INDUSTRY **Profile**

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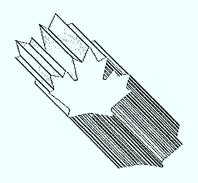
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> Industry, Science and Technology Canada

Industrie, Sciences et Technologie Canada

Specialty Vehicles

Canada



INDUSTRY

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SPECIALTY VEHICLES

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1988

FOREWORD

In a rapidly changing global trade environment, the international competitiveness of Canadian industry is the key to survival and growth. This Industry Profile is one of a series of papers which assess, in a summary form, the current competitiveness of Canada's industrial sectors, taking into account technological and other key factors, and changes anticipated under the Canada-U.S. Free Trade Agreement. Industry participants were consulted in the preparation of the papers.

The series is being published as steps are being taken to create the new Department of Industry, Science and Technology from the consolidation of the Department of Regional Industrial Expansion and the Ministry of State for Science and Technology. It is my intention that the series will be updated on a regular basis and continue to be a product of the new department. I sincerely hope that these profiles will be informative to those interested in Canadian industrial development and serve as a basis for discussion of industrial trends, prospects and strategic directions.

Alebut de latret

Minister

Canada

Introduction

In broad terms, the automotive industry in Canada includes the manufacturers of motor vehicles (passenger cars, trucks, buses and specialty vehicles), motor vehicle parts and tires and tubes for use as original equipment in the assembly of motor vehicles as well as in the aftermarket. Automotive production is directly linked to many other key industries in Canada: iron and steel, fabricated metals, aluminum alloys, rubber, plastics, textiles, glass and chemicals.

II.

In 1986, this wide range of automotive activities accounted for some 16 percent of total Canadian shipments of manufactured products, and approximately 44 percent of the total of manufactured exports (fabricated materials and end products) to the United States. In 1986, automotive shipments reached almost \$41 billion*, composed of \$25.1 billion in automobile, truck and bus assembly, \$12.2 billion in parts, \$1.8 billion* in specialty vehicles and in excess of \$1.8 billion* in tires and tubes. In the same year, total employment reached some 148 800* persons with 49 800 engaged in automobile, truck and bus assembly, 16 600* in specialty vehicle production, 68 400 in parts production and 14 000* in the manufacture of tires and tubes.

In addition to specialty vehicles, profiles have been prepared covering:

- Automotive Parts
- Automotive Tires and Tubes
- Buses
- Light Motor Vehicles
- On- and Off-highway Medium/Heavy-duty Trucks

1. Structure and Performance

Structure

The specialty vehicles industry consists of the manufacturers of a variety of products used in the transportation of goods and people in emergency and public services and in the recreational field. Much of the equipment produced is used in the essential operation and maintenance of airports, roads and highways, fire protection, ambulance services, public utilities and transportation in the country's remote areas. The major sub-sectors covered in this profile include truck bodies and trailers, airport mobile equipment, municipal vehicles, all-terrain tracked and wheeled vehicles and snowmobiles.

Total shipments by the specialty vehicles industry in 1986 were estimated at approximately \$1.8 billion. Direct employment is approximately 17 000 spread over 400 establishments, of which 32 percent are located in Ontario, 29 percent in Quebec, 36 percent in the western provinces and three percent in the Atlantic provinces. With exports accounting for only about 15 percent of total shipments, production is largely geared to the requirements of the domestic market. Imports, consisting largely of truck bodies and commercial and recreational trailers, represent about nine percent of the total domestic marke**DEPARTMENT OF** REGIONAL

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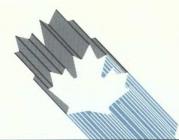
* ISTC estimate

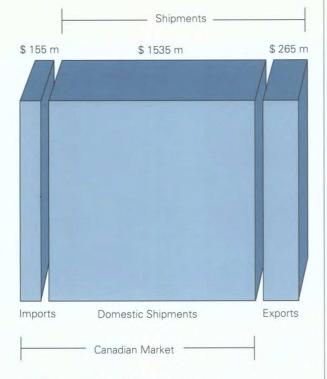
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Imports, Exports and Domestic Shipments 1986

The industry consists mainly of small establishments, with only 10 percent, or some 40 plants, employing more than 100 people. About 15 percent of the companies are foreign owned and account for approximately 25 percent of total shipments. There are large firms throughout all of the sub-sectors, though there is more concentration in the commercial trailer group.

The truck body and trailer group is the largest sub-sector. In 1986, shipments totalled approximately \$1.1 billion, of which \$90 million were exported. Employment in the sub-sector is 11 500 in 291 establishments. Transport Canada records show some 400 additional truck body and trailer manufacturers in Canada. However, since most of these firms are very small or are not primarily engaged in the manufacture of truck bodies and trailers, they are not included in the product category as defined by Statistics Canada, as their impact on the group's employment and total value of shipments is insignificant.

