

April 1992

HF1479
.P73
I5
QUEEN
c.2

PROSPERITY CONSULTATIONS

Industrial and Electrical
Equipment Sector

A Contribution to the



PROSPERITY INITIATIVE

This report has been prepared by a private sector consultation group at the request of the Honourable Michael Wilson, Minister of Industry, Science and Technology and Minister for International Trade as a contribution to the Prosperity Initiative. This document is one of a series of reports setting out the conclusions and recommendations arising from intensive consultations on the competitiveness challenges facing major industry sectors across Canada.



A contribution to the PROSPERITY INITIATIVE

HF
1479
. P73
I5
Queen
c.2

PROSPERITY INITIATIVE

Report

Of The

Industrial & Electrical

Equipment Sector

Industry Canada
Library - Queen

MAY 10 1995
MAI

Industrie Canada
Bibliothèque: - Queen

April 1992

TABLE OF CONTENTS

Executive Summary	i
Part I: Introduction	1
Part II: Industry's Leadership Role and Responsibilities	3
A. Human Resources And Learning	3
B. Technology	9
C. Trade	13
Part III: Government's role and responsibility	18
Part IV: Associations leadership role	20
Part V: National Consensus	22
Part VI: Findings and Recommendations	24
Appendix	
A. Detailed findings and recommendations	

EXECUTIVE SUMMARY

In november of 1991, the Honourable Michael Wilson, Minister of Industry, Science and Technology and Minister for International Trade, invited the Machinery and Equipment Manufacturers Association of Canada (MEMAC) and the Electrical and Electronic Manufacturers Association of Canada (EEMAC) to jointly provide leadership under the government's "Prosperity Initiative" to the development of a report from the Industrial and Electrical Equipment Sector. This report in response to Minister Wilson's request has been developed as a result of consultations between associations within the sector.

On the basis of the following assumptions, that Canadian industry must take an aggressive leadership role and that Canadian governments must establish a favourable public policy climate in which an aggressive economy can develop, the sector identified three major areas of consideration under the following headings: Human Resources, Technology, and Trade.

In the area of Human Resources, initiatives have already been undertaken by a number of associations but more training and retraining will need to take place. Attitudes will need to change as a broadly-based commitment is required from all parties.

In Technology, management both Canadian and foreign must recognize the necessity of conducting more R & D activities in Canada. Management must show leadership.

Industry cannot prosper without Trade. As the ability to compete begins at home, structural inefficiencies like interprovincial trade barriers must be removed. On the external front, industry must take more aggressive attitude towards foreign markets, for example by going after product mandates.

Government's role is to create the right climate and to develop a sense of national urgency. Associations can also assist but often lack the necessary resources.

A consensus mechanism, chaired by the Prime Minister and called the National Competitiveness Action Council must be put in placed with a mandate to establish Canadian goals for a competitive economy.

Collectively, the sector has agreed to:

- * commit themselves to an ongoing collective and collaborative undertaking to resolve the issues of concern, and
- * recommend that the Prime Minister create a permanent National Competitiveness Action Council, and
- * recommend that our sector be asked to provide a delegate to that council.

PART I

Introduction

In November of 1991, the Honourable Michael Wilson, Minister of Industry, Science and Technology and Minister for International Trade, invited the Machinery and Equipment Manufacturers Association of Canada (MEMAC) and the Electrical and Electronic Manufacturers Association of Canada (EEMAC) to jointly provide leadership under the government's "Prosperity Initiative" to the development of a report from the Industrial and Electrical Equipment Sector. This report in response to Minister Wilson's request has been developed as a result of consultations between associations within the sector.

The Industrial and Electrical Equipment Sector is not a homogeneous grouping of firms or industry associations. It cuts across many of the natural alliances which industry sectors create to support each others activities. Consequently, the sector, as defined by ISTC, omits the natural allies of many of the associations. It is not surprising therefore, that under the "Prosperity Initiative" many of the associations are meeting with each other for the first time. While these new contacts should ultimately prove to be beneficial, their very newness somewhat inhibited the development of the response required to the government's initiative.

