980
841280	ENGINES AND MOTORS NES	0.003	0.435	0.561	1.498
841290	PARTS OF HYDRAULIC & PNEUMATIC & OTHER POWER ENGINES AND MOTORS NES	61.954	50.699	39.506	32.341

HS Code	Description	2001	2002	2003	2004
841319	PUMPS FITTED OR DESIGNED TO BE FITTED WITH A MEASURING DEVICE NES	0.081	0.032	0.017	0.883
841340	CONCRETE PUMPS	0.000	0.000	0.959	0.060
841350	RECIPROCATING POSITIVE DISPLACEMENT PUMPS NES	0.779	2.046	7.897	7.511
841360	ROTARY POSITIVE DISPLACEMENT PUMPS NES	1.714	2.882	3.912	7.063
841370	CENTRIFUGAL PUMPS NES	1.262	1.408	1.224	1.642
841381	PUMPS NES	12.115	8.856	4.963	3.957
841391	PARTS OF PUMPS FOR LIQUID WHETHER OR NOT FITTED WITH A MEASURG DEVICE	15.301	12.662	14.519	17.870
841430	COMPRESSORS OF A KIND USED IN REFRIGERATING EQUIPMENT	0.000	2.035	0.048	14.039
841459	FANS NES	0.163	0.275	0.796	1.788
841480	AIR OR GAS COMPRESSORS, HOODS	19.803	17.528	44.541	19.480
841490	PARTS OF VACUUM PUMPS, COMPRESSORS, FANS, BLOWERS, HOODS	3.627	5.356	8.886	6.511
841582	AIR COND MACH NES, INC A REFRIGERATING UNIT	0.088	0.410	1.929	0.095
841610	FURNACE BURNERS FOR LIQUID FUEL	0.014	0.000	1.022	2.583
841690	PARTS OF FURNACE BURNERS, INCL MECHANICAL GRATES, ASH DISCHARGERS, ETC	0.076	0.014	0.312	1.020
841780	INDUSTRIAL OR LAB FURNACES & OVENS, INC INCINERATORS NON-ELECTRIC NES	0.146	0.236	1.112	1.360
841790	PARTS OF INDUSTRIAL /LAB FURNACES & OVENS INC INCINERATORS NON-ELECTRIC NES	3.968	0.014	0.055	0.658
841850	REFRIGERATING OR FREEZING DISPLAY COUNTERS, CABINETS, SHOW-CASES, ETC	0.171	0.041	0.092	6.604
841869	REFRIGERATING OR FREEZING EQUIPMENT NES	1.564	1.275	2.805	1.371
841899	PARTS OF REFRIGERATING OR FREEZING EQUIPMENT, NES	0.510	1.162	0.583	0.099
841939	NON-DOMESTIC, NON-ELECTRIC DRYERS NES	0.525	3.366	3.973	6.397
841940	DISTILLING OR RECTIFYING PLANT	2.497	29.869	2.080	46.529
841950	HEAT EXCHANGE UNITS, NON-DOMESTIC, NON-ELECTRIC	11.610	3.892	4.349	10.551
841960	MACHINERY FOR LIQUEFYING AIR OR GAS	0.000	2.050	44.333	14.686
841981	MACHINERY FOR MAKG HOT DRINKS OR FOR COOKG OR HEATG FOOD,NON DOMESTIC	0.090	0.283	0.347	1.324
841989	MACHINERY, PLANT, LAB EQUIP FOR TREATMENT OF MATERIALS BY CHANGE OF TEMP NES	4.496	5.097	14.575	11.696
841990	PARTS OF MACHINERY, PLANT AND EQUIPMENT OF HEADING NO 84.19	23.130	4.446	13.741	11.302
842119	CENTRIFUGES NES	0.118	1.247	0.269	4.543
842121	FILTERING OR PURIFYING MACHINERY AND APPARATUS FOR WATER	1.655	1.754	1.557	2.829
842129	FILTERING OR PURIFYING MACHINERY AND APPARATUS FOR LIQUIDS NES	7.149	14.375	2.425	15.931
842139	FILTERING OR PURIFYING MACHINERY AND APPARATUS FOR GASES NES	1.613	3.580	5.980	14.367
842199	PARTS FOR FILTERG OR PURIFYG MCHY & APPARATUS FOR LIQUIDS OR GASES,NES	1.136	0.263	0.498	6.372
842490	PTS OF MECH APPLIANCES (HAND-OP OR NOT) FOR DISPENSING OR SPRAYING LIQUIDS OR POWDERS	0.254	0.324	4.876	2.866
842539	WINCHES OR CAPTANS NES	0.000	1.067	0.054	0.157
842619	TRANSPORTER OR BRIDGE CRANES	4.125	2.533	6.587	3.381
842641	DERRICKS/CRANES O WORKS TRUCKS FITTD W A CRANE ,SELF-PROPELLED ON TIRES	0.000	0.009	0.010	2.201

HS Code	Description	2001	2002	2003	2004
842649	DERRICKS,CRANES OR WORK TRUCKS FITTED WITH A CRANE ,SELF-PROPELLED NES	0.000	0.071	0.000	1.050
842699	CRANES OR DERRICKS NES	0.055	0.275	1.570	0.218
842839	CONT-ACTION ELEVATORS/ CONVEYORS FOR GOODS/MAT NES	0.113	0.640	1.034	0.563
842890	LIFTING, HANDLING, LOADING OR UNLOADING MACHINERY NES	1.161	13.589	41.388	18.196
842919	BULLDOZERS AND ANGLEDZERS, WHEELED	0.082	0.000	0.000	1.265
842920	GRADERS AND LEVELLERS, SELF-PROPELLED	0.511	0.964	0.267	1.103
842951	FRONT END SHOVEL LOADERS	0.261	0.221	0.766	0.603
842952	SHOVELS AND EXCAVATORS WITH A 360 REVOLVING SUPERSTRUCTURE	0.000	0.000	1.635	1.204
842959	SELF-PROPELLED EXCAVATING MACHINERY NES	0.000	0.021	1.143	0.105
843041	BORING OR SINKING MACHINERY NES, SELFPROPELLED	11.271	8.357	0.398	3.321
843049	BORING OR SINKING MACHINERY NES, NOT SELF-PROPELLED	13.912	46.601	21.032	30.720
843069	CONSTRUCTION EQUIPMENT, NOT SELFPROPELLED NES	0.665	2.967	0.445	0.115
843110	PARTS OF MACHINERY OF HEADING NO 84.25	0.580	1.429	2.037	2.794
843139	PARTS OF LIFTING, HANDLING, LOADING OR UNLOADING MACHINERY NES	42.860	10.404	3.727	2.587
843142	BULLDOZER AND ANGLEDZER BLADES	0.755	1.439	0.808	0.518
843143	PARTS OF BORING OR SINKING MACHINERY, WHETHER OR NOT SELF-PROPELLED	131.695	168.916	120.452	120.590
843149	PARTS OF CRANES, WORK-TRUCKS, SHOVELS,AND OTHER CONSTRUCTION MACHINERY	7.233	4.607	9.174	9.042
843221	DISC HARROWS	0.000	0.000	0.268	0.699
843229	SCARIFIERS, CULTIVATORS, WEEDERS AND HOES	0.059	0.330	0.519	1.640
843230	SEEDERS, PLANTERS AND TRANSPLANTERS	0.701	1.807	0.702	2.857
843280	ROLLERS, STONE-REMOVERS &OTHER SOIL PREPARATION OR CULTIVATION MACHINERY	0.449	0.342	0.993	1.070
843290	PARTS FOR ROLLERS AND OTHER SOIL PREPARATION OR CULTIVATION MACHINERY	1.547	1.799	0.618	0.467
843390	PARTS OF HARVESTING, THRESHING & OTHER AGRICULTURAL & MOWING MACHINERY	0.156	0.267	0.189	1.852
843610	MACHINERY FOR PREPARING ANIMAL FEEDING STUFFS	0.171	0.665	0.687	0.978
843699	PARTS OF AGRIC/HORT/ FOREST/BEE-KEEPG MACH NES	0.084	0.656	0.042	0.197
843910	MACHINERY FOR MAKING PULP OF FIBROUS CELLULOSIC MATERIAL	0.591	0.313	0.295	0.852
844359	PRINTING MACHINERY NES	0.000	6.280	0.107	0.075
845221	AUTOMATIC SEWING MACHINES, OTHER THAN BOOK-SEWING MACHINES, NES	0.000	0.000	0.000	1.148
845610	MACHINE-TOOLS FOR WORKING ANY MATERIAL BY REMOVAL OF MATERIAL, BY LASER/ LIGHT/ PHOTON BEAM	0.000	1.957	4.439	3.174
845620	MACHINE-TOOLS FOR WORKING ANY MATERIAL BY REMOVAL OF MATERIAL, BY ULTRASONIC PROCESSES	0.000	0.857	0.000	0.061
845710	MACHINING CENTRES, FOR WORKING METAL	0.000	0.000	0.000	1.188
845811	HORIZONTAL LATHES NUMERICALLY CONTROLLED FOR REMOVING METAL	0.000	0.566	0.000	0.201
846229	BENDING/FOLDING/ FLATTENG MACH (INC PRESSES) NES FOR WORKG METAL	0.000	0.000	0.052	1.203
846592	PLANING/MILLG OR MOULDG (BY CUTTING) MACH FOR WORKG WOOD/PLASTIC ETC	0.826	0.714	0.406	1.328
846599	MACHINE-TOOLS FOR WORKG WOOD AND HARD MATERIALS (INCL RUBBER & PLASTIC), NES	0.108	0.014	0.000	3.052

