

►► Pulp and Paper



For a **Modern** and **Competitive** Industry



Québec    

►► Pulp and Paper

For a Modern and Competitive Industry

***PULP AND
PAPER:
FOR A
MODERN AND
COMPETITIVE
INDUSTRY***

Summary

SUMMARY

Context

The pulp and paper industry is one of the pillars of Québec's economy. This industry is particularly vital for the regions and, through its presence, helps to support their economic development and their influence.

However, due to the restructuring and consolidation efforts observed in North America, several segments of this industry are confronted with major difficulties that are dimming their outlook. In particular, the future of some Québec mills is compromised due to the dilapidated state of their machines and the obsolescence of the processes that they employ. These production units are today among the least competitive in North America.

Indeed, for the latter, only the weakness of the Canadian dollar has made it possible to offset this problem. Major investments are required to modernize these mills, to increase their productivity and to ensure their long-term survival.

The enterprises that operate production units in Québec are also present elsewhere in North America. Hence, it is imperative to give Québec's pulp and paper industry tools that will allow it to take advantage of the restructuring efforts rather than falling victim thereto.

The government, well aware of the importance of this industry for Québec and for the welfare of the regions, is proposing its support to help the industry successfully take up the challenges of modernization confronting it.

Strategy

Grant to INNOVATION-PAPIER (INNO-PAP)

To encourage major pulp and paper companies to include Québec mills in their strategic planning, a \$100 million grant will be allocated to INNO-PAP. This organization, whose objective is to support and promote the development of the pulp and paper industry, will be able to contribute financially to the carrying out of major modernization projects.

PIJCPF program

Moreover, those projects that will have received financial support from INNO-PAP will also be able to benefit from assistance under the Private Investment and Job Creation Promotion Fund (PIJCPF) program, administered by Investissement Québec. This latter organization will be able to complement the offer made by INNO-PAP for projects that Investissement Québec deems of capital importance for the development of Québec and its regions.

The current rules of the (PIJCPF) program will be changed to allow, when necessary, the addition of assistance over and above that proposed by INNO-PAP. The additional assistance can take the form of a loan guarantee, a loan or a monetary contribution. In this latter case, a risk-sharing measure will allow the government to recover a portion of the assistance granted.

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Introduction

INTRODUCTION

The pulp and paper industry holds a key place in Québec's economy in terms of jobs, investments and exports. Its presence, on a large portion of our territory, makes a tangible contribution to the economic and social development of the regions.

Moreover, by reason of its central role, the pulp and paper industry produces major spin-offs for the entire forest products sector. This industry supports, both upstream and downstream, a vast network of interdependent enterprises. Hence, it is of capital importance for the future of the forest products industry and represents an invaluable element in the economic dynamism of Québec. More importantly, this industry is essential for the welfare and development of the regions that are dependent on it.

The pulp and paper industry and in particular, the newsprint industry are confronted with major upheavals that are dimming their outlook. The restructuring and consolidation efforts observed in North America are jeopardizing a number of jobs and facilities. Some regions have been particularly hard hit. The dilapidated state and the lack of competitiveness of some production units are endangering the economy of certain regions where these enterprises are often the prime employers.

1 The pulp and paper industry in Québec's economy

1. THE PULP AND PAPER INDUSTRY IN QUÉBEC'S ECONOMY

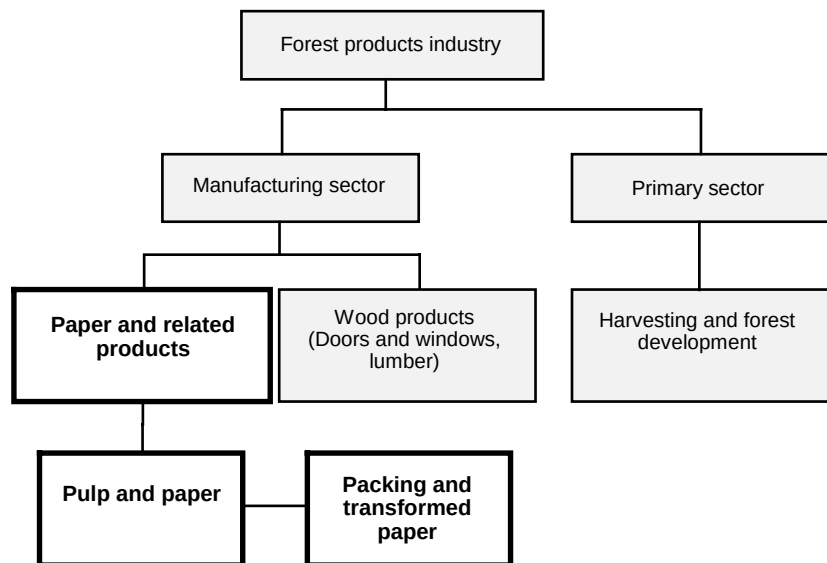
1.1 The pulp and paper industry: a major component of the forest products industry

The pulp and paper industry is at the heart of a vast array of productive activities, known as the forest products industry. The activities of this industry are substantial and of capital importance for employment in Québec, in several regions in particular.

Forest products industry

Centring on an intensive use of Québec's natural resources, the forest products industry comprises, in the primary sector, harvesting and forest develop activities and, in manufacturing activities, the primary and secondary transformation of wood and paper.

STRUCTURE OF THE FOREST PRODUCTS INDUSTRY



Wood and paper products represent 20% of Québec's international exports.

Close to 91 000 people work in this industry, a majority of whom are employed by the 3 000 manufacturing establishments belonging to this industry in Québec. The deliveries made each year by these establishments total 19 billion dollars, namely close to 17% of Québec's total manufacturing deliveries. Moreover, international exports of wood and paper products total 10.8 billion dollars, namely 20% of Québec's total international exports.

ILLUSTRATION 1

BREAKDOWN OF JOBS IN QUÉBEC'S FOREST PRODUCTS INDUSTRY - 1999

Close to 91 000 people work in the forest products industry.



Sources: Ministère des Ressources naturelles and Statistics Canada.

The forest products industry, a key player in the regions

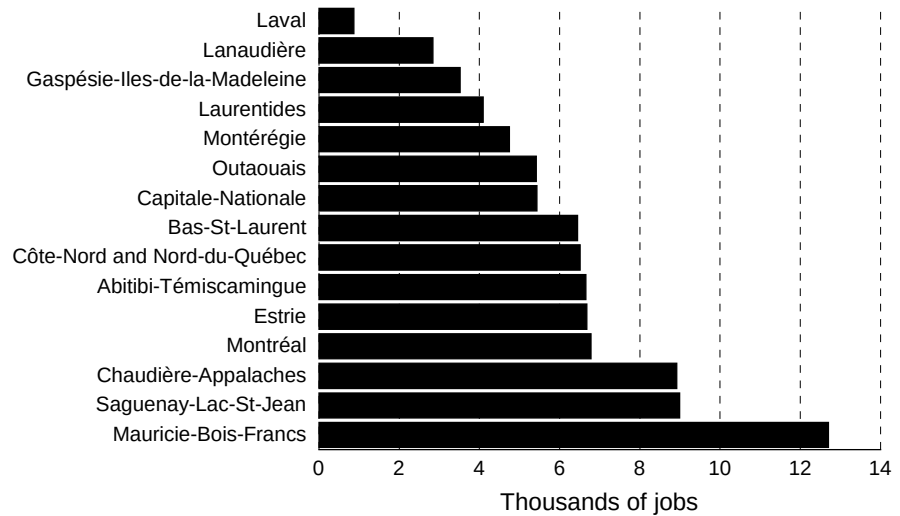
The distribution of the forest products industry over a large part of Québec's territory makes a tangible contribution to the economic activity of the regions. Indeed, this is the industry that is most spread out over Québec's territory. The forest products industry is the cornerstone of a very large number of municipalities. It is present in 590 of the 960 municipalities having at least one manufacturing establishment. This industry is particularly important for small municipalities where it is the prime manufacturing employer (cities with fewer than 20 000 residents).