At the outset, it is important to define some of the underlying assumptions of this sector of Canadian industry, as it develops this report. Our long

term goals were best defined by David Vice, Vice Chairman of Northern Telecom Inc., during his tenure as Chairman of the Canadian Manufacturers Association (CMA). At CMA's Annual Meeting in 1989, he released a report entitled "The Aggressive Economy - Daring to Compete". In defining the aggressive economy, the CMA report makes the following points.

"Aggressive economies align their resources behind a central objective: improving the ability of workers in industries to compete on an international scale - to compete on quality, on productivity, on innovation and on time. An aggressive economy is built on four pillars: a self-help attitude on the part of management, a highly skilled workforce, effective application of new technology, and a public policy environment that promotes competitive performance."

In working towards an aggressive economy, we have made the following basic assumptions:

- (a) that Canadian industry must take an aggressive leadership role
- (b) that Canadian governments must establish a favourable public policy climate in which an aggressive economy can develop.

As one of our members summed it up - "continued prosperity demands a national focus on the need to succeed in winning it. The Success Ethic".

In Minister Wilson's letter to the associations which outlined the scope of the Prosperity Initiative activities, he urged the sectors to take actions which would make Canadian industry competitive within the next five to ten years. In our view, this time frame is far too long. Dramatic industry restructuring now appears to take place in as little as two years. If industry cannot become competitive within two years the chances are that the companies will not be in business at the end of the decade.

PART II

INDUSTRY'S LEADERSHIP ROLE AND RESPONSIBILITIES

A. Human Resources and Learning

An article in the "Quarterly Market and Productivity Review" identified these issues succinctly.

"Education and Training has emerged as a key issue, indeed, some argue the key issue in the economic restructure debate. It is increasingly recognized that a well-trained and educated workforce is an essential prerequisite for a healthy economy. The current economic environment characterized by intense global competition and massive economic restructuring puts an increasing premium on the ability of firms and workers to adapt quickly to change. This ability in turn is directly related to the quality of the work force as retraining is easier when workers have high levels of basic skills and educational attainment. In addition, rapid technological change is constantly raising the average skill level of jobs requiring continuous upgrading of the skills of the workforce."

Canada has a number of strengths in the Human Resource area, including high levels of expenditure on education, high post secondary enrolment rate and high levels of educational attainment. Yet a number of weaknesses can be pointed to including:

- * the inability on the part of a surprisingly high proportion of adult Canadians to read at a level needed to meet most everyday reading demands
- * a disturbingly high and increasing high school drop-out rate
- * a lagging interest at the post secondary level in engineering and science programs

- * a perceived lower level of private sector training effort than our major trading partners
- * public sector labour market programs, with relatively lesser focus on training programs

Obviously, governments, management and labour must cooperate if we are to make the education and training in our industry appropriate for the needs of the twenty-first century.

It had been charged that industry has abrogated its responsibility to train its workers and that it must re-develop a training culture. Others blame the poor training record in our sector on the many foreign-owned companies and the preponderance of small and medium sized firms. This latter point is certainly most important and indeed perhaps does not receive an appropriate degree of attention by government and educators. Fortunately, there are examples in our sector where the Canadian management of foreign-owned firms has fought for and won product mandates. They have adopted modern manufacturing practices and in restructuring and reorganizing their work-force, they have recognized the importance of training and retraining.

Regrettably, there now appears to be an exodus of Canadian management of branch plants thus the likelihood that the above criticism may be justified. Also those that lay the blame squarely on the shoulders of management do so with some justification for there are far too many firms which would rather "steal" trained staff than train them. Often these are the same firms which suffer from a managerial malaise which shows up in other facets of their

operations. In these sad cases, training of management should be a first priority, for without it the entire operation is likely at risk!