HS Code	Description	2001	2002	2003	2004
846719	TOOLS FOR WORKING IN THE HAND, PNEUMATIC TYPE, NES	0.001	0.845	0.003	0.102
846799	HAND TOOLS NES, PARTS OF	0.052	0.751	0.421	0.436
847130	PORTABLE DIGITAL COMPUTERS <10KG	0.315	0.357	0.914	1.611
847141	NON-PORTABLE DIGITAL COMPUTERS, INCL BOTH A CPU & INPUT/OUTPUT (I/O) UNIT	0.315	0.347	1.680	4.546
847149	DIGITAL DATA PROCESSING SYSTEMS, NES	2.975	0.988	1.071	2.457
847150	DIGITAL PROCESSING UNITS NOT SOLD AS COMPLETE SYSTEMS	0.570	2.036	1.427	7.281
847160	COMPUTER INPUT/ OUTPUT UNITS, WITH OR WITHOUT STORAGE UNITS	1.290	2.992	2.650	2.832
847170	COMPUTER DATA STORAGE UNITS	1.413	2.236	2.287	2.253
847180	UNITS OF AUTOMATIC DATA PROCESSING EQUIPMENT NES	2.239	2.119	2.131	2.752
847190	AUTOMATIC DATA PROCESSING EQUIPMENT NES	2.312	10.916	2.515	1.162
847330	PARTS& ACCESSORIES OF AUTOMATIC DATA PROCESSG MACHINES &UNITS THEREOF	10.699	5.034	4.758	6.807
847410	SORTING/ SCREENING/ SEPARATG/ WASHG MACHINES FOR STONE, ORES, ETC	0.320	0.258	0.129	1.845
847420	CRUSHING/GRINDG MACHINES FOR EARTH, STONE, ORES, ETC	0.141	0.000	0.154	0.986
847490	PTS OF SORTING, SCREENG, MIXG, CRUSHG, GRINDG, WASHG, AGGLOMERATG MACHINES	3.279	0.786	0.955	0.587
847981	MACH FOR TREATG METAL INCL ELECTRIC WIRE COIL-WINDERS NES HAVG INDIV FUNCTIONS	0.057	0.790	0.000	0.046
847982	MACH FOR MIXING/ KNEADING/ CRUSHING/ GRINDING/ ETC, NES HAVG INDIVID FUNCTIONS	0.525	1.677	1.685	4.767
847989	MACHINES & MECHANICAL APPLIANCES NES HAVING INDIVIDUAL FUNCTIONS	54.835	22.175	35.153	41.061
847990	PARTS OF MACHINES& MECHANICAL APPLIANCES NES HAVG INDIVIDUAL FUNCTIONS	43.468	20.803	22.952	44.552
848120	VALVES FOR OLEOHYDRAULIC OR PNEUMATIC TRANSMISSIONS	1.084	1.582	0.769	1.294
848130	VALVES, CHECK	2.475	1.526	7.034	6.775
848140	VALVES, SAFETY OR RELIEF	2.955	2.600	3.325	5.490
848180	TAPS, COCKS, VALVES AND SIMILAR APPLIANCES, NES	16.507	25.824	25.856	39.240
848190	PARTS OF TAPS, COCKS, VALVES OR SIMILAR APPLIANCES	2.727	4.413	11.769	10.296
848340	GEARS &GEARING, BALL SCREWS, GEAR BOXES, SPEED CHANGERS, TORQUE CONVERTERS	0.612	0.865	1.169	2.242
848360	CLUTCHES AND SHAFT COUPLINGS (INCLUDING UNIVERSAL JOINTS)	0.090	0.187	0.147	1.110
848390	PARTS OF POWER TRANSMISSION EQUIPMENT/OTH GOODS USD TO TRANSMIT POWER	0.296	0.909	1.380	2.069
848420	MECHANICAL SEALS	0.100	0.188	0.483	2.385

Alberta's exports from Chapter 84 consisted of a wide variety of machinery and related equipment to numerous countries. Total machinery exports from Alberta were \$2.0 billion in 2004, making it Alberta's fourth-largest export category. Forty-two percent of these exports were to non-FTA countries. The largest product category to non-FTA nations was parts of boring and sinking machinery (HS 843149), where the United Arab Emirates, Venezuela, and India are among the major importers, with tariffs of 10%, 35 – 40%, and 25%, respectively. Other major importers of boring and sinking machinery parts, such as the EU and Singapore, impose 0% tariffs. Behind boring and sinking machinery parts, exports of turbo propellers (HS 841121) have increased significantly in recent years, with Switzerland and the EU the major trading partners. Switzerland imposes a 0.1% + Fr 60/100kg tariff while the EU's tariff is 0 – 3.6%. Parts of motors (HS

841290), distilling equipment (HS 841940), and taps, cocks, and valves (HS 848180) were also large export product categories. While bound tariffs vary widely between product groups and export destinations, numerous countries impose 0% tariffs in several product categories. Other countries have consistently high tariffs for a number of Chapter 84 products, such as Kuwait (100%), Venezuela (35 – 40%), India (25%), and the United Arab Emirates (15%). Considering the large impact of Chapter 84 exports on total exports, reduction of these tariffs would be beneficial for Alberta's export performance.

HS Chapter 85 – Electrical Machinery

Table 83. Bound Tariff Summary: Chapter 85 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
850131	DC MOTORS, DC GENERATORS, OF AN OUTPUT NOT EXCEEDING 750 W	China	12.0%	0.000	0.039	3.961
		Indonesia	n.a.	0.028	0.000	0.883
		Thailand	30.0%	0.072	0.235	0.557
850134	DC MOTORS, DC GENERATORS, OF AN OUTPUT EXCEEDING 375 KW	U.A.Emirates	n.a.	0.000	0.758	0.670
		China	12.0%	0.000	0.000	0.626
		Peru	30.0%	0.000	0.537	0.000
850153	AC MOTORS, MULTI-PHASE, OF AN OUTPUT EXCEEDING 75 KW	Japan	0.0%	0.000	2.214	0.000
850212	GENERATG SETS,DIESEL/ SEMI-DIESEL EXCEEDG 75 KVA BUT NOT EXCED 375 KVA	Russia	n.a.	0.873	0.000	0.000
850213	GENERATG SETS,DIESEL/ SEMI-DIESEL ENGINES,OF AN OUTPUT EXCEEDG 375 KVA	Pakistan	n.a.	0.000	0.000	0.686
		China	10.0%	0.000	1.252	0.420
		Hong Kong	n.a.	0.000	0.553	0.000
		Ukraine	n.a.	0.000	0.534	0.000
850220	GENERATING SETS WITH SPARK-IGNITION INTERNAL COMBUSTION PISTON ENGINES	Korea, South	0 – 13%	0.000	0.000	1.217
850239	ELECTRIC GENERATING SETS	EU 25	0 – 2.7%	0.000	2.411	0.000
		EU 15	0 – 2.7%	0.000	2.211	0.000
		U.A.Emirates	n.a.	2.079	0.000	0.000
850300	PARTS OF ELECTRIC MOTORS, GENERATORS,GENERATG SETS & ROTARY CONVERTERS	China	3 – 12%	0.023	0.047	0.542
		Peru	30.0%	1.340	0.000	0.242
		India	25.0%	0.000	0.947	0.179
		EU 25	2.7%	0.080	0.530	0.151
		EU 15	2.7%	0.080	0.522	0.151
850421	LIQUID DIELECTRIC TRANSFORMERS HAVG A POWER HANDLG CAPACITY <= 650 KVA	Jamaica	50.0%	1.014	0.000	0.000
850433	TRANSFORMERS ELECTRIC POWER HANDLING CAPACITY > 16 KVA BUT <= 500 KVA	Sudan	n.a.	0.000	0.646	0.000
850440	STATIC CONVERTERS, NES	Russia	n.a.	0.015	0.031	0.936
		EU 25	0 – 3.3%	3.360	0.412	0.920
		Singapore	0 – 10%	0.219	0.647	0.896
		EU 15	0 – 3.3%	3.358	0.397	0.855
		Hong Kong	0.0%	1.529	0.636	0.701
		Saudi Arabia	n.a.	0.668	0.153	0.207
		Malaysia	0 – 5%	0.500	0.000	0.019

HS Code	Description	Market	Tariff	2002	2003	2004
850490	PARTS OF ELECTRICAL TRANSFORMERS, STATIC CONVERTERS AND INDUCTORS	EU 25	0.0%	0.221	0.056	1.138
		EU 15	0.0%	0.221	0.005	0.897
850590	ELECTRO-MAGNETS NES AND PARTS OF HEADING NO 85.05	Iran	n.a.	0.000	0.000	2.219
851150	GENERATORS AND ALTERNATORS	Pakistan	n.a.	0.000	0.840	1.803
		Tanzania	n.a.	0.000	1.966	0.100
851531	ELEC MACH & APPLIANCES FOR ARC (INC PLASMA ARC) WELDING, FULLY/PARTLY AUTOMATIC	Japan	0.0%	0.000	0.000	0.649
851590	PTS OF ELECTRIC/ LASER/ ULTRASONIC/ ETC MACH FOR WELDING/ CUTTING/ HOT SPRAYING METALS, NES	Japan	0.0%	0.737	0.000	0.000
851711	LINE TELEPHONE SETS WITH CORDLESS HANDSETS	Taiwan	0.0%	0.544	0.027	0.105
851719	TELEPHONE SETS, NES	Singapore	0.0%	5.438	5.688	8.672
		Taiwan	0.0%	52.137	51.232	3.955
		Australia	0.0%	6.164	5.087	3.749
		Hong Kong	0.0%	24.406	21.603	3.566
		Japan	0.0%	0.943	0.512	1.755
		New Zealand	0.0%	0.378	0.672	1.074
		Korea, South	0.0%	1.919	0.882	0.883
		India	0.0%	0.017	0.002	0.850
		China	0.0%	0.018	0.183	0.764
		EU 15	0.0%	2.954	3.917	0.714
		EU 25	0.0%	2.990	3.923	0.714
		Thailand	0.0%	2.482	0.502	0.243
		Saudi Arabia	n.a.	1.856	2.695	0.018
		Egypt	0.0%	0.042	0.571	0.013
851730	TELEPHONIC OR TELEGRAPHIC SWITCHING APPARATUS	U.A.Emirates	15.0%	2.113	2.624	0.012
		Russia	n.a.	1.130	1.208	0.000
		Singapore	0.0%	2.119	0.945	0.297
		Hong Kong	0.0%	2.698	4.093	0.157
		Japan	0.0%	0.513	0.325	0.045
		Korea, South	0.0%	2.961	0.698	0.037
		Australia	0.0%	3.733	0.611	0.035
		EU 25	0.0%	3.606	1.498	0.032
		EU 15	0.0%	3.584	1.497	0.032
		Taiwan	0.0%	9.977	7.577	0.008
		Saudi Arabia	n.a.	0.860	0.525	0.000
		Guatemala	45.0%	1.199	0.000	0.000
851750	APPARATUS FOR CARRIER-CURRENT /DIGITAL LINE SYSTEMS	EU 15	0.0%	2.148	1.988	12.393
		EU 25	0.0%	2.148	1.990	12.393
		Saudi Arabia	n.a.	0.000	0.127	8.569
		Singapore	0.0%	0.454	0.918	2.741
		Pakistan	50.0%	0.000	0.006	1.697
		Hong Kong	0.0%	1.528	2.131	1.404
		Thailand	0.0%	0.090	0.153	0.928
		Australia	0.0%	0.511	0.827	0.801