The transformation of forest resources is the sole manufacturing activity of 135 municipalities.

Moreover, Québec has 717 single-industry municipalities¹ whose populations total 2.1 millions inhabitants. Close to 35% of these municipalities (250) rely on the transformation of forest resources. For 172 of these municipalities, this activity provides more than 90% of the manufacturing jobs. Finally, it is the sole manufacturing industry in 135 of them.

¹ Municipality, 50% of whose jobs in the manufacturing sector are generated by the same activity.

ILLUSTRATION 2

FOREST PRODUCTS INDUSTRY: ESTIMATE OF JOBS BY REGION - 1999

Sources: Ministère des Ressources naturelles and Statistics Canada.

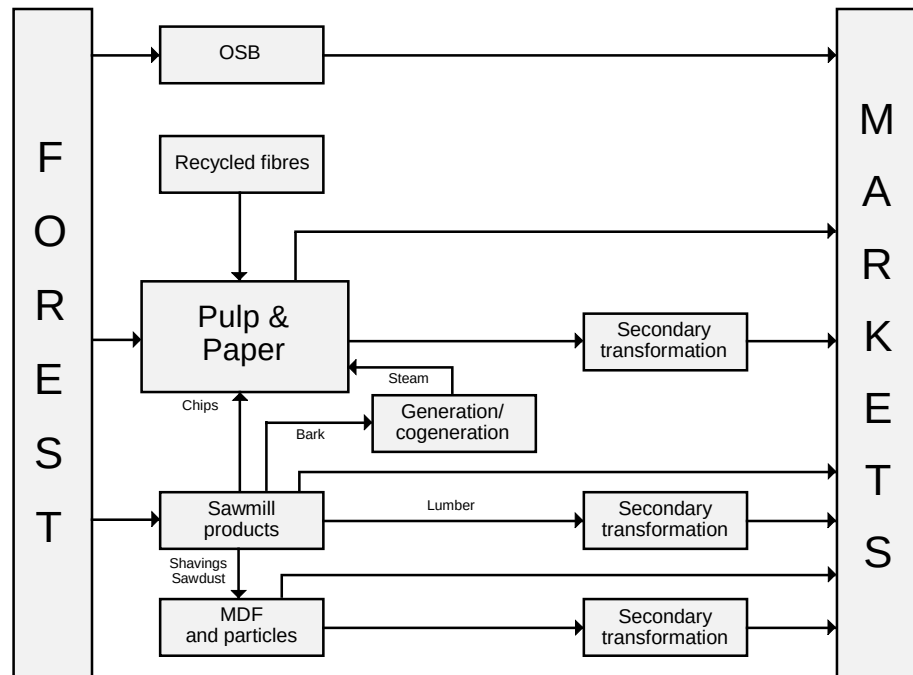
1.2 The pulp and paper industry: the driving force in several areas of activity

An immense array of ties and interdependencies unites the various segments of the forest products industry. The pulp and paper industry is a driving force in many areas. Here are a few examples:

- by way of its wood fibre purchases, mainly in the form of wood chips, the pulp and paper industry helps indirectly maintain 20 000 jobs in the sawmill products sector by purchasing from it close to one billion dollars in products, which represents 25% of its revenues;
- it also helps support other upstream businesses such as those involved in harvesting and forest development.

The pulp and paper industry helps maintain 20 000 jobs in the sawmill products sector.

THE PULP AND PAPER INDUSTRY, AT THE HEART OF THE FOREST PRODUCTS INDUSTRY



Source: Ministère des Ressources naturelles.

Other sectors of the economy also benefit from the presence of the forest products industry:

- electricity sales made by Hydro-Québec to this industry total close to 17 TWh² and account for close to 28% of its sales to big enterprises and 10.5% of its total sales;
- the transportation sector benefits from the deliveries that the pulp and paper industry makes in Québec, the United States and the rest of Canada. Each year, 140 million dollars are spent by pulp and paper companies to bring their products to these markets, including close to 90 million dollars in the trucking industry alone.

² TWh: Terawatthour (1x 10¹² watthours)

1.3 The pulp and paper industry: a major player

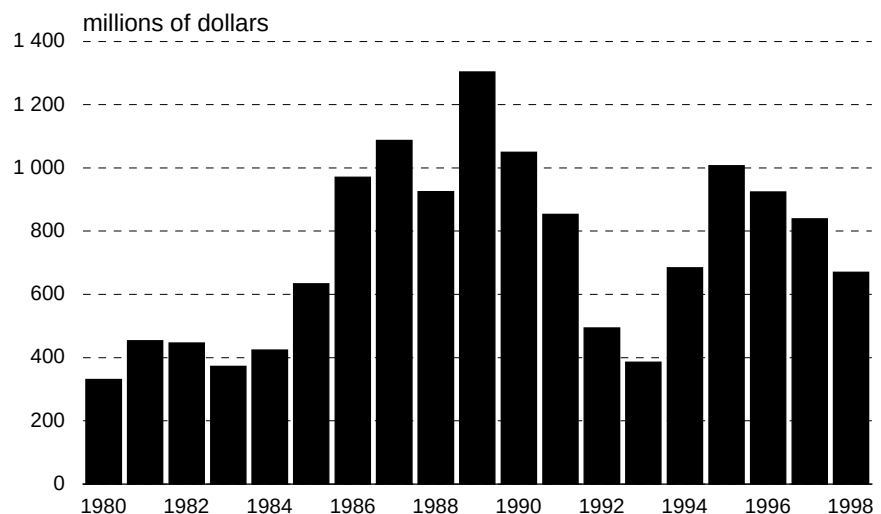
The pulp and paper industry holds a key place in Québec's economy:

The pulp and paper sector accounts for more than 7% of Québec's total manufacturing deliveries.

- its manufacturing deliveries total 8 billion dollars, namely more than 7% of Québec's total manufacturing deliveries. A large share of these deliveries is intended for export markets;
- close to 6.4 billion dollars in paper products are shipped each year on the North American, European and Asian markets. These shipments represent more than 10% of Québec's total international exports;
- the pulp and paper sector contributes approximately 6 billion dollars to Québec's trade balance surplus (exports — imports). Without the participation of the pulp and paper industry, Québec's trade balance, which stands at roughly 1.7 billion dollars, would be negative;
- on average, during the 1990s, the sector injected 700 million dollars annually in the purchase of equipment and the construction of fixed assets (13% of all the capital expenditures of Québec's manufacturing sector).