There are some good examples where industries have collectively worked together to improve the training of the workforce. The electrical and electronic industries for example, created a Sectoral Skills Council jointly managed by both labour and management. A training fund has been established with equal funding from the Federal and Provincial governments, management and the workers to support training which takes place within a plant as determined by a Joint Workplace Committee. At present, more than twenty factories participate in this program with more than seven thousand workers involved in training. Obviously, there is a great need to expand this program throughout the sector in Ontario and plans are also well underway to establishing a similar program in Quebec. To date, The Sectoral Skills Council has dealt only with the question of retraining the present workforce. As the highly skilled segment of the workforce is aging and will need to be replaced, to this end, an apprenticeship training program is presently being developed under the umbrella of The Sectoral Skills Council.

While the Electrical/Electronic industry has been cited for its training effort, other initiatives have also taken place. The Canadian Tooling Manufacturers Association (CTMA) has initiated standardized on-the-job training applicable to all apprentices for Tool & Die Makers, MouldMakers, PatternMakers and General Machinists in the Province of Ontario. Negotiations with the Canadian Council of Directors of Apprenticeship are

afoot to implement the same training standards in the rest of Canada. In addition to the unified apprenticeship workplace training, a uniform training module for the theoretical "in-school" training portion for the forementioned trades is in process. Currently, CTMA, through the Provincial Advisory Committee (PAC) in cooperation with the Ontario Government, is developing a basic "common core curriculum" for all these trades. It has gone even further, for in conjunction with Employment and Immigration Canada and others, it has established a National Industrial Adjustment Service Committee for the Tooling/Machining Industry, to consider human resource planning and development needs in the industry.

Likewise, the plastics industry is active in establishing training initiatives. The Society of the Plastics Industry is currently offering a traineeship program with the financial support of the Ontario Ministry of Skills Development and the federal Employment and Immigration department. The program assists employers to provide their employees with both on-the-job and in-school training. Currently the program is providing training to 200 employees. The traineeships program is an interim step leading to the plastics industry's establishment of the Canadian Plastics Training Centre, a permanent industry-operated facility set to open in the fall of 1992. However, the plastics industry recognizes that it is not enough to establish suitable training facilities. A major challenge to manufacturing in general, is to attract young people to consider the sector as a viable career choice. To this end, SPI has initiated a program to introduce plastics as a topic of study into the curriculum of students in grades 7, 8 and 9.

The need is great - it has been documented by innumerable studies but two in particular analyze the situation for the Industrial equipment sector within Ontario and British-Columbia. These are the two MEMAC studies, conducted with provincial support, which clearly establish the skills shortfall and the reasons for its continued existence. (Copies available through MEMAC)

In spite of these laudable examples the fact remains that not enough training and retraining takes place in our society. Also for one reason or another, industry does not play as important a training role as does industry in other countries, or as it should. This must change - the change must soon take place and it must be broadly based. Involvement in the process should be universal - one way or another.

Attitudes need to change. Employers need to see training as a critical investment in the future of their industry and in the future of their companies, recognizing that the skill and talents of our people is one of the critical resources and critical advantages that we have as a place to live and as a place to do business.

In the past, nations have recognized the economic and social importance of investing in education and have transferred resources to it. This they do to create the infrastructure necessary for an educated, skilled population. Most developed nations, as their wealth increases, have also transferred resources to activities believed to enhance the quality of human life - such

as health care and related social services. As individuals have acquired increased disposable income, their activities have led to expansion in leisure and recreational activities, as well as other activities that contribute to the quality and richness of our lives, and in the service sector.