HS Code	Description	Market	Tariff	2002	2003	2004
	APPARATUS FOR CARRIER-CURRENT /DIGITAL LINE SYSTEMS (continued)	Taiwan	0.0%	0.340	0.444	0.562
		China	0.0%	2.040	0.398	0.130
		U.A.Emirates	n.a.	0.003	0.518	0.047
		Malaysia	0.0%	1.538	0.000	0.004
851780	ELECTRICAL APPARATUS FOR LINE TELEPHONY/TELEGRAPHY NES	EU 15	0.0%	0.004	1.223	1.788
		EU 25	0.0%	0.005	1.223	1.788
		Taiwan	0.0%	1.311	0.997	0.007
		U.A.Emirates	n.a.	0.562	0.101	0.000
851790	PARTS OF ELECTRICAL APPARATUS FOR LINE TELEPHONE OR LINE TELEGRAPHY	EU 25	0.0%	23.750	13.121	6.687
		EU 15				
		EU 15	0.0%	23.693	13.105	6.681
		Australia	0.0%	6.126	7.970	5.782
		Hong Kong	0.0%	13.062	10.462	5.668
		Korea, South	0.0%	8.806	4.502	5.639
		Taiwan	0.0%	30.196	24.172	4.911
		Japan	0.0%	1.125	1.487	2.608
		India	0.0%	0.059	0.087	2.127
		China	0.0%	1.855	0.803	1.586
		New Zealand	0.0%	0.864	2.271	1.521
		Thailand	0.0%	0.761	0.481	1.504
		Turkey	0.0%	0.492	0.205	1.122
		Malaysia	0.0%	0.227	0.207	0.644
		Argentina	35.0%	0.259	0.322	0.550
		Saudi Arabia	n.a.	3.375	1.578	0.481
		Philippines	0.0%	0.137	1.717	0.353
		Panama	0.0%	0.361	0.547	0.340
		Pakistan	50.0%	0.018	0.591	0.196
		Brazil	35.0%	0.700	0.337	0.143
		U.A.Emirates	15.0%	2.075	1.824	0.057
		Indonesia	0.0%	0.778	0.019	0.000
852020	TELEPHONE ANSWERING MACHINES	EU 15	0.0%	1.550	0.637	0.070
		EU 25	0.0%	1.558	0.637	0.070
		Hong Kong	0.0%	1.864	0.204	0.008
		Taiwan	0.0%	2.169	0.151	0.000
		U.A.Emirates	n.a.	0.635	0.039	0.000
852290	PARTS AND ACCESSORIES OF APPARATUS OF HEADING NOS 85.19 TO 85.21, NES	Taiwan	0 – 7.5%	0.667	0.265	0.000
852432	RECORDED LASER DISCS, SOUND ONLY	Brazil	n.a.	0.000	0.000	0.784
852440	RECORDED MAGNETIC TAPES (EXCLUDING SOUND/IMAGE)	Singapore	0.0%	0.745	0.307	0.167
		Hong Kong	0.0%	0.738	0.305	0.072
		Korea, South	0.0%	1.353	0.147	0.042
		Taiwan	0.0%	0.660	0.413	0.033
		Australia	0.0%	0.837	0.107	0.019
852499	RECORDED MEDIA FOR SOUND/IMAGE, NES	EU 25	0 – 3.5%	0.574	0.302	0.253
		EU 15	0 – 3.5%	0.524	0.302	0.253
852510	TRANSMISSION APPARATUS FOR RADIO-TELEPHONY RADIO-BROADCASTG OR TELEVISION	EU 15	0 – 3.6%	3.621	0.032	3.443
		EU 25	0 – 3.6%	3.621	0.032	3.443
		China	0.0%	1.081	4.310	3.232
		Thailand	0 – 5%	1.292	0.373	1.073

HS Code	Description	Market	Tariff	2002	2003	2004
852520	TRANSMISSION APPARATUS, FOR RADIO-TELEPHONY INCORPORATING RECEPTION APPARATUS	China	0.0%	4.051	1.824	3.476
		EU 25	0.0%	5.121	3.241	3.040
		EU 15	0.0%	4.977	3.209	2.975
		Saudi Arabia	n.a.	0.080	0.223	1.108
		U.A.Emirates	n.a.	0.039	1.140	1.023
		Australia	0.0%	0.073	0.410	0.736
		South Africa	15.0%	0.235	0.261	0.711
		Pakistan	50.0%	0.104	0.545	0.648
		Bangladesh	50.0%	0.013	0.401	0.625
		Russia	n.a.	0.000	0.000	0.623
		Hong Kong	0.0%	0.484	0.301	0.546
		Nigeria	n.a.	0.271	1.601	0.521
		Cameroon	n.a.	0.000	0.770	0.212
		Taiwan	0.0%	1.034	0.154	0.171
		Argentina	35.0%	0.000	0.604	0.139
		Ecuador	15.0%	2.258	1.181	0.013
852691	RADIO NAVIGATIONAL AID APPARATUS	EU 25	0 – 3.7%	1.670	3.018	4.134
		China	2.0%	4.529	1.121	4.049
		EU 15	0 – 3.7%	1.670	2.983	3.676
		Japan	0.0%	1.680	1.876	2.323
		Australia	15.0%	1.248	1.066	1.993
		Switzerland	0.1% + Fr 66/100kg	0.053	1.592	1.276
852739	RADIO-BROADCAST RECEIVERS NES	Bulgaria	35.0%	0.000	0.000	0.828
852790	RADIO RECEPTION APPARATUS NES	Yemen	n.a.	0.000	1.367	0.000
852910	AERIALS & AERIAL REFLECTORS OF ALL KINDS; PARTS SUITABLE FOR USE THEREWITH	EU 25	0 – 5%	0.313	0.733	0.806
		Switzerland	0 – 1.1% + Fr 66/100kg	0.037	0.207	0.788
		EU 15	0 – 5%	0.313	0.722	0.768
		Saudi Arabia	n.a.	0.000	0.015	0.532
852990	PARTS SUITABLE FOR USE SOLELY/ PRINCIPALLY WITH APPARATUS OF HEADINGS 85.25 TO 85.28	China	0 – 15%	23.568	20.231	25.079
		Brazil	35.0%	0.252	4.981	6.952
		Switzerland	0 – 0.4% + Fr 66/100kg	0.000	0.000	5.746
		EU 25	0 – 5%	26.902	4.508	5.323
		EU 15	0 – 5%	26.847	4.445	5.165
		Dom. Republic	40.0%	0.179	0.000	4.776
		Taiwan	0 – 10%	8.825	10.771	3.200
		Ecuador	10 – 15%	2.326	0.014	2.682
		Australia	0 – 15%	1.570	1.966	0.984
		Malaysia	0 – 10%	2.482	0.985	0.862
		Uruguay	25.0%	0.000	0.000	0.704
		Hong Kong	0.0%	0.034	0.239	0.625
		Jamaica	50.0%	0.003	0.000	0.590
		Korea, South	0 – 13%	0.009	0.093	0.537
		Guatemala	45.0%	0.107	3.607	0.057
853080	ELECTRICAL SIGNALLING, SAFETY OR TRAFFIC CONTROL EQUIPMENT, NES	India	n.a.	0.000	0.000	1.642

HS Code	Description	Market	Tariff	2002	2003	2004
853110	BURGLAR OR FIRE ALARMS AND SIMILAR APPARATUS	EU 15	0 – 2.2%	0.240	0.212	0.780
		EU 25	0 – 2.2%	0.240	0.212	0.780
853400	PRINTED CIRCUITS	EU 25	0.0%	1.233	0.449	4.165
		EU 15	0.0%	1.233	0.449	4.150
		Hong Kong	0.0%	0.827	0.845	1.259
		Australia	0.0%	1.460	0.478	0.007
		Malaysia	0.0%	1.388	0.000	0.000
		Ecuador	20.0%	1.341	0.000	0.000
853540	LIGHTNG ARRESTERS, VOLTAGE LIMITERS & SURGE SUPPRESSORS, > 1,000 VOLTS	Russia	n.a.	0.000	0.699	0.000
853590	ELECTRICAL APPARATUS FOR SWITCHG/ PROTECTG ELECTR CIRCUITS, > 1,000 VOLTS, NES	Russia	n.a.	0.513	0.158	0.060
853630	ELECTRICAL APPARATUS FOR PROTECTG ELECTR CIRCUITS (OVERLOAD PROTECTORS), </=1,000 VOLTS	Dom. Republic	40.0%	0.000	0.000	0.606
		EU 25	2.3%	0.042	0.241	0.564
		EU 15	2.3%	0.042	0.241	0.549
853690	ELECTRICAL APPARATUS FOR SWITCHG/ PROTECTG ELECTR CIRCUITS, </= 1,000 VOLTS, NES	Libya	n.a.	0.576	0.032	0.036
853710	BOARDS, PANELS, INCLUDG NUMERICAL CONTROL PANELS, </=1000 V	Malaysia	5 – 25%	0.000	0.001	2.402
		EU 25	2.1%	1.249	0.551	1.589
		EU 15	2.1%	1.244	0.437	1.422
		Japan	0.0%	0.005	0.037	1.305
		Bangladesh	200.0%	0.000	0.000	0.750
		Russia	n.a.	0.034	0.860	0.156
		Cuba	n.a.	0.232	0.644	0.086
		Romania	25.0%	0.000	2.296	0.000
853720	BOARDS, PANELS, INCLUDG NUMERICAL CONTROL PANELS, > 1,000 V	India	25.0%	0.000	0.006	1.022
		Malaysia	n.a.	0.000	0.000	0.955
		EU 25	2.1%	0.996	3.360	0.932
		Saudi Arabia	n.a.	0.341	0.261	0.791
		Egypt	30 – 60%	0.000	0.750	0.759
		Hong Kong	0.0%	0.677	1.137	0.408
		EU 15	2.1%	0.760	0.080	0.234
		China	8.4%	0.000	1.474	0.003
853810	BOARDS, PANELS, ETC FOR GOODS OF HEADG NO. 85.37, NOT EQUIPPD W THEIR APPARATUS	U.A.Emirates	n.a.	0.058	0.752	0.908
		Taiwan	9.0%	0.026	0.521	0.250
		Hong Kong	n.a.	2.013	0.215	0.058
		EU 25	2.2%	7.207	0.441	0.024
		EU 15	2.2%	7.171	0.441	0.024
		Philippines	n.a.	0.624	0.000	0.006
853890	PARTS FOR USE WITH THE APPARATUS OF HEADG NO. 85.35, 85.36 OR 85.37, NES	Hong Kong	n.a.	0.315	2.356	2.058
		Morocco	40.0%	0.007	0.000	1.968
		Australia	0.0%	0.001	0.233	1.307
		EU 25	1.7 – 3.2%	0.128	0.386	1.097
		EU 15	1.7 – 3.2%	0.128	0.295	1.091
		Saudi Arabia	n.a.	0.000	0.772	0.229