ILLUSTRATION 3

INVESTMENT IN THE PULP AND PAPER INDUSTRY

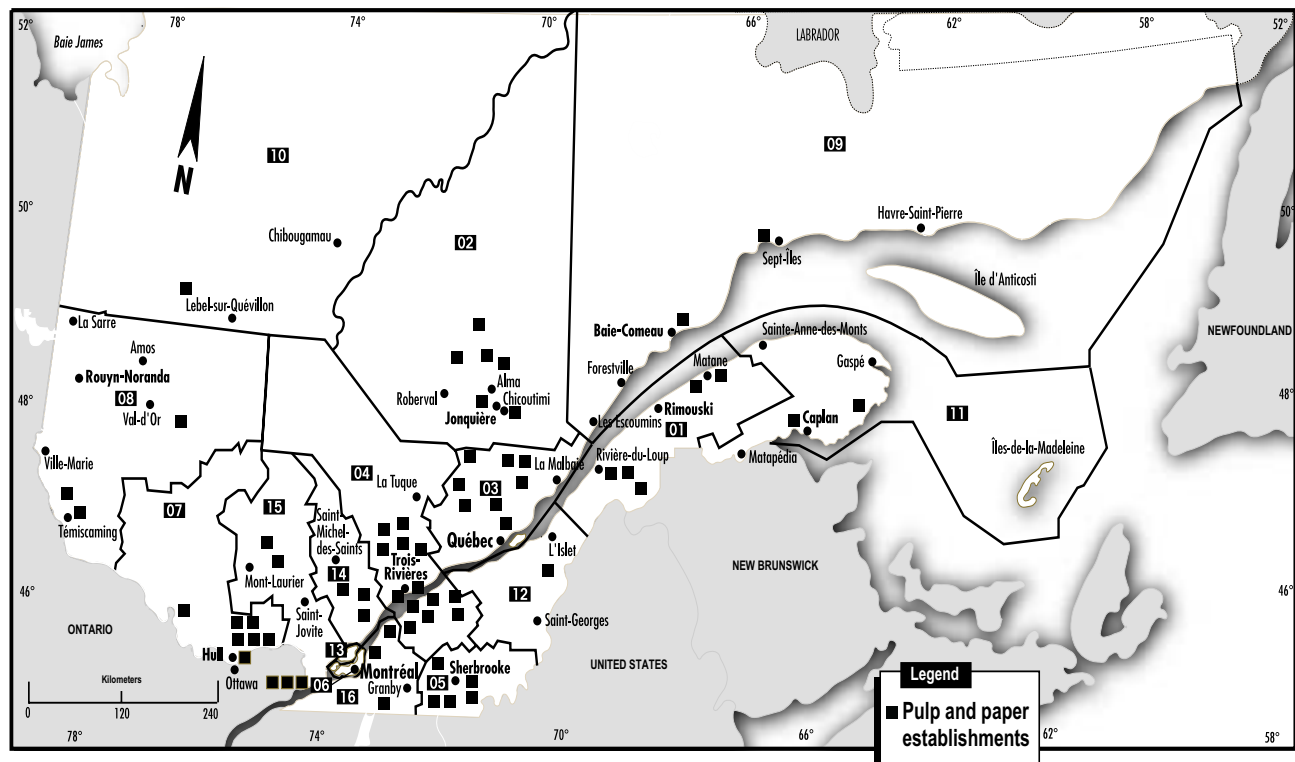


Sources: Ministère des Ressources naturelles and Statistics Canada.

The pulp and paper industry accounts for more than 21 000 direct jobs on Québec's territory.

There are 65 pulp and paper establishments spread out in 15 of the 16 administrative regions of Québec. They employ 21 000 people distributed over the entire territory. If the paper-related products industry is added (packing, transformation of paper and paperboard), more than 31 000 jobs are maintained.

FIGURE 1
PULP AND PAPER ESTABLISHMENTS

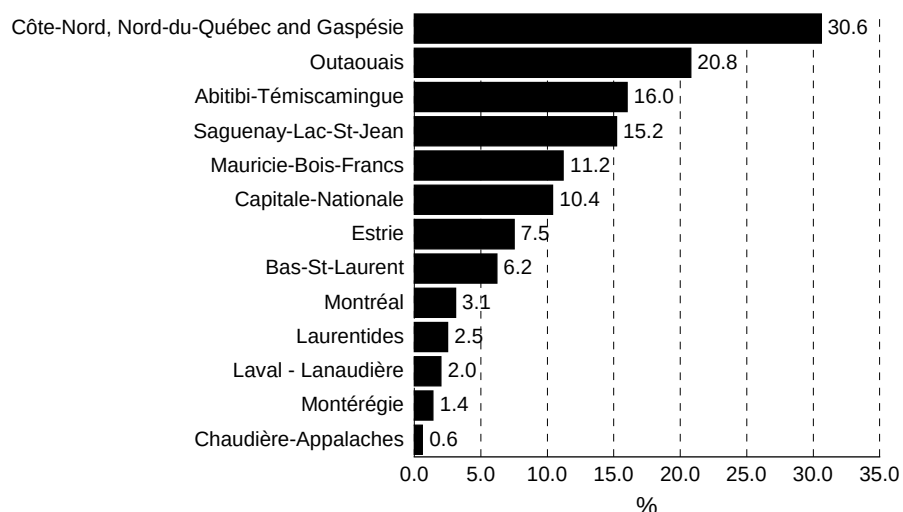


An examination of the regional breakdown of jobs in this industry reveals the dependence of some regions on the pulp and paper sector. For example, 30.6% of all manufacturing jobs of the Côte-Nord, Nord-du-Québec and Gaspésie-Îles-de-la-Madeleine regions are concentrated in this sector. This proportion reaches 20.8% in Outaouais, 16.0% in Abitibi-Témiscamingue and 15.2% in Saguenay-Lac-St-Jean.

ILLUSTRATION 4

IMPORTANCE OF JOBS IN THE PULP AND PAPER INDUSTRY-1999

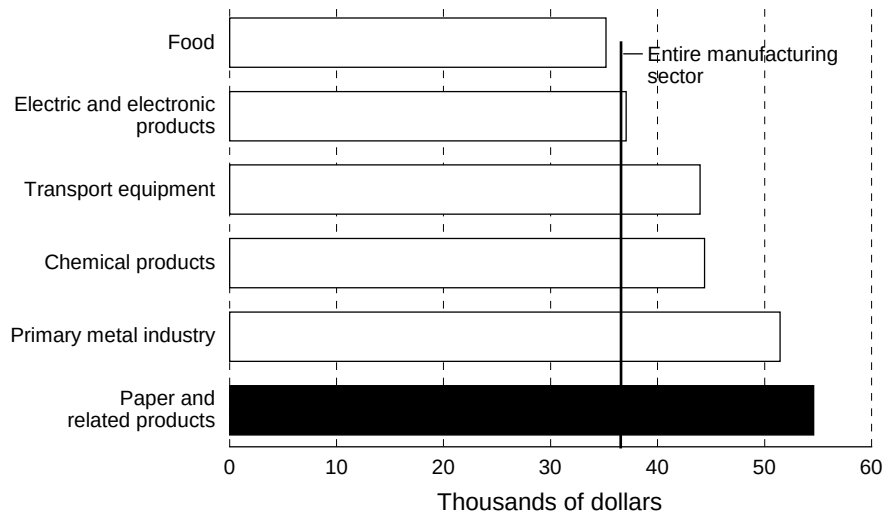
(in percentage of total manufacturing jobs)



Sources: Ministère des Ressources naturelles, Ministère des Finances, and Statistics Canada.

These jobs are particularly important for the economic activity of the regions that are most dependent on them due, in particular, to the importance of the payroll that they generate and the ripple effect that they have on local communities. Moreover, the average wages paid by pulp and paper companies and commercial pulp mills are among the highest of Québec's manufacturing sector.

ILLUSTRATION 5

AVERAGE ANNUAL WAGES BY MANUFACTURING ACTIVITY SECTOR - 1999

Source: Institut de la statistique du Québec.

Montréal is the leading world centre for pulp and paper industry head offices.

Although this industry holds a relatively modest place in the manufacturing sector of the Greater Montréal Area, it makes Montréal the leading world centre for pulp and paper industry head offices, outranking the City of Helsinki in Finland. This presence supports the activity of certain segments of the propulsive services industry, made up of specialized private and university research centres as well as world-renowned consulting bureaux. Montréal is also home to the head office of the Canadian Pulp and Paper Association, and the Pulp and Paper Technical Association of Canada. Moreover, Montréal sponsors the holding of Paper Week International, the largest annual international convention in this sector, an event attended by close to 15 000 participants.