The service sector is dependent upon the wealth of a nation created by other sectors. It is a user not a producer of wealth. This message must be transmitted more clearly so that it becomes accepted. In so doing, the importance of wealth generating industries (manufacturing) will be understood, and thus they will be nurtured and developed. Further it is important to emphasize, on the basis of evidence from our own country and other developed nations, that the ongoing development of Science and of Technology to our resource-based industries, to our established manufacturing and to new industries producing tradeable goods and services, is vital for our economic growth. It is the income generated through these activities in tradeable goods and services, that allows for the expansion of the service sector particularly in the personal and social services sector, and the creation of new jobs and a better quality of life for Canadians.

The preceding confirms the need to soon establish a broadly based commitment to the training and retraining process. A piecemeal or tardy process will provide insufficient resources, an inequitable distribution of costs and responsibilities and a response out-of-step with the need. Branch plants

are a problem as is out-of-date management philosophy. The needs of wealth creating industry must be stressed not only because of its training and education requirements but also because without a viable manufacturing/processing infrastructure, the service industry will not flourish and new jobs will not be created.

B. Technology

The managers of Canadian industry are responsible for Canada's industrial R&D performance!

The high level of foreign ownership of Canadian industry is frequently cited as a reason for Canada's poor performance in industrial R&D and there is much justification in this claim, particularly at a time of industrial rationalization, the downgrading of responsibilities of local managers, and the introduction of foreign management in lieu of Canadian. The emphasis is very much directed to the corporate bottom-line and long term issues such as training and R&D are not necessarily of direct interest and concern.

If the managers of Canadian industry do not obtain/win product mandates and the right to conduct in Canada the R&D associated with those mandates, then not only is their future in jeopardy, but also Canada's R&D performance will remain relatively low. Canada's manufacturing infrastructure is heavily foreign owned, this is a reality, a result of our historic development. It must be clearly recognized, and if it is, then it will be clearly understood

that to change our national R&D performance branch plants must be encouraged to do more R&D in Canada and to use this knowledge to their corporate Canadian advantage. We cannot go on wringing our hands about our dismal comparative performance and only look to a portion of our manufacturing infrastructure to correct the ills. "Canadian" firms must do more to be sure, but so must branch plants operating in Canada. Government programs to promote industrial R&D will not succeed if this reality is not accepted and accommodated.

In the past, three quarters of the Canadian government's Science and Technology budget has been spent by government departments. A major portion of this funding has supported R&D in government laboratories. R&D performed in government laboratories frequently lacks an appropriate focus and is no substitute for R&D undertaken by industry. If Canada is to have a successful industrial R&D program, then Canadian industry must give leadership to such programs and government effort should be redirected to enhance and complement them.

By global standards, the majority of Canadian companies fall in the small to medium size category. Where R&D has been undertaken, venture capital is frequently needed to ensure the final development of the product and its successful introduction into the marketplace. In 1991, the Science Council of Canada produced a useful discussion paper on the role for venture capital in creating threshold technology companies in Canada. While there are differing views of the role of government in this area there is no doubt

that it is important to undertake detailed discussions between government and industry on the important role of venture capital in Canadian industry.

Canadian industry continues to view R&D tax credits as the most valuable and appropriate mechanism for government funding of industrial R&D in this country. In its recent budget, the Canadian government indicated its intention to amend the regulations in order to improve the efficiency of delivering R&D tax credits. We in industry welcome this initiative and will continue to work with the Departments of Finance and Revenue to bring this matter to a successful conclusion.

Having said this however, it must be recognized that small and medium sized industry has a very difficult time with R&D Tax credits. This is a great pity for SME's are a key repository of innovation, of energy and of job development. The problem stems from difficult legislation and the interpretation thereof, through bureaucratic procedures to financial problems. Much effort is being expended to clarify the language, interpretation and audit procedures, all within a helpful climate. The one major problem of funding has yet to be resolved. Because of funding difficulties SME's need a mechanism to put money aside or to accumulate funds, to enable an R&D project to be undertaken, or equally important, to continue one to be financed during troubled times.

SME's therefore need a form of Registered R&D Tax Savings Plan as well as an R&D Tax Deferral Plan. These two subjects have in the past been proposed by MEMAC.