Manufacturers in this sub-sector include producers of truck, van and bus bodies, commercial and recreational trailers and mobile homes. Types of truck bodies produced include dump, stake, grain and cattle, van, school bus, tank, utility and service. These bodies are mounted on truck chassis built by truck manufacturers. Manufacturers of truck and school bus bodies are the only group which operate under the provisions of the Canada-U.S. Automotive Products Trade Agreement (Auto Pact). Commercial trailers can be grouped into the following categories: stake or platform, van, lowbed, logging, tank and dump. Recreational (noncommercial) trailers comprise travel trailers, tent trailers, motor homes, truck campers and 5th-wheel trailers. Mobile homes are designed as portable structures built on chassis, to be used with or without permanent foundations and utilities.

The airport mobile equipment sub-sector consists of about 40 companies with shipments estimated at \$100 million, and exports of more than \$50 million annually. The sub-sector produces a variety of vehicles used in aircraft or airport servicing and maintenance; in crash, fire and rescue operations; in runway snowblowing and sweeping; in aircraft refuelling and de-icing; and in passenger, cargo and baggage handling. Although relatively small, this sub-sector is actively involved in seeking new export opportunities.

Vehicles used principally in municipal service are produced by 57 companies, with total shipments of approximately \$200 million. Products in this subsector include fire trucks, aerial ladders, garbage trucks, snow-clearing equipment, salt or sand spreaders, street sweepers and utility vehicles with aerial devices (for power and telephone maintenance). Exports, limited to fire trucks and utility vehicles, average about \$25 million annually.

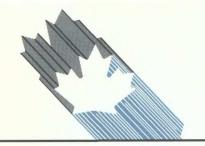
There are 14 manufacturers of all-terrain vehicles and one producer of snowmobiles in Canada. The all-terrain vehicles are designed and built to meet difficult off-road transportation requirements which conventional vehicles would have trouble satisfying. Both tracked and wheeled vehicles are produced in a wide range of sizes, from small two-person recreational units to heavy-duty vehicles with a capacity of 70 tonnes. Total shipments in this subsector are estimated at about \$190 million, of which nearly \$100 million are exported.

Performance

The specialty vehicle industry serves a mature market characterized by slow growth. Its performance is closely related to that of the Canadian economy and the corresponding requirement for transportation equipment.

There is no significant difference in performance among the industry's main sub-sectors, except for the recreational vehicle group, which is particularly sensitive to economic conditions having to do with changes in consumer spending, energy pricing and interest rates.

Shipments of specialty vehicles have had an average annual growth rate in real terms of 2.5 percent over the last 10 years. Both shipments and levels of employment made exceptional gains in 1986. This came from increased activity in the transportation of goods which, in turn, resulted from the overall increase in economic activity.



2. Strengths and Weaknesses

Structural Factors

Truck Bodies and Trailers

By North American standards, the size of most companies in this sub-sector is relatively small. In general, the industry is regional and responds to local market requirements. Rationalization on a North American basis is rare. The cost of entry for truck bodies and recreational vehicles is low. The technological sophistication required for the product and its production, which basically consists of simple assembly operations, is minimal.

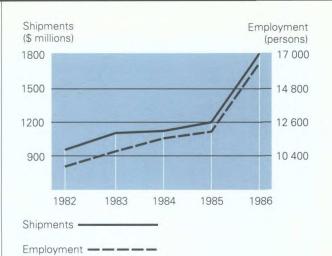
The competitiveness of Canadian producers in relation to their U.S. counterparts is influenced by the scale of operations, labour, material, and component and transportation costs. In many cases, these costs are higher in Canada than in the United States. Overall, the ability of Canadian manufacturers to compete in the domestic market is attributable to the customized nature of products, Canadian tariffs and regional distribution of smaller companies serving local markets. Competitiveness is increased by productivity and product improvements such as the Alforge Process for welding aluminum, and improved aerodynamic truck bodies and truck body designs built in "kit" form from lightweight materials. With the exception of some specialized trailers and school buses, the sub-sector is not competitive in export markets.

Municipal Vehicles

The majority of establishments in this sub-sector are medium sized, serving local markets and using general, standard technology in the production of their products. Regionalization of the industry has been influenced by municipal and provincial purchasing practices favouring local companies. Garbage trucks, the largest group in the sub-sector, are built in three main configurations — front, side and rear-end loading. The compactor unit designs for the front and side loaders are entirely Canadianbuilt, whereas the rear-end loaders are built mainly under licence or royalty, using U.S. designs. The purchase of garbage trucks, principally by municipalities, has recently been declining in favour of private waste-management contractors.

The fire truck group is largely a custom market, controlled by the fire chiefs in cities and municipalities. The capacity to meet custom-design requirements has permitted Canadian manufacturers to offset their cost disadvantage vis-à-vis U.S. manufacturers.