2 *Outlook for the pulp and paper industry*

2. OUTLOOK FOR THE PULP AND PAPER INDUSTRY

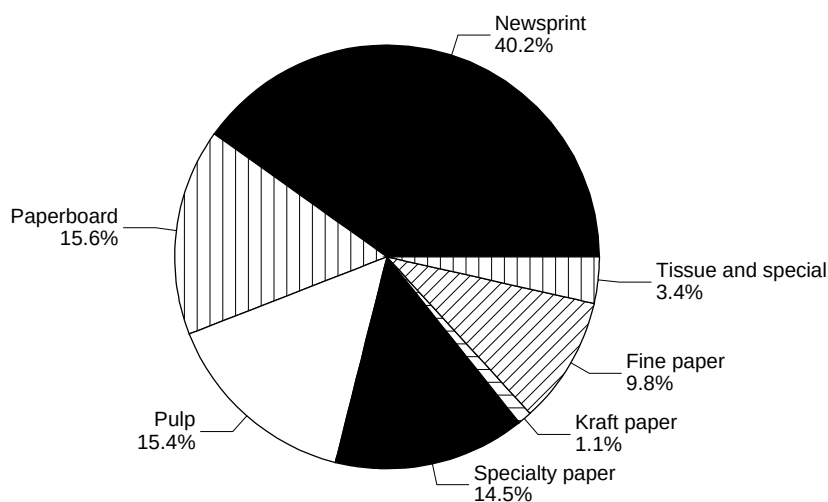
2.1 Main products of Québec's industry

Québec's pulp and paper industry has a diversified production:

- newsprint, manufactured from mechanical pulp, accounts for 40.2% of Québec's total paper product production;
- specialty paper³, also made from mechanical pulp and mainly used to print flyers, magazines and directories, represents 14.5% of production;
- the remaining production is broken down between paperboard and Kraft paper (16.7%), commercial pulp (15.4%), fine paper (9.8%) and finally, tissue paper and special paper (3.4%).

Newsprint is the main paper product manufactured in Québec, accounting for more than 40% of total tonnage.

ILLUSTRATION 6
PRODUCTS MANUFACTURED BY QUÉBEC'S PULP AND PAPER INDUSTRY – 1999
(in proportion of total tonnage)



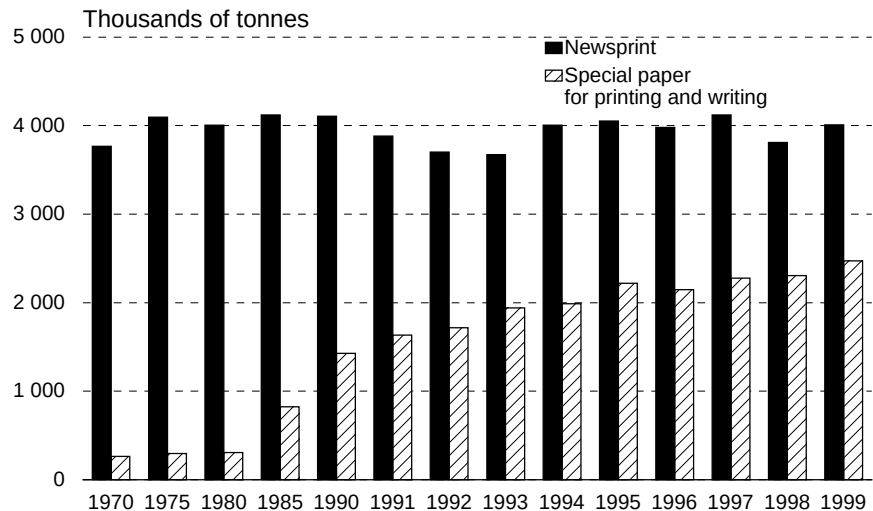
Source: Ministère des Ressources naturelles.

³ The detailed definition of the types of paper is given in the Appendix.

Québec's newsprint production has remained relatively stable since 1970, at just under 4 million tonnes, whereas that of specialty paper has increased significantly following the development of the flyer market. Indeed, Québec's production of printing and writing paper jumped from 263 000 tonnes at the start of the same decade to close to 2 million tonnes thirty years later. A large portion of the production of this type of paper has been achieved thanks to the conversion of small-size newsprint machines.

Within a broader perspective, Québec is responsible for roughly 3% of the world paper and paperboard production and 33% of Canada's pulp and paper production, making Québec the leading producing area in Canada. Moreover, approximately 55% of the newsprint consumption of Northeastern United States comes from Québec exports.

ILLUSTRATION 7
EVOLUTION OF THE PRODUCTION OF THE PULP AND PAPER INDUSTRY IN QUÉBEC



Source: Ministère des Ressources naturelles.

2.2 Future market developments

The products of Québec's pulp and paper producers are mainly intended for the North American market. Fluctuations in demand from the rest of the world have a relatively small impact on Québec's industry, except for the price variations that they may trigger. The strength of the demand for Québec's paper products basically depends on the dynamism of the North American market.

According to RISI⁴, it is fine paper that will be most in demand in North America over the next few years, with a projected 27% increase, followed closely by tissue paper and paperboard which should progress by 18% and 29% respectively.

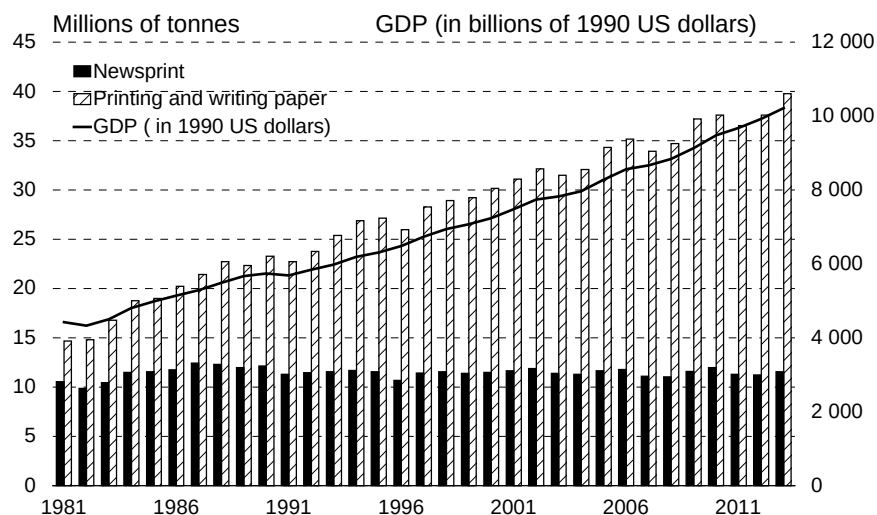
The North American newsprint market is not expected to grow.

As for newsprint, the North American demand is not expected to grow much. Indeed, apart from cyclical variations, this market is characterized by stability.

In the past, demand for newsprint was closely linked to population growth and the increase in wealth. In most western markets, and in particular in North America, newsprint consumption progressed at a faster pace than did the rest of the economy. However, for close to thirty years, and in particular over the last ten years, this relationship has no longer applied. Indeed, despite the major increase in the GDP, North American newsprint consumption has hardly progressed.

⁴ Resource Information Systems Inc., North American Pulp and Paper Review, July 1999.

ILLUSTRATION 8
AMERICAN CONSUMPTION OF NEWSPRINT AND PRINTING PAPER



Sources: Ministère des Ressources naturelles and Resource Information Systems Inc.

This stagnation is attributable to several factors. First, new means of transmitting information, such as television initially and the Internet more recently, have added new advertising and information vehicles to those already in existence. Competition between the various vehicles has become more intense. As a result, although the budget that enterprises devote to advertising has increased in recent years, the share obtained by newspapers has tended to drop.

A second factor is the one linked to the change in consumption habits of publishers. Following at times major variations in the price of newsprint, some users have lowered their consumption structurally by reducing the weight of the paper used and the size of the pages or, more drastically, by using high-end products such as supercalendered or coated paper in the place of newsprint.

2.3 Price trends

Over the last decade, the prices of the various types of paper underwent major variations. This phenomenon had different consequences on Québec's mills, depending on whether they produce newsprint or paper with a higher added value.