HS Code	Description	Market	Tariff	2002	2003	2004
854221	MONOLITHIC INTEGRATED CIRCUITS – DIGITAL	Malaysia	n.a.	5.087	1.040	1.635
		EU 15	0.0%	5.855	0.140	0.058
		EU 25	0.0%	5.855	0.140	0.058
		China	0.0%	1.131	0.768	0.033
		Australia	n.a.	0.649	0.009	0.023
854229	MONOLITHIC INTEGRATED CIRCUITS – OTHER THAN DIGITAL	Malaysia	n.a.	0.526	1.669	0.422
		EU 25	0.0%	1.137	0.000	0.041
		EU 15	0.0%	1.137	0.000	0.017
		China	0.0%	0.793	0.222	0.012
854260	HYBRID INTEGRATED CIRCUITS	EU 25	0.0%	1.635	0.003	0.000
		EU 15	0.0%	1.635	0.000	0.000
854389	ELECTRICAL MACHINES AND APPARATUS NES	Brazil	35.0%	0.000	0.009	0.605
		EU 25	0 – 3.7%	0.865	0.108	0.297
		EU 15	0 – 3.7%	0.865	0.108	0.284
		China	0.0%	1.949	1.905	0.027
854390	PARTS OF ELECTRICAL MACHINES & APPARATUS HAVG INDIVIDUAL FUNCTIONS, NES	EU 15	0.0%	0.003	0.600	0.524
		EU 25	0.0%	0.003	0.600	0.524
854441	ELECTRIC CONDUCTORS, <= 80 VOLTS, FITTD W CONNECTORS	EU 25	0 – 3.3%	0.124	0.601	0.570
		EU 15	0 – 3.3%	0.123	0.583	0.554
854449	ELECTRIC CONDUCTORS, <= 80 VOLTS, NES	EU 25	0 – 3.7%	0.052	0.447	1.506
		EU 15	0 – 3.7%	0.052	0.447	1.234
		Japan	0 – 4.8%	0.000	0.369	1.224
854459	ELECTRIC CONDUCTORS, > 80 VOLTS BUT < 1,000 VOLTS, NES	Singapore	0.0%	0.061	0.869	0.006
854460	ELECTRIC CONDUCTORS, > 1,000 VOLTS, NES	Japan	0 – 4.8%	0.593	0.304	0.000

Table 84. Chapter 85 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
850131	DC MOTORS, DC GENERATORS, OF AN OUTPUT NOT EXCEEDING 750 W	1.093	0.664	1.125	6.485
850134	DC MOTORS, DC GENERATORS, OF AN OUTPUT EXCEEDING 375 KW	0.000	0.316	2.774	1.735
850153	AC MOTORS, MULTI-PHASE, OF AN OUTPUT EXCEEDING 75 KW	20.083	0.098	2.214	0.985
850212	GENERATG SETS,DIESEL/ SEMI-DIESEL EXCEEDG 75 KVA BUT NOT EXCED 375 KVA	0.000	0.945	0.741	0.349
850213	GENERATG SETS,DIESEL/ SEMI-DIESEL ENGINES,OF AN OUTPUT EXCEEDG 375 KVA	0.204	0.000	2.712	2.102
850220	GENERATING SETS WITH SPARK-IGNITION INTERNAL COMBUSTION PISTON ENGINES	0.309	0.000	0.378	1.220
850239	ELECTRIC GENERATING SETS	4.414	2.872	2.557	0.675
850300	PARTS OF ELECTRIC MOTORS, GENERATORS,GENERATG SETS & ROTARY CONVERTERS	0.649	1.742	2.687	2.180
850421	LIQUID DIELECTRIC TRANSFORMERS HAVG A POWER HANDLG CAPACITY <= 650 KVA	0.253	1.320	0.055	0.371
850433	TRANSFORMERS ELECTRIC POWER HANDLING CAPACITY > 16 KVA BUT <= 500 KVA	0.145	0.264	1.047	0.335
850440	STATIC CONVERTERS, NES	5.547	8.649	4.999	7.458

HS Code	Description	2001	2002	2003	2004
850490	PARTS OF ELECTRICAL TRANSFORMERS, STATIC CONVERTERS AND INDUCTORS	0.505	0.961	0.908	2.465
850590	ELECTRO-MAGNETS NES AND PARTS OF HEADING NO 85.05	0.000	0.000	0.006	2.238
851150	GENERATORS AND ALTERNATORS	0.014	0.111	2.825	1.977
851531	ELEC MACH & APPLIANCES FOR ARC (INC PLASMA ARC) WELDG, FULLY/PARTLY AUTOMATIC	0.024	0.000	0.067	0.659
851590	PTS OF ELECTRIC/ LASER/ ULTRASONIC/ ETC MACH FOR WELDING/ CUTTING/HOT SPRAYING OF METALS, NES	1.155	0.875	0.502	0.915
851711	LINE TELEPHONE SETS WITH CORDLESS HANDSETS	0.065	0.616	0.479	0.187
851719	TELEPHONE SETS, NES	67.106	103.950	99.671	27.800
851730	TELEPHONIC OR TELEGRAPHIC SWITCHING APPARATUS	23.944	29.473	17.584	0.819
851750	APPARATUS FOR CARRIER-CURRENT /DIGITAL LINE SYSTEMS	4.976	9.666	8.331	31.600
851780	ELECTRICAL APPARATUS FOR LINE TELEPHONY/TELEGRAPHY NES	2.499	3.331	2.822	2.076
851790	PARTS OF ELECTRICAL APPARATUS FOR LINE TELEPHONE OR LINE TELEGRAPHY	79.677	105.546	89.185	58.610
852020	TELEPHONE ANSWERING MACHINES	6.295	7.607	1.262	0.218
852290	PARTS AND ACCESSORIES OF APPARATUS OF HEADING NOS 85.19 TO 85.21, NES	2.125	1.953	0.788	0.007
852432	RECORDED LASER DISCS, SOUND ONLY	0.086	0.042	0.032	0.789
852440	RECORDED MAGNETIC TAPES (EXCLUDING SOUND/IMAGE)	5.960	5.062	1.605	0.551
852499	RECORDED MEDIA FOR SOUND/IMAGE, NES	3.356	1.973	1.065	0.397
852510	TRANSMISSION APPARATUS FOR RADIO-TELEPHONY, RADIO-BROADCASTG OR TELEVISION	4.097	6.260	5.042	8.115
852520	TRANSMISSION APPARATUS, FOR RADIO-TELEPHONY INCORPORATG RECEPTION APPARATUS	6.097	14.714	15.952	16.861
852691	RADIO NAVIGATIONAL AID APPARATUS	6.760	9.956	10.367	15.771
852739	RADIO-BROADCAST RECEIVERS NES	0.000	0.013	0.000	0.977
852790	RADIO RECEPTION APPARATUS NES	0.049	0.273	1.429	0.205
852910	AERIALS & AERIAL REFLECTORS OF ALL KINDS; PARTS SUITABLE FOR USE THEREWITH	1.225	1.015	2.039	3.816
852990	PARTS SUITABLE FOR USE SOLELY/PRINCIPLY W APPARATUS OF HEADINGS 85.25 TO 85.28	21.497	68.010	48.056	59.400
853080	ELECTRICAL SIGNALLING, SAFETY OR TRAFFIC CONTROL EQUIPMENT, NES	0.244	0.253	0.020	1.675
853110	BURGLAR OR FIRE ALARMS AND SIMILAR APPARATUS	0.592	0.368	0.323	2.040
853400	PRINTED CIRCUITS	4.815	6.565	2.242	5.776
853540	LIGHTNG ARRESTERS,VOLTAGE LIMITERS & SURGE SUPPRESSORS, > 1,000 VOLTS	0.015	0.285	1.434	0.623
853590	ELECTRICAL APPARATUS FOR SWITCHG/ PROTECTG ELECTR CIRCUITS, > 1,000 VOLTS, NES	0.225	0.853	0.697	0.800
853630	ELECTRICAL APPARATUS FOR PROTECTG ELECTR CIRCUITS (OVERLOAD PROTECTORS), </=1,000 VOLTS	0.118	0.540	1.141	2.343
853690	ELECTRICAL APPARATUS FOR SWITCHG/ PROTECTG ELECTR CIRCUITS, </= 1,000 VOLTS, NES	0.996	1.740	1.049	1.855
853710	BOARDS,PANELS,INCLUDG NUMERICAL CONTROL PANELS, </=1000 V	3.964	4.158	7.846	8.280
853720	BOARDS,PANELS,INCLUDG NUMERICAL CONTROL PANELS, > 1,000 V	9.612	3.507	8.662	7.121
853810	BOARDS, PANELS, ETC FOR GOODS OF HEADG NO. 85.37, NOT EQUIPPD W THEIR APPARATUS	2.672	11.647	2.238	1.708
853890	PARTS FOR USE WITH THE APPARATUS OF HEADG NO. 85.35, 85.36 OR 85.37, NES	0.774	1.572	5.156	9.976