There is only one Canadian company building its own aerial ladder and fire pump units. All other Canadian manufacturers are using U.S.- and European-built pumps and ladders.



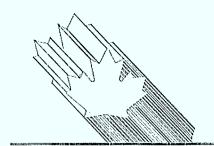
Total Shipments and Employment

Canadian-built snow-clearing equipment and utility vehicles are mainly for Canadian use, with only limited sales of these products to the United States.

Airport Equipment and All-terrain Vehicles

This sub-sector produces technologically advanced products used in the essential services to the air transportation system, and for difficult off-road transportation requirements. The establishments, mostly medium sized, are characterized by short-run manufacturing operations. The products they supply range from crash, fire and rescue vehicles, to 70-tonne payload capacity, heavy-duty, all-terrain vehicles, priced in excess of \$250 000 each, to small recreational all-terrain units and snowmobiles valued at less than \$10 000 each. In general, the industry is internationally competitive, as manufacturers of these products must seek export business to maintain production-utilization rates. Exports, mainly to the United States, account for about 50 percent of total sub-sector shipments.

With the development of new Canadian products and the improved competitive position of the industry, a move towards import replacement of airport equipment by the major Canadian airlines and Transport Canada is expected to continue in the future. Canadian firms producing airport vehicles, all-terrain vehicles and snowmobiles have been, and will continue to be, active in product development and innovation. Canadian technology and expertise in building airport snow-clearing and all-terrain vehicles for use in the most difficult terrain conditions, are recognized worldwide and are the main contributing factors to the sub-sector's international competitiveness.



SPECIALTY VEHICLES

Trade-related Factors

AS OF JANUARY 1, 1988, THE FOLLOWING TARIFFS APPLIED TO KEY PRODUCTS IN THE INDUSTRY:

:	Canada	U.S.	E.C.	Japan
	%	%	%	%
Truck bodies All-terrain vehicles Fire trucks,	9.2 9.2	Free 2.5	6.9 17.0	3.0 Free
airport crash, fire and rescue vehicles	10.2	5.3	6.2	5.7
Trailers	15.0	3.2	5.3	5.7
Snowmobiles	Free	2.5	17.0	3.0

The existing non-tariff barriers (NTBs) affecting the airport vehicle group are the "Buy America" and small business set-aside practices in the United States at the federal level.

Truck and school bus body manufacturers operate under the Auto Pact and import certain components duty free, largely from the United States, such as refrigeration units, hydraulic tail-gates, pumps, cylinders, door hardware, etc.

In Canada, recreational vehicles are built to meet Canadian Standards Association (CSA) standards, even though these are not mandatory in all provinces except in the western provinces. Consequently, Canadian producers of recreational vehicles could be at a competitive disadvantage against imports which have not been CSA certified.

Under the Canada-U.S. Free Trade Agreement (FTA), bilateral tariffs on vehicles and original equipment parts will be phased out over 10 years and aftermarket parts over five years. The Canadian provisions of the Auto Pact remain unchanged, although only those companies listed in the FTA will be able to participate.

Companies participating in Canada must continue to meet current Auto Pact performance requirements to retain eligibility for duty-free imports from third countries after bilateral tariffs are phased out. Under the FTA, vehicles and parts exported to the United States will be required to meet a new 50-percent North American rule of origin which is higher than the current U.S. Auto Pact requirements.

Under the FTA, Canada has also agreed to phase out the prohibition on the entry of used and second-hand vehicles from the United States over a five-year period.

Technological Factors

Although Canadian commercial trailer manufacturers are generally lagging behind their U.S. competitors in automated production technology, some companies are now adopting the use of computer-assisted design (CAD), computeraided manufacturing (CAM) and other automated manufacturing and information-processing equipment. However, due to the high cost of such equipment, its introduction is limited to larger companies with the necessary financial resources.

3. Evolving Environment

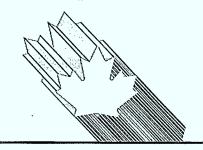
The market for specialty vehicles depends on the general state of the economy and is expected to show a moderate to slow annual growth in real terms over the next five to 10 years. Specialty vehicles is a mature industry which will continue to rely principally on domestic demand, which is not anticipated to change significantly in the future.

The impact of the FTA on Canadian manufacturers of airport vehicles, all-terrain vehicles and snowmobiles is expected to be positive, because it will provide greater access to the United States. Some companies in the truck body and trailer group will have to adjust over the next three to five years if imports from the United States increase as bilateral tariffs drop.

4. Competitiveness Assessment

Most of the companies in the specialty vehicles industry have a domestic and regional focus and do not compete in export markets because of small scale, marginal financial resources and limited research and development capabilities. The removal of Canada-U.S. tariffs will result in increased competition, but the impact is expected to be limited because of the structure of the industry in both Canada and the United States.