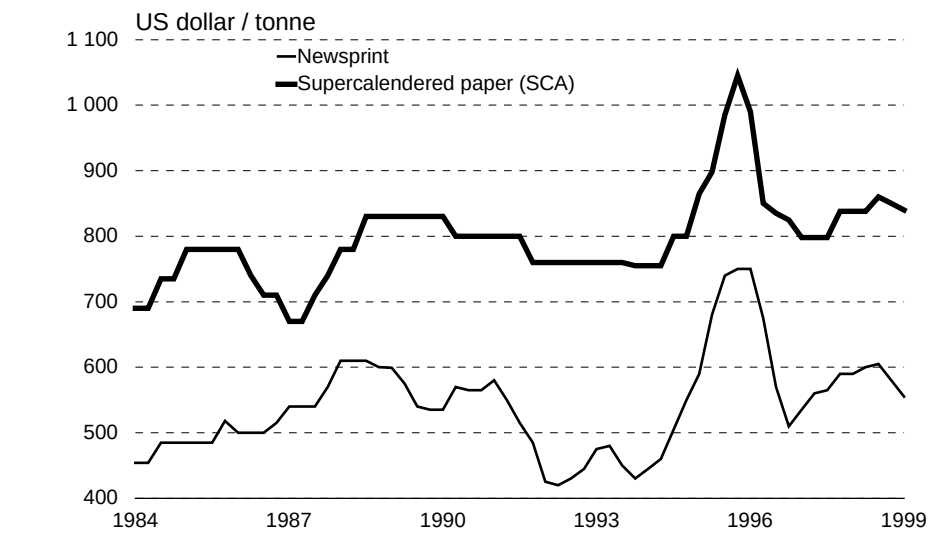
In the latter case, as the profit margins of enterprises are larger, price level fluctuations generally did not call into question the profitability of mills.

From 1992 to 1994, Québec's newsprint industry accumulated deficits totaling 1.3 billion dollars.

However, in the case of newsprint, as there was an excess supply and the product was not very distinctive, these fluctuations had major consequences for the industry. At the start of the last decade, namely from 1992 to 1994, Québec's newsprint mills accumulated deficits totaling 1.3 billion dollars.

After having fallen until 1994, prices temporarily rebounded, without however allowing the newsprint industry to benefit from a long enough period to re-establish their financial position.

ILLUSTRATION 9
PRICE TRENDS ON THE PAPER MARKETS



Source: Ministère des Ressources naturelles.

As a result, in 1999, the price of newsprint was at a level comparable to that of 1990 and the financial position of certain newsprint mills remains precarious.

2.4 Competitive position of Québec's pulp and paper industry

Specialty paper (mechanical pulp base)

The competitive position of Québec producers of value-added paper (specialty paper, printing paper, etc.) is not particularly problematic at the present time. Indeed, the profit margins that they can obtain on their products are such that even the least productive mills can be profitable.

However, very few value-added paper machines have been built in Québec. For the most part, the existing machines are the result of the

conversion of low-capacity newsprint machines to types of paper offering a better outlook.

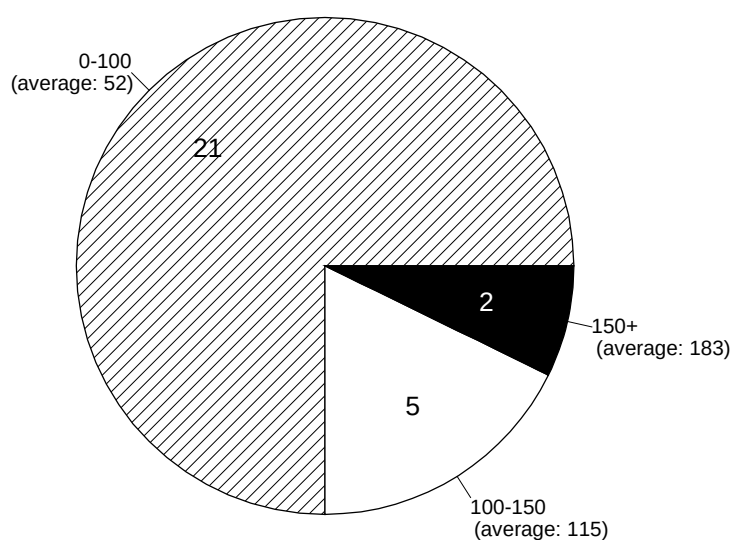
The fact that Québec's industry only has a few high-capacity value-added paper machines dims the outlook for certain mills. While the survival of Québec mills producing value-added paper is not threatened over the very short term, this production niche is increasingly being exploited by high-capacity machines established abroad, which will hurt Québec's industry.

Recent paper machines have production capacities and technologies that allow them to realize major economies of scale for each tonne produced. These savings are mainly achieved in labour costs. This is not generally the case for older machines.

For example, in 1999, Stora-Enso finalized the construction of a specialty paper machine (supercalendered paper) having an annual capacity of 350 000 tonnes in Port-Hawkesbury, Nova Scotia.

In comparison, the average annual capacity of the 28 specialty paper machines of Québec is just under 73 000 tonnes. In fact, only two of these machines have an annual production capacity in excess of 150 000 tonnes. Without the latter, the average annual capacity of Québec's specialty paper machines would be less than 60 000 tonnes.

ILLUSTRATION 10
BREAKDOWN OF THE 28 SPECIALTY PAPER MACHINES ACCORDING
TO THEIR PRODUCTION CAPACITY— 1999
 (with corresponding averages – in thousands of tonnes)



Source: Ministère des Ressources naturelles.

At the North American level, the total value-added paper production will increase and prices will adjust accordingly. Those mills with small machines, such as those of Québec, will inevitably become less competitive and risk being threatened over the medium term.

Newsprint

The position of Québec's newsprint producers is much more precarious than that of value-added paper producers. Indeed, since 1975, there has been a major deterioration in their competitiveness and, generally, this deterioration has only been offset by the performance of the Canadian dollar.

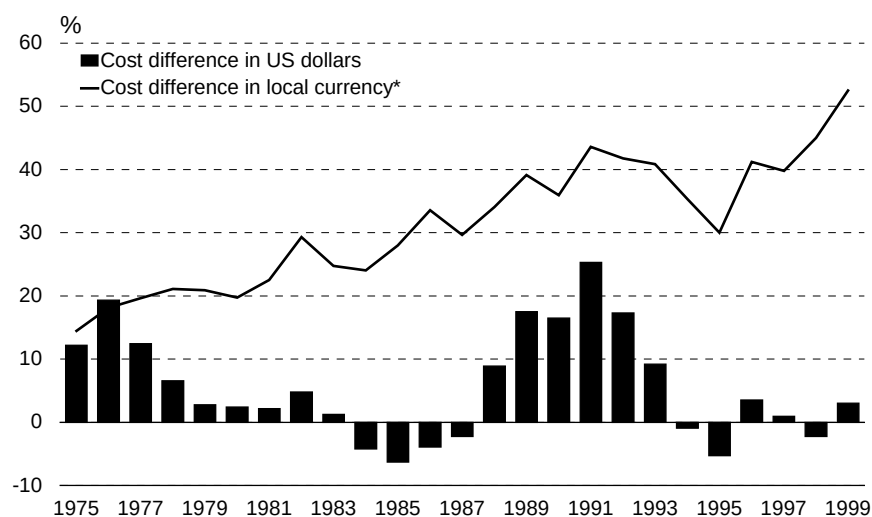
Indeed, in 1976, the Canadian dollar had a value equivalent to the American dollar. Back then, the production costs of a tonne of newsprint in Québec were 19% higher than those of the Southern United States, a difference of 50 dollars⁵. If one disregards the change in value of the Canadian dollar and if one compares the evolution of production costs in local currency, one notes that in 1999 this difference reached 256 dollars per tonne produced, namely a difference of more than 52%.

⁵ Production costs for all of Eastern Canada. However, Québec represents more than half of the paper production of this region and has an almost identical production and cost structure. Hence, the evolution of costs is a good reflection of those of Québec's industry.

ILLUSTRATION 11

PERCENTAGE DIFFERENCE BETWEEN THE COST OF PRODUCING A TONNE OF NEWSPRINT IN EASTERN CANADA AND IN THE SOUTHERN UNITED STATES

$[(\text{costs Eastern Canada} - \text{costs Southern United States}) / \text{costs Southern United States}]$



* : Canadian dollars in Canada and American dollars in the United States.

Sources: Ministère des Ressources naturelles and Ministère des Finances.

Without the weak Canadian dollar, our newsprint industry would no longer be competitive.