HS Code	Description	2001	2002	2003	2004
854221	MONOLITHIC INTEGRATED CIRCUITS – DIGITAL	0.000	12.791	2.105	1.928
854229	MONOLITHIC INTEGRATED CIRCUITS – OTHER THAN DIGITAL	0.000	2.589	1.905	0.545
854260	HYBRID INTEGRATED CIRCUITS	0.000	1.840	0.003	0.019
854389	ELECTRICAL MACHINES AND APPARATUS NES	3.363	3.635	2.618	1.660
854390	PARTS OF ELECTRICAL MACHINES & APPARATUS HAVG INDIVIDUAL FUNCTIONS, NES	0.073	0.041	0.688	1.055
854441	ELECTRIC CONDUCTORS, FOR A VOLTAGE NOT EXCEEDG 80 V, FITTD W CONNECTORS	1.437	1.847	2.325	3.071
854449	ELECTRIC CONDUCTORS, <= 80 V, NES	3.329	0.139	1.206	3.675
854459	ELECTRIC CONDUCTORS, > 80V BUT <= 1,000 V, NES	0.483	0.627	1.218	1.136
854460	ELECTRIC CONDUCTORS, > 1,000 V, NES	2.265	1.509	1.371	0.602

Shipments of electrical machinery accounted for Alberta's fifth-largest export category from 2002 to 2004, with approximately one-quarter of total exports going to non-FTA countries. Chapter 85 product categories are numerous, with exports shipped to a large number of different countries. The major product categories from 2002 to 2004 were parts for telephone lines (HS 851790), telephone sets (HS 851719), and parts for radio, television, and radar equipment (HS 852990). The *Information Technology Agreement* has reduced many countries' tariffs for numerous products in this chapter to 0%. Despite these 0% tariffs, exports have fallen significantly in both telephone line parts and telephone sets, with exports to the EU, Taiwan, and Hong Kong (all major importers) reduced to a fraction of the value of earlier years. In comparison, exports from the parts for radio and television category (HS 852990), one of the largest product groups to non-FTA countries, have remained relatively constant, and the reduction of tariffs in this category, particularly to China (0 – 15%) and Brazil (35%), would be beneficial for Alberta. Even with the ITA, some high tariffs remain in several product categories in Chapter 85, and Alberta would also benefit from their reduction or removal.

HS Chapter 86 – Railway Equipment

Table 85. Bound Tariff Summary: Chapter 86 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
860900	CARGO CONTAINERS DESIGND TO BE CARRID BY ONE O MORE MODES OF TRANSPORT	Russia	n.a.	0.007	1.439	0.009
		Kazakhstan	n.a.	0.000	0.591	0.000
		EU 15	0.0%	0.679	0.015	0.000
		EU 25	0.0%	0.679	0.015	0.000

Table 86. Chapter 86 Export Values to Non-FTA Countries, 2002– 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
860900	CARGO CONTAINERS DESIGND TO BE CARRID BY ONE O MORE MODES OF TRANSPORT	0.000	0.703	2.675	0.026

HS Chapter 87 – Vehicles, Not Railway

Table 87. Bound Tariff Summary: Chapter 87 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
870120	ROAD TRACTORS FOR SEMI-TRAILERS (TRUCK TRACTORS)	Russia	n.a.	3.153	0.000	0.000
		India	40.0%	0.503	0.000	0.000
870130	TRACK-LAYING TRACTORS (CRAWLERS)	Russia	n.a.	0.000	0.000	2.649
870190	WHEELED TRACTORS NES	EU 25	0 – 7%	0.080	0.000	0.689
		EU 15	0 – 7%	0.080	0.000	0.087
		South Africa	10.0%	0.579	0.000	0.000
870310	SNOWMOBILES, GOLF CARS AND SIMILAR VEHICLES	EU 15	10.0%	0.000	0.000	0.516
		EU 25	10.0%	0.003	0.002	0.516
870321	MOTOR VEHICLES W SPARK IGNITION, CYLINDER CAPACITY ≤ 1000 CC	EU 15	10.0%	0.916	2.561	4.359
		EU 25	10.0%	0.916	2.585	4.359
870324	MOTOR VEHICLES W SPARK IGNITION, CYLINDER CAPACITY > 3000 CC	EU 25	10.0%	0.289	1.345	0.504
		EU 15	10.0%	0.220	1.215	0.299
		Norway	5.3%	0.046	1.128	0.061
		Japan	0.0%	0.349	1.055	0.000
870410	DUMP TRUCKS DESIGNED FOR OFF-HIGHWAY USE	Cuba	n.a.	0.000	0.000	0.735
870422	DIESEL POWERD TRUCKS W A GVW EXC FIVE TONNES BUT NOT EXC TWENTY TONNES	EU 25	3.5 – 22%	0.000	0.647	0.000
		EU 15	3.5 – 22%	0.000	0.000	0.000
870431	GAS POWERED TRUCKS WITH A GVW NOT EXCEEDING FIVE TONNES	EU 25	3.5 – 22%	0.556	0.310	0.150
		EU 15	3.5 – 22%	0.507	0.273	0.150
		Norway	5.3%	0.000	1.160	0.000
870520	MOBILE DRILLING DERRICKS	Egypt	30.0%	0.000	0.000	2.535
		Libya	n.a.	0.000	0.115	1.165
		New Zealand	30.0%	0.000	0.000	1.163
		EU 15	3.7%	0.000	0.612	0.000
		EU 25	3.7%	0.000	0.612	0.000
		Peru	30.0%	1.320	0.000	0.000
870540	MOBILE CONCRETE MIXERS	Iran	n.a.	9.331	0.000	0.000
870590	SPECIAL PURPOSE MOTOR VEHICLES NES	Venezuela	35 – 40%	0.918	0.300	0.614
		Russia	n.a.	6.168	0.175	0.083
		China	9 – 12%	0.000	3.608	0.000
		India	40.0%	0.000	1.707	0.000
		Argentina	35.0%	0.000	0.836	0.000
		Oman	15.0%	0.000	0.665	0.000
		EU 15	3.7%	3.525	0.458	0.000
		EU 25	3.7%	3.525	0.458	0.000
		Kazakhstan	n.a.	0.757	0.000	0.000
		Ecuador	20 – 40%	0.607	0.179	0.000
870600	CHASSIS FITTD W ENGINES FOR THE VEHICLES OF HEADG NOS 87.01 TO 87.05	Argentina	35.0%	0.558	0.000	0.000
870870	WHEELS INCLUDING PARTS AND ACCESSORIES FOR MOTOR VEHICLES	Kuwait	100.0%	0.516	0.000	0.000

HS Code	Description	Market	Tariff	2002	2003	2004
870899	MOTOR VEHICLE PARTS NES	EU 25	3 – 4.5%	1.408	1.691	3.352
		EU 15	3 – 4.5%	1.406	1.680	3.234
		Cuba	5.0%	3.640	0.659	0.738
		Australia	0 – 25%	0.375	0.003	0.614
		Japan	0.0%	1.158	1.434	0.344
		Sudan	n.a.	0.901	0.804	0.087
		Yemen	n.a.	0.333	0.668	0.067
		Iran	n.a.	0.621	0.053	0.000
871500	BABY CARRIAGES AND PARTS THEREOF	EU 15	2.7%	1.310	0.008	0.102
		EU 25	2.7%	1.310	0.008	0.102
871631	TANKER TRAILERS AND SEMI-TRAILERS	Russia	n.a.	0.500	0.000	0.000
871640	TRAILERS AND SEMI-TRAILERS NES	Ecuador	20.0%	0.486	0.591	0.329
		EU 15	2.7%	1.343	0.885	0.003
		EU 25	2.7%	1.343	0.885	0.003
		Iran	n.a.	6.865	0.000	0.000

Table 88. Chapter 87 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
870120	ROAD TRACTORS FOR SEMI-TRAILERS (TRUCK TRACTORS)	1.827	3.656	0.190	0.151
870130	TRACK-LAYING TRACTORS (CRAWLERS)	0.285	0.337	0.096	2.649
870190	WHEELED TRACTORS NES	2.704	0.665	0.622	1.222
870310	SNOWMOBILES, GOLF CARS AND SIMILAR VEHICLES	0.003	0.070	0.201	0.674
870321	MOTOR VEHICLES W SPARK IGNITION, CYLINDER CAPACITY =< 1000 CC	0.037	0.931	2.595	4.449
870324	MOTOR VEHICLES W SPARK IGNITION, CYLINDER CAPACITY > 3000 CC	2.861	0.820	3.969	1.128
870410	DUMP TRUCKS DESIGNED FOR OFF-HIGHWAY USE	0.026	0.000	0.000	1.111
870422	DIESEL POWERD TRUCKS W A GVW EXC FIVE TONNES BUT NOT EXC TWENTY TONNES	0.376	0.186	0.960	0.024
870431	GAS POWERED TRUCKS WITH A GVW NOT EXCEEDING FIVE TONNES	0.944	0.951	2.098	0.276
870520	MOBILE DRILLING DERRICKS	2.010	1.320	0.750	4.864
870540	MOBILE CONCRETE MIXERS	0.501	9.734	0.506	0.400
870590	SPECIAL PURPOSE MOTOR VEHICLES NES	11.927	11.988	8.266	1.482
870600	CHASSIS FITTD W ENGINES FOR THE VEHICLES OF HEADG NOS 87.01 TO 87.05	0.000	0.831	0.000	0.369
870870	WHEELS INCLUDING PARTS AND ACCESSORIES FOR MOTOR VEHICLES	0.098	0.624	0.113	0.031
870899	MOTOR VEHICLE PARTS NES	4.705	9.515	6.060	5.798
871500	BABY CARRIAGES AND PARTS THEREOF	0.344	1.310	0.116	0.333
871631	TANKER TRAILERS AND SEMI-TRAILERS	0.889	0.694	0.044	0.000
871640	TRAILERS AND SEMI-TRAILERS NES	4.778	8.780	1.640	0.507

Of Alberta's \$253.5 million in 2004 Chapter 87 exports, \$31 million was shipped to non-FTA countries. Growing product categories include motorized vehicles with engines of 1000cc or less (HS 870321) and mobile drilling derricks (HS 870520). The EU, with a 10% tariff, was the major importer of motorized vehicles, while Egypt, with a 30% tariff, gained importance in mobile drilling derricks, importing \$2.5 million. Although total exports from this category fell from 2002 to 2004, the majority of the decline was the result of lower shipments to non-WTO members such as Russia and Iran.