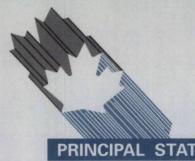


Producers of airport and all-terrain vehicles are technologically advanced, with sophisticated manufacturing facilities and processes and will continue to exploit export opportunities. Canadian-built airport crash trucks, aircraft refuellers, airport snowblowers and runway sweepers, ambulances, all-terrain vehicles and snowmobiles are some of the products which will continue to be internationally competitive.

The FTA is expected to create opportunities for the more competitive sub-sectors by providing manufacturers of these products with improved access to the large U.S. market. Elimination of tariffs will, however, increase competitive pressures on the other sub-sectors. For further information concerning the subject matter contained in this profile, contact:

Surface Transportation and Machinery Branch Industry, Science and Technology Canada Attention: Specialty Vehicles 235 Queen Street Ottawa, Ontario K1A 0H5

(613) 954-3728

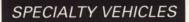


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SPECIALTY VEHICLES

		1973	1982	1983	1984	1985	1986
	Establishments	362	294	309	311	314	403
	Employment	14 000	10 200	10 700	11 250	12 000	16 660
	Shipments (\$ millions)	1 300	960	1 100	1 150	1 200	1 800
DE STAT	FISTICS						
		1973	1982	1983	1984	1985	1986
	Exports (\$ millions)	120	140	150	180	192	265
	Domestic shipments (\$ millions)	1 180	820	950	970	1 008	1 535
	Imports (\$ millions)	250	180	175	160	160	155
	Canadian market (\$ millions)	1 430	1 000	1 125	1 130	1 168	1 690
	Exports as % of shipments	9.2	14.5	13.6	15.6	16.0	14.7
	Imports as % of domestic market	17.5	18.0	15.5	14.1	13.7	9.2
	Canadian share of international market — %	0.5	0.5	0.6	0.7	0.7	0.8
	Source of imports (% of total value)		1982 1983 1984	U.S. 95 95 95	E.C.	Asia	Others 5 5 5
			1985 1986	95 95	=	Ξ	5 5
	Destination of exports (% of total value)			U.S	E.C.	Asia	Others
			1982 1983 1984 1985	80 80 75 80	E	15 15 10 3	5 5 15 17

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REGIONAL DISTRIBUTION — Average over the last 3 years

	Atlantic	Quebec	Ontario	Prairies	B.C.
Establishments – % of total	3	29	32	24	12
Employment – % of total	2	27	35	25	11
Shipments - % of total	4	28	33	22	13

MAJOR FIRMS

Name	Ownership	Location of Major Plants		
Truck Bodies	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Commercial Vans Incorporated	Canadian	Ontario		
Canadian Blue Bird Coach Ltd.	American	Ontario		
DEL Equipment Ltd.	Canadian	Ontario		
Fourgons Transit Inc.	Canadian	Quebec		
Multi-Vans Inc.	Canadian	Ontario		
Thomas Built Buses of Canada	American	Ontario		
Trailers (Commercial)		A MARY AND A STATE		
Columbia Trailer	Canadian	British Columbia		
Fruehauf Canada	American	Ontario		
Manac Inc.	Canadian	Quebec		
Trailmobile	Canadian	Ontario		
Westank-Willock	Canadian	Saskatchewan		
Recreational Vehicles		State State State		
(Non-Commercial Trailers)				
Bonair Leisure Products	Canadian	Quebec		
Fleetwood Canada	American	Ontario		
Scamper Canada Ltd.	American	Alberta		
Triple E (Canada)	Canadian	Manitoba		
Airport Mobile Equipment	A Sherika Saraha			
Amertek Inc.	Canadian	Ontario		
Nordic Systems Inc.	Canadian	Ontario		
Frink of Canada	American	Ontario		
Robert Mitchell Co.	Canadian	Quebec		
SMI Industries Canada	Canadian	Nova Scotia		
Municipal Vehicles	and the second	The same hand the		
Hub Fire Engines	Canadian	British Columbia		
Pierre Thibault Trucks	Canadian	Quebec		
Fort Garry Industries	Canadian	Manitoba		
Superior Emergency Equipment	Canadian	Alberta		
Haul-All Equipment Systems	Canadian	Alberta		
Sweeprite Mfg. Inc.	Canadian	Saskatchewan		
Universal Handling Equipment	Canadian	Ontario		
King Equipment Manufacturing	Canadian	Ontario		
All-Terrain Vehicles and Snowmobiles		State States		
Bombardier Inc.	Canadian	Quebec		
Canadian Foremost	Canadian	Alberta		
Ontario Drive & Gear Ltd.	Canadian	Ontario		

Note: Statistics Canada data have been used in the preparation of this profile.

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