Until there is a critical mass of industrial R&D within Canada, we cannot expect small and medium sized Canadian firms to undertake, on their own, the long term basic research or pre-competitive research that might lead to a quantum advance in technology. Because of this, support for industrial R&D should continue to focus on the "D", that is it should give the most weight to new product development. However, there must be more industrial influence on the significant levels of research carried out in our universities and government laboratories. Governments should support industry - led consortia or clusters which are prepared to participate in longer term research in cooperation with academic research leaders. The current high dependence on universities to build the required university - industry linkages will not succeed on their own.

By world standards, Canada has a relatively small R&D infrastructure thus we cannot expect to develop all the new technology required by our industry. As a consequence we must follow the example of other countries and adapt technologies developed in other parts of the world. The commercial offices in Canadian embassies around the world can play a vital role in building an "information network" which can assist Canadian industry in locating appropriate foreign technology. However Canadian companies must be sufficiently technically literate to select, adopt and use such foreign technology -- a problem that many must resolve!

In the U.S., technology has flourished from the massive projects funded for defence, much to the envy of our industry. There are new demands being

placed on the world, one of them is the environment, an area many see as an opportunity. It is said that rather than seeing regulatory environmental change as a burden and an expense, industry should seize the challenge to lead the world in this field.

This subject was addressed, not thoroughly because of the constraints on time, but it was addressed in the above context. The response was surprising - for it was hesitant, cautious and less than optimistic. The view was that the environment does not sell: price, quality, etc, does. It appears to be a subject difficult to grasp and quantify. (Perhaps the difficulty - which the group apparently had dealing with this topic indicates that it is worthy of further study. Maybe other countries are having the same problem and we might be the first to see the opportunity). It was felt other "exotic" areas such as alternative energy, efficiency, low-wear, zero defect, etc might provide more profitable areas of endeavour.

C. Trade

In these days of globalization and opening of markets it is understood that the Industrial and Electrical Equipment sector cannot prosper without trade, both domestic and external.

C.1 Domestic Trade

The major issue of concern identified by this sector is the hundreds of interprovincial barriers to trade which, according to a Canadian Manufacturers Association estimate, affect 10-15% of gross domestic product.

The ability to compete abroad begins at home. However, because of structural inefficiencies created by governments, this ability is seriously compromised.

While governments now realize the extent of the problem, they are moving too slowly to effect the necessary changes.

If the world order can change as rapidly as recent events have demonstrated, it is hard to understand why Canada is still lagging so far behind and why Canadians have to wait until 1995, as suggested in the "Prosperity through Competitiveness" discussion paper, to see a single integrated market.

A single economic market will promote a more efficient and lower-cost industrial base and more specialized and productive firms. This will also encourage firms to compete more aggressively at home and abroad thereby enhancing Canada's competitiveness and exports. International trade liberalization requires that Canada be more competitive. To achieve that level of competitiveness, speedy removal of all interprovincial barriers to trade therefore remains one of the major and most urgent things to do.

C.2 External Trade

Industry must also take a more aggressive attitude towards foreign markets. Canadian management of foreign-owned corporations must fight for survival. It is up to them to show the benefits of operating in Canada and obtain their share of the corporate pie.

To compete in rapidly changing world markets, the Canadian manufacturing industry must seek out niches for itself and fill the requirements of those niche markets as efficiently and financially effectively as possible. It is the government's role to provide for Canadian industry an environment -- regulatory, commercial and financial -- in which the state-of-the-art products from manufacturers can compete worldwide. As their part of this business bargain, Canadian managers must develop strategies to sell and support their products with sustained efforts, using the very best methods and techniques to retain a competitive edge.

Product mandates, be they North American or worldwide, are required for any firm that looks to grow. The Canadian market is just not big enough. To reap the benefits of exports, firms can't just work on their own. Industry must maximize the synergy among themselves. Success can no longer stem from individual efforts in pursuit of short-term objectives. Success will flow from pooling our collective efforts.