Table 89. Bound Tariff Summary: Chapter 88 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
880211	HELICOPTERS OF AN UNLADEN WEIGHT NOT EXCEEDING 2,000 KG	New Zealand	5.0%	0.000	0.000	0.559
880212	HELICOPTERS OF AN UNLADEN WEIGHT EXCEEDING 2,000 KG	EU 15	0 – 2.7%	0.000	0.000	5.381
		EU 25	0 – 2.7%	0.000	0.000	5.381
		New Zealand	5.0%	1.870	0.000	0.000
880230	AIRCRAFT NES OF AN UNLADEN WEIGHT > 2,000 KG BUT NOT EXCEEDG 15,000 KG	Panama	10.0%	0.000	0.000	2.967
		Maldives	30.0%	0.000	0.000	2.693
		Myanmar	n.a.	0.000	0.000	1.646
		Indonesia	n.a.	0.000	2.100	0.000
880330	AIRCRAFT PARTS NES	EU 25	0 – 2.7%	1.719	4.203	30.915
		EU 15	0 – 2.7%	1.716	4.178	28.243
		Malaysia	5.0%	0.331	7.971	1.890
		Australia	1.0%	2.105	1.002	1.710
		Brazil	35.0%	0.000	4.901	1.162
		Russia	n.a.	0.000	0.101	0.539

Table 90. Chapter 88 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
880211	HELICOPTERS OF AN UNLADEN WEIGHT NOT EXCEEDING 2,000 KG	0.000	0.000	0.159	0.787
880212	HELICOPTERS OF AN UNLADEN WEIGHT EXCEEDING 2,000 KG	0.000	1.870	0.000	5.381
880230	AIRCRAFT NES OF AN UNLADEN WEIGHT > 2,000 KG BUT NOT EXCEEDG 15,000 KG	7.178	0.000	2.176	7.306
880330	AIRCRAFT PARTS NES	4.665	5.092	19.121	37.644

Total Chapter 88 exports grew from \$46 million in 2002 to \$120 million in 2004, with the share to non-FTA partners growing from 16% to 43%. The EU was the primary destination to account for the increase, with large imports of aircraft parts and helicopters. The EU imposes a 0 – 2.7% tariff in both categories, whereas tariffs can run as high as 35% in Brazil, 10% in Panama, and 5% in Malaysia. While Alberta does not have a domestic airplane production capacity, tariff reduction may facilitate the re-sale of aircraft, and enhance Alberta's aircraft parts exports.

HS Chapter 89 – Ships and Boats

Table 91. Bound Tariff Summary: Chapter 89 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
890399	ROWING BOATS, CANOES, SCULLS AND OTHER PLEASURE BOATS NES	Japan	0.0%	1.792	0.000	0.000

Table 92. Chapter 89 Export Values to Non-FTA Countries, 2002 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
890399	ROWING BOATS, CANOES, SCULLS AND OTHER PLEASURE BOATS NES	0.000	1.966	0.009	0.065

HS Chapter 90 – Optical and Medical Instruments

Table 93. Bound Tariff Summary: Chapter 90 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
900110	OPTICAL FIBERS, OPTICAL FIB BUNDLES & CABLES, OTHER THAN THOSE OF HEADG 85.44	EU 15	2.9%	0.991	0.002	0.005
		EU 25	2.9%	0.991	0.002	0.005
901180	MICROSCOPES, OPTICAL, NES	EU 15	6.7%	0.000	0.756	0.246
		EU 25	6.7%	0.000	0.756	0.246
901580	SURVEYG, HYDROGRAPHIC, OCEANOGRAPHIC, METEOROLOGIC, GEOPHYSICAL INSTRUMENTS, NES	China	5.0%	0.227	4.727	8.549
		Brazil	15 – 35%	0.127	3.865	6.449
		Singapore	n.a.	0.424	0.364	6.301
		EU 25	2.7 – 3.7%	10.285	4.156	4.464
		EU 15	2.7 – 3.7%	10.241	4.134	4.455
		Russia	n.a.	0.002	0.764	3.267
		U.A.Emirates	n.a.	1.176	5.120	3.125
		Venezuela	35 – 40%	0.351	0.659	2.874
		Iran	n.a.	0.567	0.000	1.897
		Indonesia	n.a.	0.000	0.014	1.355
		India	40.0%	0.000	1.482	1.205
		Pakistan	n.a.	0.005	0.000	0.668
		Australia	0 – 10%	0.395	2.019	0.629
		Cuba	n.a.	0.117	0.182	0.530
		Libya	n.a.	0.603	0.035	0.306
		Japan	0.0%	0.100	0.868	0.219
		Qatar	n.a.	0.614	0.000	0.090
		Colombia	35.0%	1.038	0.081	0.007
		South Africa	0.0%	1.990	0.000	0.007
		Norway	2.5 – 4%	0.633	1.351	0.000
		Hong Kong	n.a.	0.000	0.867	0.000
		Trin. & Tobago	n.a.	0.286	0.666	0.000
901590	PARTS AND ACCESSORIES FOR USE WITH THE APPARATUS OF HEADING NO 90.15	EU 25	2.7%	0.925	3.700	8.245
		EU 15	2.7%	0.849	3.699	8.209
		Norway	3 – 4%	1.980	5.741	6.394
		U.A.Emirates	n.a.	0.138	0.751	5.920

HS Code	Description	Market	Tariff	2002	2003	2004
	PARTS AND ACCESSORIES FOR USE WITH THE APPARATUS OF HEADING NO 90.15 (continued)	Australia	n.a.	0.173	0.846	5.539
		Singapore	10.0%	0.000	10.476	3.872
		Oman	15.0%	0.073	0.008	2.398
		Brazil	15 – 35%	0.139	4.771	2.234
		Azerbaijan	n.a.	0.000	0.000	1.595
		Venezuela	35 – 40%	0.081	0.075	1.382
		Argentina	35.0%	0.000	0.120	1.313
		Russia	n.a.	0.000	0.000	0.824
		India	40.0%	0.467	0.084	0.671
		Colombia	35.0%	0.866	0.000	0.015
		China	5.0%	2.055	0.047	0.000
		Bolivia	n.a.	0.089	0.917	0.000
		Peru	30.0%	12.295	0.000	0.000
901890	INSTRUMENTS AND APPLIANCES USED IN MEDICAL OR VETERINARY SCIENCES, NES	EU 25	0.0%	0.148	0.614	0.822
		EU 15	0.0%	0.148	0.614	0.817
901910	MECHANO-THERAPY APPLIANCES; MASSAGE OR PSYCHOLOGICAL APPARATUS	EU 25	0.0%	3.900	9.787	25.731
		EU 15	0.0%	3.695	9.384	22.417
		Norway	0.0%	0.624	0.840	0.981
		Russia	n.a.	0.126	0.271	0.955
		Switzerland	0.0%	0.000	0.271	0.649
		Australia	0.0%	0.079	0.216	0.616
902214	X-RAYS APPARATUS, MEDICAL/SURGICAL/ VETERINARY USE NES	China	4.0%	0.000	0.000	0.643
902300	INSTRUMENTS, APPARATUS AND MODELS, DESIGNED FOR DEMONSTRATIONAL PURPOSES	Korea, South	9.0%	0.000	1.672	0.000
902410	MACHINES & APPLIANCES FOR TESTING THE MECHANICAL PROPERTIES OF METALS	China	7.0%	0.000	0.011	2.139
902519	THERMOMETERS, NOT COMBINED WITH OTHER INSTRUMENTS, NES	China	8.4%	0.000	0.000	0.503
902590	PARTS AND ACCESSORIES FOR USE WITH THE APPARATUS OF HEADING NO 90.25	EU 25	0 – 3.2%	0.007	0.547	0.107
		EU 15	0 – 3.2%	0.007	0.502	0.094
902610	INSTRUMENTS & APPARATUS FOR MEASURING OR CHECKING THE FLOW OF LEVEL OF LIQUIDS	EU 25	0.0%	0.489	0.256	0.553
		EU 15	0.0%	0.462	0.254	0.553
902620	INSTRUMENTS AND APPARATUS FOR MEASURING OR CHECKING PRESSURE	China	0.0%	1.160	1.246	2.528
		EU 25	0.0%	1.031	0.779	0.675
		Hong Kong	0.0%	0.010	0.025	0.652
		EU 15	0.0%	1.011	0.490	0.621
		Kuwait	100.0%	0.023	1.487	0.005
902680	INSTRUMENTS & APPARATUS FOR MEASURING OR CHECKING VARIABLES OF LIQUIDS OR GASES, NES	Iran	n.a.	0.000	1.383	0.000
902690	PARTS OF INSTRUMENTS & APPARATUS FOR MEASURING OR CHECKING VARIABLES OF LIQUIDS OR GASES, NES	EU 25	0.0%	0.577	0.455	0.464
		EU 15	0.0%	0.565	0.443	0.452
902710	GAS OR SMOKE ANALYSIS APPARATUS	EU 25	2.5%	5.125	9.791	12.809
		EU 15	2.5%	5.122	9.784	12.795
		Saudi Arabia	n.a.	0.913	0.355	1.940
		China	7.0%	0.844	0.912	1.763
		Australia	0.0%	0.315	0.891	1.324