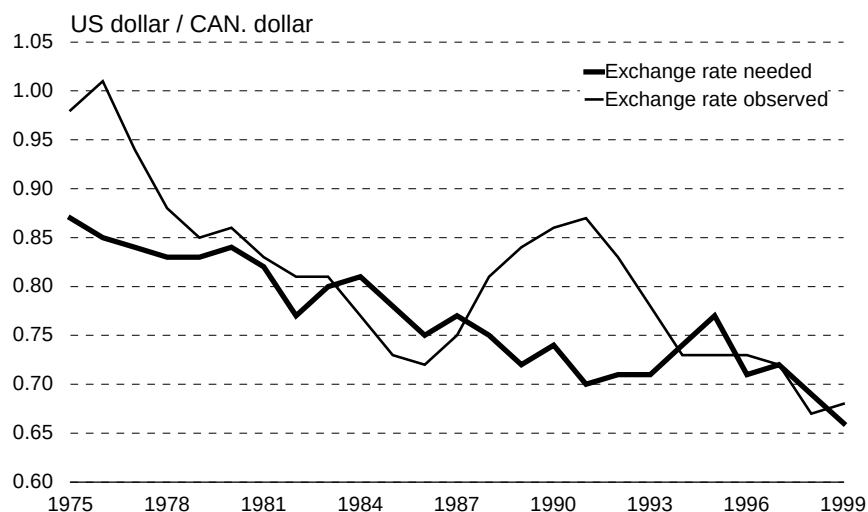
However, if one takes into account the evolution of the Canadian dollar, the difference in the cost of producing a tonne of newsprint was approximately 15 dollars in 1999, namely a difference of just over 3%. The depreciation of the Canadian dollar largely compensated for the loss of competitiveness of Québec mills. Without this artificial advantage, Québec's newsprint industry would no longer be competitive today.

Indeed, if the Canadian dollar had remained at 0.81 American dollars, namely the average observed since 1975, Québec's newsprint industry would not have been competitive for the last 18 years. In other words, if, in 1975, Québec enterprises were able to compete with a Canadian dollar trading at 0.87 American dollars, in 1999, only a Canadian dollar trading at 0.66 American dollars allowed Québec's industry to hold its own vis-à-vis the American competition. This represents a loss of competitiveness of 25% in a quarter of a century.

ILLUSTRATION 12
EXCHANGE RATE NEEDED TO EQUALIZE PRODUCTION COSTS
 (Eastern Canada versus Southern United States)

In 1975, a Canadian dollar trading at 0.87 American dollars permitted the parity of production costs in Québec and the Southern United States.

In 1999, Québec's newsprint industry needed a Canadian dollar trading at 0.66 American dollars to obtain this equality.

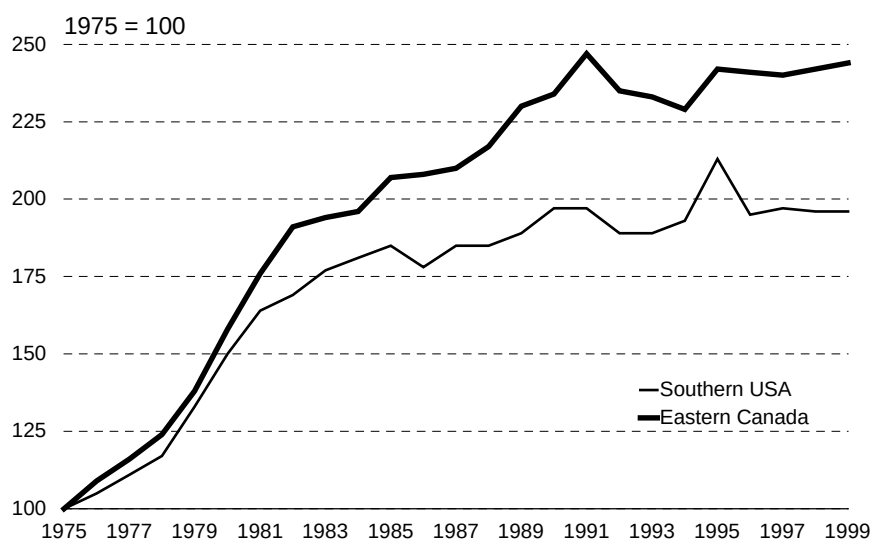


Sources: Ministère des Ressources naturelles and Ministère des Finances.

Disregarding the evolution of the Canadian dollar, production costs increased faster in Québec than in the United States. Since 1975, they have been multiplied by a factor of:

- 2.5 in Québec;
- 2.0 in the Southern United States.

ILLUSTRATION 13
EVOLUTION OF TOTAL NEWSPRINT PRODUCTION COSTS
 (in local currency)



Source: Ministère des Ressources naturelles.

The dilapidated state of some mills is the main competitiveness problem facing Québec's industry.

The sources of this faster increase observed since 1975 may be summed up in three elements:

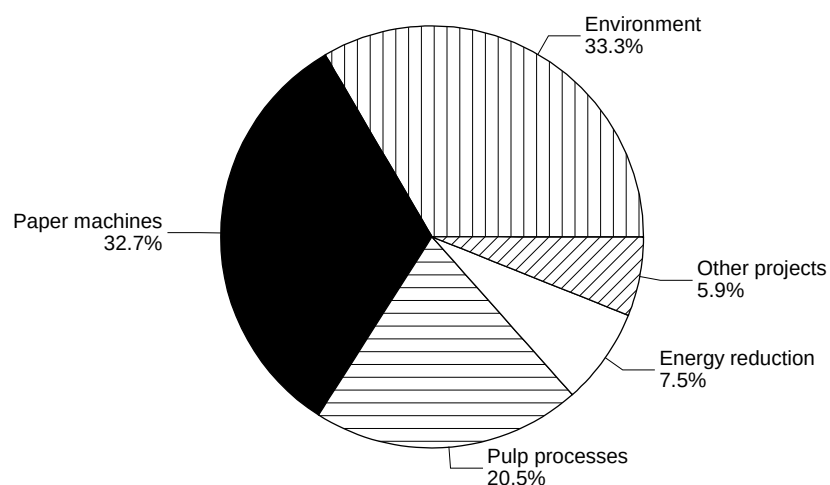
- the dilapidated state of some mills is the main element in the competitiveness problem facing Québec mills;
- energy costs; Québec's historic advantage has dwindled over time;
- the cost of fibre which has increased by 80% in Québec, compared to 33% in the Southern United States.

On the subject of the dilapidated state of mills, whereas the American industry, and mainly that of the Southern United States, built new production units incorporating the latest equipment, Québec's mills favoured capital expenditures to reduce environmental pollution or defensive investments such as up-grading their equipment.

From 1985 to 1992, capital expenditures were mainly used to modernize pulp rooms and to speed up existing paper machines. Since 1993, capital expenditures of an environmental nature have mobilized close to 33% of total investments. In 1996 and 1997, special efforts were devoted to investments in energy efficiency.

ILLUSTRATION 14

BREAKDOWN OF THE CAPITAL EXPENDITURES OF QUÉBEC'S PULP AND PAPER INDUSTRY– 1993-1998

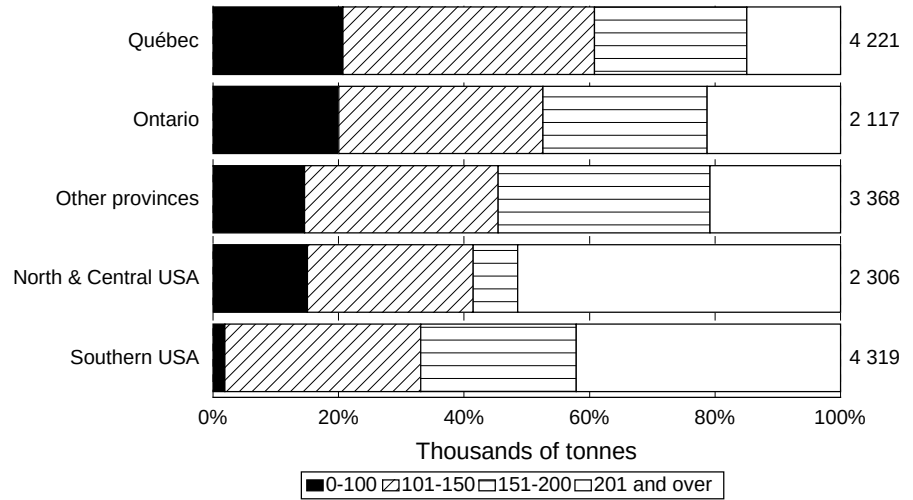


Source: Ministère des Ressources naturelles.