HS Code	Description	Market	Tariff	2002	2003	2004
	GAS OR SMOKE ANALYSIS APPARATUS (continued)	Singapore	0.0%	0.929	0.896	1.047
		Hong Kong	0.0%	0.475	0.504	1.043
		U.A.Emirates	15.0%	0.353	1.376	0.933
		Taiwan	0.0%	0.223	0.318	0.668
		Russia	n.a.	0.000	0.000	0.505
		India	25.0%	0.023	0.603	0.448
		Qatar	15.0%	0.748	0.531	0.125
		Iran	n.a.	0.149	1.014	0.058
902720	CHROMATOGRAPHS AND ELECTROPHORESIS INSTRUMENTS	Pakistan	n.a.	0.000	0.000	0.560
902730	SPECTROMETERS, SPECTROPHOTOMETERS& SPECTROGRAPHS USG OPTICAL RADIATIONS	EU 15	0.0%	1.883	2.172	3.460
		EU 25	0.0%	1.883	2.172	3.460
		Japan	0.0%	0.211	0.000	0.911
902780	INSTRUMENTS AND APPARATUS FOR PHYSICAL OR CHEMICAL ANALYSIS, NES	EU 25	0.0%	1.698	1.115	0.670
		EU 15	0.0%	1.698	1.114	0.661
		U.A.Emirates	n.a.	0.103	0.829	0.029
		Iran	n.a.	0.702	1.027	0.000
902790	MICROTOMES;PARTS&ACCESS OF INST&APP FOR PHYSICAL OR CHEM ANALYSIS,NES	EU 25	0 – 2.5%	1.624	1.584	2.161
		EU 15	0 – 2.5%	1.624	1.561	2.155
		Saudi Arabia	n.a.	0.109	0.075	1.156
903040	INSTRUMENTS & APPARATUS, SPECIALLY DESIGNED FOR TELECOMMUNICATIONS NES	EU 15	0.0%	0.212	0.106	0.679
		EU 25	0.0%	0.212	0.106	0.679
		China	0.0%	2.004	0.427	0.402
903082	INSTRUMENTS FOR CHECKING SEMICONDUCTOR WAFERS	Korea, South	0.0%	0.000	1.110	0.000
903089	INSTRUMENTS& APPARATUS FOR MEASURG OR CHECKG ELECTRICAL QUANTITIES NES	Korea, South	13.0%	0.125	1.691	0.072
903090	PARTS & ACCESS FOR INST & APP FOR MEAS OR CHECKG ELECTRICAL QUANTITIES	Russia	n.a.	0.040	0.000	0.633
		Ecuador	15.0%	0.000	0.000	0.533
		EU 25	0 – 2.5%	0.047	0.539	0.399
		EU 15	0 – 2.5%	0.047	0.539	0.272
		Malaysia	0 – 5%	0.032	0.550	0.168
903149	OPTICAL INSTRUMENTS AND APPLIANCES NES	EU 25	0.0%	0.500	0.016	0.093
		EU 15	0.0%	0.500	0.016	0.077
903180	MEASURING OR CHECKING INSTRUMENTS, APPLIANCES AND MACHINES, NES	EU 25	0 – 4%	1.065	2.895	2.765
		EU 15	0 – 4%	1.065	2.825	2.317
		Norway	2.5%	0.560	0.003	0.041
		Japan	0.0%	1.306	0.004	0.016
903190	PARTS & ACCESSORIES FOR MEASURING OR CHECKING INST,APPL & MACHINES,NES	EU 25	0 – 2.8%	0.462	0.756	2.774
		EU 15	0 – 2.8%	0.462	0.719	2.645
		Singapore	0.0%	0.001	0.010	0.767
903289	AUTOMATIC REGULATING OR CONTROLLING INSTRUMENTS AND APPARATUS, NES	Sudan	n.a.	0.013	2.032	8.178
		EU 25	0 – 2.8%	1.222	1.089	4.872
		EU 15	0 – 2.8%	1.175	1.058	4.783
		Korea, South	8.0%	0.003	0.166	2.904
		Saudi Arabia	n.a.	0.241	0.390	2.051
		Chad	80.0%	0.000	0.474	0.921
		Pakistan	n.a.	0.000	0.000	0.644
		Russia	n.a.	4.854	0.277	0.546
		Japan	0.0%	0.639	0.022	0.116

Table 94. Chapter 90 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
900110	OPTICAL FIBERS, OPTICAL FIB BUNDLE S & CABLES, OTHER THAN THOSE OF HEADG 85.44	0.240	0.992	0.002	0.015
901180	MICROSCOPES, OPTICAL, NES	0.001	0.024	1.010	0.247
901580	SURVEYG, HYDROGRAPHIC, OCEANOGRAPHIC, METEOROLOGIC, GEOPHYSICAL INSTRUMENTS, NES	29.382	20.646	28.067	43.942
901590	PARTS AND ACCESSORIES FOR USE WITH THE APPARATUS OF HEADING NO 90.15	10.877	19.648	28.792	42.662
901890	INSTRUMENTS AND APPLIANCES USED IN MEDICAL OR VETERINARY SCIENCES, NES	0.138	0.387	0.855	1.096
901910	MECHANO-THERAPY APPLIANCES;MASSAGE OR PSYCHOLOGICL APTITUDE-TESTG APPARATUS	2.165	4.730	11.434	29.079
902214	X-RAYS APPARATUS, MEDICAL/SURGICAL/VETERINARY USE NES	0.000	0.000	0.077	1.206
902300	INSTRUMENTS,APPARATUS AND MODELS,DESIGNED FOR DEMONSTRATIONAL PURPOSES	0.224	0.424	1.709	0.309
902410	MACHINES & APPLIANCES FOR TESTING THE MECHANICAL PROPERTIES OF METALS	0.000	0.073	0.140	2.242
902519	THERMOMETERS, NOT COMBINED WITH OTHER INSTRUMENTS, NES	0.394	0.184	0.253	0.665
902590	PARTS AND ACCESSORIES FOR USE WITH THE APPARATUS OF HEADING NO 90.25	0.019	0.020	0.602	0.416
902610	INSTRUMENTS & APPARATUS FOR MEASURG OR CHECKG THE FLOW OR LEVEL OF LIQUIDS	1.010	1.363	0.883	2.007
902620	INSTRUMENTS AND APPARATUS FOR MEASURING OR CHECKING PRESSURE	3.157	3.692	5.431	6.888
902680	INSTRUMENTS & APPARATUS FOR MEASURG OR CHECKG VARIABLES OF LIQUIDS OR GASES, NES	0.397	1.112	2.839	1.684
902690	PARTS OF INSTTRUMENTS & APPARATUS FOR MEASURG OR CHECKG VARIABLES OF LIQUIDS OR GASES, NES	0.854	1.535	1.456	1.500
902710	GAS OR SMOKE ANALYSIS APPARATUS	15.187	12.211	19.828	26.002
902720	CHROMATOGRAPHS AND ELECTROPHORESIS INSTRUMENTS	0.196	0.396	0.125	1.052
902730	SPECTROMETERS, SPECTROPHOTOMETERS &SPECTROGRAPHS USG OPTICAL RADIATIONS	2.538	2.702	2.383	4.544
902780	INSTRUMENTS AND APPARATUS FOR PHYSICAL OR CHEMICAL ANALYSIS, NES	2.461	3.178	3.980	2.645
902790	MICROTOMES;PARTS&ACCESS OF INST&APP FOR PHYSICAL OR CHEM ANALYSIS,NES	3.086	3.282	3.012	5.072
903040	INSTRUMENTS & APPARATUS, SPECIALLY DESIGNED FOR TELECOMMUNICATIONS NES	1.454	2.413	0.594	2.154
903082	INSTRUMENTS FOR CHECKING SEMICONDUCTOR WAFERS	0.000	0.000	1.110	0.004
903089	INSTRUMENTS&APPARATUS FOR MEASURG OR CHECKG ELECTRICAL QUANTITIES NES	0.183	0.717	1.903	0.926
903090	PARTS & ACCESS FOR INST & APP FOR MEAS OR CHECKG ELECTRICAL QUANTITIES	0.497	0.194	1.222	3.189
903149	OPTICAL INSTRUMENTS AND APPLIANCES NES	0.663	0.506	0.045	0.195
903180	MEASURING OR CHECKING INSTRUMENTS, APPLIANCES AND MACHINES, NES	4.154	3.779	3.862	5.515
903190	PARTS & ACCESSORIES FOR MEASURING OR CHECKING INST,APPL & MACHINES,NES	2.190	0.932	0.943	3.850
903289	AUTOMATIC REGULATING OR CONTROLLING INSTRUMENTS AND APPARATUS, NES	2.697	8.169	6.337	22.392

Optical and medical instruments are a growing export category for Alberta, with shipments rising from \$373 million in 2002 to \$505 million in 2004. Much of the growth has been in exports to non-FTA countries, which realized an increase in share of total optical and medical instrument exports from 26% to 44%. Relatively low tariffs to the EU likely fuelled a large share of the increase, but numerous other non-FTA countries also realized significant import increases over previous years. Tariff rates fluctuate widely among countries, but Brazil, South Korea, Singapore, China, Venezuela, and Norway are among the countries with increasing export values and relatively high tariffs. Thus, they could be the first countries to target for tariff reduction.