As a result, Québec's production units are more dilapidated and smaller than elsewhere in North America. For example, the average production capacity of Québec's 34 newsprint machines is 124 000 tonnes per year, whereas it is 153 000 tonnes for the 79 other newsprint machines in North America.

ILLUSTRATION 15

**BREAKDOWN OF THE TOTAL NEWSPRINT PRODUCTION CAPACITY
ACCORDING TO THE SIZE OF MACHINES - 1998**



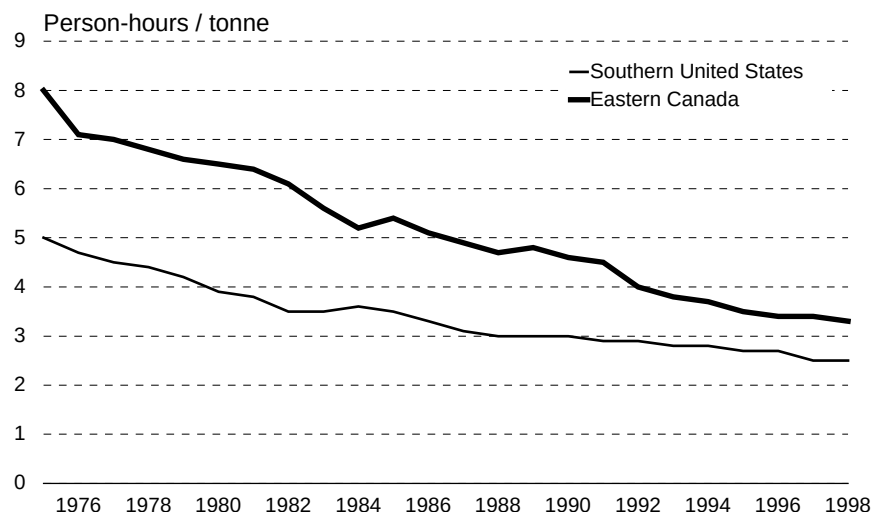
Source: Ministère des Ressources naturelles.

Specifically, machines of 150 000 tonnes and under represent 61% of the installed capacity in Québec, compared to 33% in the Southern United States. Moreover, paper machines of over 200 000 tonnes account for 15% of the capacity in Québec, compared to 42% in the Southern United States.

This situation has impacts in several respects:

- first, the use of low-capacity machines results in higher operating costs, in particular with respect to labour costs. This element represents 19% of the total costs and, despite major productivity gains since the early 1990s, it still takes 27% more labour than in the United States to produce a tonne of paper, namely 3.3 person-hours, compared to 2.6 person-hours in the Southern United States;

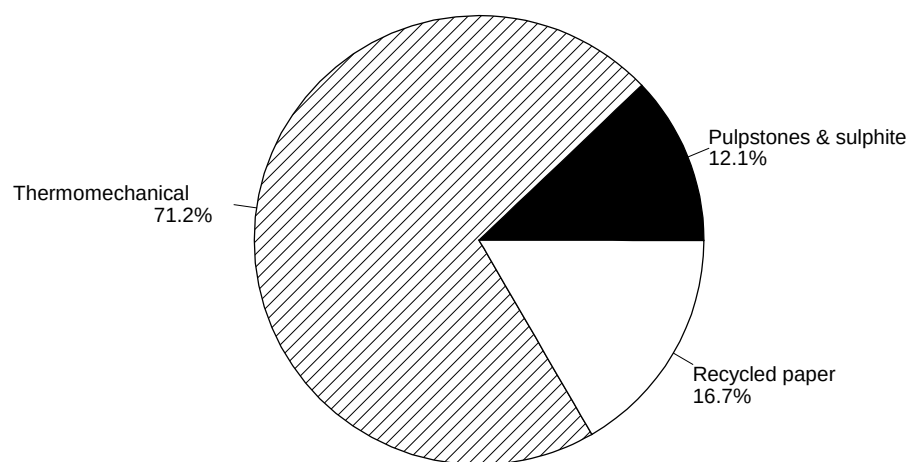
ILLUSTRATION 16
EVOLUTION OF JOBS BY TONNE OF NEWSPRINT PRODUCED



Source: Ministère des Ressources naturelles.

- more importantly, small machines have reached their full potential in terms of manufacturing quality and operating speed. It is no longer possible to improve their productivity or the quality of their products. As their level of profitability is lower, it is those mills that are equipped with small machines that are the first to be hit with temporary or permanent production cuts when prices fall;
- finally, a few mills still have dilapidated pulp rooms using a pulpstone process and a sulphite technology. These technologies date back to the turn of the last century and, although they have been improved over the years, they are still much less efficient than those introduced more recently [thermomechanical processes (end of the 1970s) and recycled paper (early 1990s)]. For these few mills, this has major implications for pulp production costs and hence paper production costs.

ILLUSTRATION 17
PULP PROCESSES OF QUÉBEC'S NEWSPRINT MILLS - 1999
(in proportion of total tonnage)



Source: Ministère des Ressources naturelles.

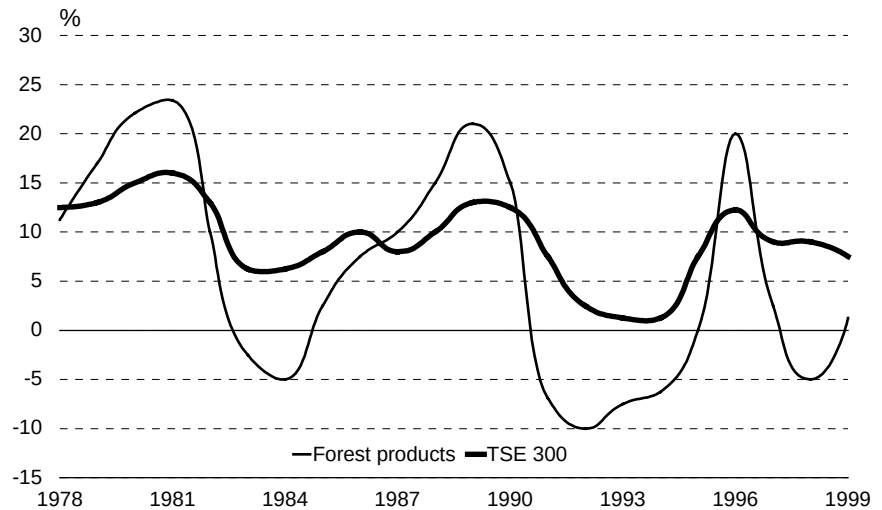
2.5 Strategic stakes for the industry

The low profitability level of some enterprises in the pulp and paper sector during the 1990s has had an impact on their stock market performance. The return on the shareholders' equity of forest products enterprises has witnessed much greater fluctuations than that of big enterprises as a whole.

ILLUSTRATION 18

RATE OF RETURN ON SHAREHOLDERS' EQUITY

(TSE-forest products versus TSE 300 indices)



Source: Ministère des Ressources naturelles.

During this period, there were several years of negative return on shareholders' equity. As these financial results did not compare well with those of the other sectors, they led shareholders to exert pressure on the industry to improve its profitability.

This lack of interest on the part of investors also resulted in a reduction in funds from the primary stock market and a greater hesitation by financial institutions to become involved in the funding of new projects.

The strategic plans of enterprises, motivated by financial constraints and investor expectations, have left little room for modernization and investment projects. Indeed, some enterprises which, in the past, invested heavily in the modernization of their equipment, have been penalized by the financial markets and have seen the value of their stocks fall.

As a result, the managers of enterprises have preferred to reduce operating costs through the acquisition of existing productive assets and the rationalization of their operations.