HS Chapter 93 – Arms and Ammunition

Table 95. Bound Tariff Summary: Chapter 93 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
930591	PARTS AND ACCESSORIES OF MILITARY WEAPONS	EU 15	0.0%	0.000	0.845	0.026
		EU 25	0.0%	0.000	0.845	0.026

**Table 96. Chapter 93 Export Values to Non-FTA Countries
2001 – 2004, \$ millions – Selected Products**

HS Code	Description	2001	2002	2003	2004
930591	PARTS AND ACCESSORIES OF MILITARY WEAPONS	0.000	0.000	0.845	0.026

HS Chapter 94 – Furniture and Bedding

Table 97. Bound Tariff Summary: Chapter 94 – Selected Markets, 2002 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
940310	OFFICE FURNITURE, METAL, NES	EU 25	0.0%	1.457	0.266	1.770
		EU 15	0.0%	1.422	0.266	1.745
940330	OFFICE FURNITURE, WOODEN, NES	EU 25	0.0%	0.074	0.131	1.022
		China	0.0%	0.016	0.079	0.745
		EU 15	0.0%	0.070	0.131	0.683
		India	n.a.	0.000	0.000	0.594
940429	MATTRESSES FITTD W SPRINGS/STUFFD/INTERNALLY FITTD W/ANY MATERIAL	Japan	3.8%	0.063	0.378	1.306
940600	PREFABRICATED BUILDINGS	Algeria	n.a.	4.573	0.944	5.750
		Bahrain	35.0%	0.460	2.365	3.061
		Iraq	n.a.	0.000	0.000	1.539
		Kazakhstan	n.a.	0.000	0.061	1.071
		EU 15	2.7%	0.257	0.387	0.587
		EU 25	2.7%	0.257	0.387	0.587
		Japan	0.0%	1.633	0.318	0.530
		Korea, South	13.0%	1.287	0.899	0.242
		Libya	n.a.	0.024	1.180	0.036
		Australia	15.0%	0.243	0.810	0.013
		Kyrgyzstan	10.0%	0.000	0.783	0.000
		Kuwait	100.0%	1.568	0.000	0.000
		India	n.a.	1.485	0.000	0.000
		Singapore	n.a.	0.674	0.000	0.000
		Turkmenistan	n.a.	0.633	0.000	0.000

Table 98. Chapter 94 Export Values to Non-FTA Countries, 2002 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
940310	OFFICE FURNITURE, METAL, NES	5.141	2.808	0.764	3.538
940330	OFFICE FURNITURE, WOODEN, NES	2.885	1.513	0.474	3.056
940429	MATTRESSES FITTD W SPRINGS/STUFFD/INTERNALLY FITTD W/ANY MATERIAL	0.241	0.132	0.634	1.376
940600	PREFABRICATED BUILDINGS	7.468	13.816	9.460	14.306

Alberta's exports of furniture and bedding, which are included in Chapter 94, are mainly comprised of prefabricated buildings and metal furniture for office use. Less than 10% of Alberta's total furniture and bedding exports are to non-FTA countries. Algeria and Bahrain imported more goods in 2004 than in 2002, while Japan and South Korea are amongst the countries whose values have decreased over the period. Reduction of high tariffs to Bahrain (35%) and South Korea (13%) may be beneficial for growth in Alberta's Chapter 94 exports.

HS Chapter 95 & 97 – Toys and Sports Equipment; Art and Antiques

Table 99. Bound Tariff Summary: Chapter 95 & 97 – Selected Markets, 2001 – 2004, Export Values – \$ millions

HS Code	Description	Market	Tariff	2002	2003	2004
950320	REDUCED-SIZE (SCALE) MODEL ASSY KITS	Saudi Arabia	n.a.	0.000	3.181	0.000
970110	PAINTGS,DRAWGS&PASTELS	EU 15	0.0%	0.118	1.930	0.214
		EU 25	0.0%	0.118	1.930	0.214

Table 100. Chapter 95 & 97 Export Values to Non-FTA Countries, 2001 – 2004, \$ millions – Selected Products

HS Code	Description	2001	2002	2003	2004
950320	REDUCED-SIZE (SCALE) MODEL ASSY KITS	0.234	0.006	3.191	0.267
970110	PAINTGS,DRAWGS&PASTELS	0.082	0.131	1.949	0.311

Export Highlights

Alberta's total exports have increased by more than 36% over the past three-year period, from \$49.3 billion in 2002 to \$67.4 billion in 2004. Exports have more than doubled in only the past six years, as total exports from Alberta were only \$31.2 billion in 1998.

The United States remains Alberta's largest export destination, accounting for more than 88% of total exports from 2002 to 2004. Exports to FTA countries as a whole, which includes the United States, Mexico, Chile, Costa Rica, and Israel, remained at approximately 89% of total exports over the period. Exports to non-FTA countries increased from \$5.4 billion to \$7.1 billion over the three-year period, with their relative percentage of total exports declining marginally from 11.0% to 10.6%.

The top five non-FTA trading partners for Alberta from 2002 to 2004 were Japan, China, the EU, South Korea, and Taiwan. In 2004 alone, China became the top non-FTA export destination for Alberta's goods for the first time, accounting for more than \$1.7 billion in trade. Exports to China increased by 132% from 2002 when exports were \$0.76 billion.

Among Alberta's top ten non-FTA trading partners, large increases were also noted from 2002 to 2004 for the EU, Australia, and Singapore, where export values rose by 38.9%, 87.8%, and 35.2%, respectively. South Korea and Taiwan were the only two countries among the top ten non-FTA trading partners that imported fewer goods in dollar terms in 2004 than in 2002. Exports to South Korea decreased by 2.2% while exports to Taiwan fell by 30.7%.

Alberta's dominant export category continued to be Mineral Fuel & Oil (HS 27), accounting for 67.1% of total exports over the three-year period. The second-largest export category was Plastics (HS 39), accounting for 3.3% of total exports. Other categories in the top ten in 2004 included Organic Chemicals (HS 29), Machinery (HS 84), Meat (HS 02), Wood (HS 44), Electrical Machinery (HS 85), Wood Pulp (HS 47), Cereals (HS 10), and Nickel (HS 75).

Among the top ten export categories, only two (Mineral Fuel & Oil and Wood), had more than 90% of their export value destined for FTA countries. The eight categories for which exports to non-FTA countries exceeded 10% of total category exports realized the following changes:

- Plastics (HS 39) – non-FTA share fell from 12.6% in 2002 to 8.9% in 2004;
- Organic Chemicals (HS 29) – non-FTA share increased from 20.8% in 2002 to 48.6% in 2004;
- Machinery (HS 84) – non-FTA share increased from 37.6% in 2002 to 42.3% in 2004;
- Meat (HS 02) – non-FTA share fell from 18.5% in 2002 to 17.1% in 2004;
- Electrical Machinery (HS 85) – non-FTA share increased from 21.5% in 2002 to 23.4% in 2004;
- Wood Pulp (HS 47) – non-FTA share fell from 58.4% in 2002 to 56.6% in 2004;
- Cereals (HS 10) – non-FTA share increased from 76.3% in 2002 to 87.8% in 2004;
- Nickel (HS 75) – non-FTA share increased from 94.2% in 2002 to 96.6% in 2004.
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The export value of Plastics (HS 39) from Alberta to non-FTA countries increased from \$169.7 million in 2002 to \$221.0 million in 2004 despite the declining share of these exports relative to total plastic exports. Polymers of ethylene and low-density polyethylene were the two dominant product categories. Some export destinations, such as Taiwan and Japan, imposed low tariffs of 2.5% and 2.8%, respectively, when compared to other countries. Tariffs to Indonesia (40%), Malaysia (30%), Brazil (20%), Australia (10%), New Zealand (10%), the EU (6.5%) and China (6.5%) should be considered for reduction during trade negotiations.

Alberta's exports of Organic Chemicals (HS 29) to non-FTA countries have increased from \$299 million in 2002 to \$1.05 billion in 2004 due to high levels of exports of ethylene glycol to Asia. Indonesia's 40% tariff on ethylene glycol is significantly higher than the 5.5% tariff imposed by China, Japan, and South Korea. The growth of Organic Chemical exports from Alberta should influence tariff reduction to all four countries.

Exports of Machinery (HS 84) and Electrical Machinery (HS 85) include a large number of product categories to numerous destinations. Export values to non-FTA countries for Machinery reached \$844 million in 2004 from \$653 million in 2002; Electrical

Machinery export values fell to \$337 million in 2004 from \$460 million in 2002. Some trade destinations, such as the EU, have assigned low tariffs to many products in both categories. Other destinations impose relatively high tariffs, with tariffs for some major product categories reaching as high as 100% in Kuwait, 35 – 40% in Venezuela, 35% in Brazil, 15% in the United Arab Emirates, and 10% in China, Australia, and Singapore. Reduction of tariffs to these countries will benefit major export products in the Machinery and Electrical Machinery categories.

The value of total Meat (HS 02) exports to non-FTA countries did not change significantly from 2002 to 2004, as exports fell from \$352 million to \$334 million. The composition of exports, however, did change significantly, with increased values of lower-tariff pork exports offsetting decreased exports of beef products. Most beef products face high tariffs in Taiwan (NT \$10/kg), Japan (50%), and South Korea (40%), which historically have been the primary non-FTA destinations of Alberta's beef exports. Reduction of these tariffs should be considered a priority to facilitate the return to former large beef export values.

Exports of Wood Pulp (HS 47) from Alberta to non-FTA countries decreased from \$742 million in 2002 to \$705 million in 2004. Chemical and semi-chemical wood pulp products were the primary export products, and major export destinations included Japan, Taiwan, the EU, China, South Korea, and Australia. None of these countries impose tariffs on wood pulp products. Smaller export destinations include Indonesia (40% tariff), Nepal (20%), India (25%) and the Philippines (10%), all of which could be targeted for tariff reduction during trade negotiations.

The value of Cereal (HS 10) exports to non-FTA countries increased from \$660 million in 2002 to \$944 million in 2004. Durum and non-durum wheat were the two main product categories with exports to dozens of countries. Cereal exports face high tariffs, as evidenced by the high tariffs to Alberta's major non-FTA trading partners: the EU (€ 95 – 148/t), Japan (55 ¥/kg), Nigeria (150%), Colombia (124%), Venezuela (117%), Guatemala (106%), Jamaica (100%), Tunisia (80%), China (65%), Morocco (34 – 170%), the Philippines (30%), Peru (30 – 68%), and Indonesia (27%). Given the large and increasing value of cereal products to non-FTA countries, tariff reduction of these products should be considered a priority.

Alberta's exports of Nickel (HS 75) to non-FTA countries account for approximately 95% of Alberta's total nickel exports. Nickel export values to non-FTA countries increased from 2002 to 2004 from \$275 million to \$559 million. The EU, which does not assign a tariff to Alberta's nickel exports, was the major export destination. Other major export destinations, including Japan (44 ¥/kg tariff), South Korea (5.0%), China (3%), and Singapore (10%) should be targeted for tariff reduction during trade negotiations.