Consolidation is the principal leitmotif in the strategic plan of enterprises.

Consolidation has become the principal leitmotif in the strategic plan of enterprises (acquisitions, moving closer to markets, closures). The interest of a strategy that gives an important place to mergers and acquisitions appears to reflect three considerations:

- first, the fact that they are considered to be the most acceptable path, in the eyes of financial circles, to expand the sales figure of a given enterprise;
- secondly, it allows an enterprise to acquire a wider array of mills that can respond to specific regional markets, by reducing transportation costs in particular;
- finally, several leaders consider that a part of the solution to the low prices observed in the sector, and hence to its profitability, is through a tighter control of the level of production and hence the supply.

The results:

Consolidation efforts will lead to the closing down of the least profitable mills.

- a reduction in production capacities through the closing down of the least profitable mills;
- an effort to limit capital expenditures at their current level or at a level below the annual depreciation cost;
- investments moving closer to the markets for which the products are intended.

For the next five years, the budgets of the enterprises of this sector earmarked for major investments will be limited, especially in North America. According to specialized sources⁶, capital expenditure forecasts for the next few years are the lowest in the last twenty years, both for American enterprises as a whole and Canadian enterprises. Moreover, the expansion projects are likely to take place in high-growth markets, in particular those of Asia.

⁶ *Pulp and Paper*, January 2000.

2.6 Strategic stakes for Québec

Certain Québec mills are among the least competitive in North America and their survival could be compromised.

Practically all enterprises operating production units in Québec have mills elsewhere in North America. Within this context, the fact that the competitive position of Québec's mills has deteriorated over the last twenty years makes them vulnerable to the rationalization efforts undertaken by big enterprises. Several of these mills are today among the least competitive in North America and risk seeing their survival compromised. This is particularly true in the newsprint segment, newsprint being the main paper product manufactured in Québec.

Québec needs to have sufficient tools to position itself and to reorient the strategic planning of enterprises to its advantage.

In light of the industry's restructuring and consolidation efforts, it is imperative that Québec acquire tools allowing it to take advantage of the restructuring efforts rather than falling victim thereto. Too many jobs are at stake.

Hence, the Québec Government is proposing measures to preserve the competitive nature of the forestry resources of which it is the main trustee on behalf of all Quebecers. These measures, which concern those production units that are most likely to benefit from modernization, will have a major, structuring impact for the regions that depend on these units.

3 *Strategy*

3. STRATEGY

3.1 Promote major, structuring investments

The government is giving priority to actions that will allow Québec mills that are the least competitive, but that have a strong potential, to acquire high-performance tools that will lead them to position themselves advantageously in North American markets.

These actions have three specific objectives:

- promote the preservation, consolidation and development of the pulp and paper industry in Québec;
- preserve, in Québec, jobs associated with this area of activity;
- contribute to the funding of major, structuring investment projects intended for pulp and paper mills.

In light of the diversity of these objectives and the importance for the industry of acquiring high performance tools in order to ensure its competitiveness over the long term, the nature of the projects that should ideally be put forward is as follows:

- the replacement of an outdated pulpwood stone or sulphite pulp manufacturing process by a modern, more efficient process⁷;
- the replacement of a paper machine to redirect the mill towards the production of higher value-added paper⁸;
- the replacement of a low capacity paper machine by a higher capacity one making it possible to considerably reduce the mill's production costs²;
- the integration of a paper machine in an existing commercial pulp plant².

⁷ The investment required for the construction of a new pulp room can reach 100 to 150 million dollars for a capacity of close to 250 000 tonnes.

⁸ The investment required to replace or integrate a paper machine can vary between 150 and 400 million dollars. The amount depends on the production capacity of the machine, the type of paper manufactured and the peripheral equipment that must be added or modified.

Moreover, in all cases, these investment projects will have to enable the mill to:

- support the competition of establishments that manufacture similar products and, in the case of newsprint mills, lead the latter to reposition themselves in the one third of North American mills having the lowest production costs;
- support over the long term major variations in the exchange rate and in the price of its product.

3.2 Financial support for investment projects

The assistance offered for projects meeting the aforementioned objectives will come from two complementary programs:

- Innovation-Papier (INNO-PAP), a non-profit organization;
- the PIJCPF program administered by Investissement-Québec.

3.2.1 Grant to INNO-PAP

Due to their importance and their complexity, the strategic investment projects of the pulp and paper industry are planned over a long time period.

To encourage major pulp and paper companies to include the modernization of their Québec mills in their strategic investment planning, a 100-million-dollar grant will be allocated to INNO-PAP, an organization working to support and promote the development of the pulp and paper industry. The amounts earmarked will be used to provide financial support for eligible projects.

INNO-PAP will be able to support up to 15% of the eligible expenditures of investment projects that are submitted and which this organization deems worthwhile supporting.

3.2.2 PIJCPF Program

Since its creation, the PIJCPF program has actively participated in construction and upgrading projects intended for Québec's pulp and paper mills. However, the current rules of this program do not always allow it to support major projects that are necessary to ensure the consolidation of the activities of the pulp and paper industry in Québec.

To facilitate the access of such projects to the PIJCPF, the current rules will be changed to allow, if necessary, the addition of assistance over and above that proposed by INNO-PAP. Those major projects that will have received financial support from INNO-PAP, and which the

government considers to be of capital importance for the development of Québec and its regions, will be able to benefit from additional assistance in the form of loan guarantees, loans, or a monetary contribution. In this latter case, a risk-sharing measure will allow the government to recover a portion of the assistance granted.

Conclusion

CONCLUSION

The Québec Government intends to take the necessary steps to maintain the competitive nature of the forestry resources of which it is the main trustee on behalf of all Quebecers. The government favours targeted measures that will allow Québec mills to be among the top producers of their category.

Through the proposed contribution, the government wants to support Québec's pulp and paper industry and, in several respects, the forest products industry as a whole. That way, the government will ensure the economic development of the regions that are dependent on this industry.

It is estimated that the projects that will benefit from the proposed strategy will generate approximately 700 million dollars in major investments over the next five to seven years. The projects that will be supported will make it possible to preserve 2 500 direct jobs and thousands of indirect jobs, which are central to the welfare, influence and economic development of Québec and its regions.

Appendix

1. TYPES OF PAPER

There are numerous different types of paper and each has its own individual characteristics that set it apart from the others.

2. LEXICON

Papers

Directory paper:	Light, opaque paper, similar to newsprint, used to print directories.
Coated paper:	Paper that is coated with a mineral-based layer to improve its opacity and impermeability.
Printing and writing paper:	General term designating all paper of average or superior quality intended for printing or writing.
Newsprint:	Paper used to print newspapers. It is mainly composed of mechanical pulp to which a certain quantity of chemical pulp has been added.
Uncoated paper:	Paper that has not been coated with chemical products or mineral filler (ex.: newsprint).
Supercalendered paper: (SCA, SCB, SCC)	Paper whose surface is relatively porous and that has been given a glossed or glazed finish. It is used to print high-end magazines.
Specialty paper:	Coated or uncoated paper containing more than 10% mechanical pulp. It is used to print flyers, magazines, telephone directories and pocket books.
Fine paper:	Generic term designating good quality paper, such as printing and writing paper. This paper may be coated or uncoated and contains least then 10% mechanical pulp.

Other terms

MDF:	Medium density fiberboard.
OSB:	Oriented strand board.
Commercial pulp:	Pulp of all categories sold on the open market.
Mechanical pulp:	Pulp obtained by pressing pulpwood against a moving abrasive stone (groundwood pulp) or by chip defibration between two rotating disks of a refiner.
Thermomechanical pulp:	Mechanical pulp having undergone a steam treatment and that has been refined.
Kraft paper:	Pulp obtained by extracting the lignine by means of a caustic soda solution. Kraft means “strong” in German. This process produces fibres that are stronger than sulphite pulp or semi-chemical pulp.
CTMP:	Chemi-thermomecanical pulp. Pulp manufactured by means of a process that consists of putting chips through a chemical process prior to their being heated and mechanically defibered in a refiner.