It is therefore essential for business and governments to adopt an industrial clusters strategy. To meet the trade challenge, businesses must encourage integration, grouping together and common actions. Export consortia are also a good tool for accessing new markets. They allow Canadian industry to bid on larger and more complex export projects than any one company could manage singly. That means that industry can gain economies of scope and scale, and use its marketing and managerial resources with much greater efficiency. While consortia members may be both

subsidiaries of multinationals and domestic firms, their international rivalry is subordinated to a "Team Canada" approach.

However, access alone does not guarantee success. For example, the Canadian capacity for success on major international projects, particularly in developing countries, is seriously hampered by its lack of competitiveness in the field of the financing of international trade. (i.e. some countries offer very attractive soft loans/mixed credit terms which are not available in Canada)

Some Canadian companies have performed well internationally, both alone and in consortia. Increasingly in recent years, however, Canadian firms have come up against a new impediment to export success. Constraints on available low cost export financing are precluding Canadian firms from even bidding on projects. Unable to match the financing facilities of other OECD nations, Canadian firms are being closed out of these potentially valuable markets. Strategically important projects are being lost to Canadian firms solely because of lack of strong export financing.

Furthermore, the Canadian chartered banks are either non-competitive or not interested in financing exports, unlike the German and Austrian banks for example who are major participants with their exporters. The primary reason is the degree of risk which is shared between the banks and their federal governments. There is also an apparent attitudinal difference, in that our commercial banks seem to lack a trading culture. Efforts by the Canadian

government and/or the Bank of Canada to correct these weaknesses is necessary.

In summary, there are considerable gains for Canada arising from exports, by raising incomes, expanding job opportunities and maintaining a critical mass of labour skills.

PART III

GOVERNMENT'S ROLE AND RESPONSIBILITY

Industry views the government's primary role as that of creating a climate in which Canadian industry can become globally competitive. This should include the responsibility to nurture industrial development under appropriate circumstances.

Over the past decade, much of Canadian industry has dramatically restructured and streamlined its internal organization in order to remain globally competitive. If Canada as a nation is to remain competitive, it is imperative that governments undertake a similar restructuring. For example, Canada is grossly over-governed. Federal and Provincial governments have Ministries which frequently have over-lapping areas of jurisdiction. This is inefficient and frequently counter-productive. There are many areas in which governments can become competitive. Governments can assist by agreeing and using national standards in areas, such as education and training, the environment, and energy efficiency. It is important that national standards be developed in consultation with industry and other affected parties.

Canadian governments must give high priority to the elimination of the barriers to inter-provincial trade. Canadian industry cannot win product mandates and become focused and competitive if it is forced to have

manufacturing operations located in province. The global economy is moving much too quickly to allow us the luxury of waiting until 1995.

In his recent study of Canadian Competitiveness, Professor Michael Porter urged the encouragement of industrial clusters within Canada. Federal and provincial governments, in consultation with their industries, should work together to implement such a national policy.

Governments can play a vital role in changing public opinion with respect to national competitiveness. During times of war, governments are very effective in persuading people that "Your country needs you". It seems that military conflict has been replaced by global economic rivalry. Governments can play an important role in developing national support for a "Competitive Canada". Stressing the values not just of education, but education in Science and Technology and developing a sense of national urgency.

PART IV

ASSOCIATIONS LEADERSHIP ROLE

Both the Porter Report and Minister Wilson have commented on the need for Canadian industrial associations to play a greater leadership role on behalf of their industries. Associations agree!

While this principle is readily accepted, one must be under no illusion about the difficulty in bringing this concept to fruition. With the exception of some powerful associations, many are by and large small, poorly funded, inadequately manned and narrowly focused.

As governments are reduced in size and program spending, they look to associations to take on more responsibilities, provide more answers, and become more involved in long term, policy oriented matters. It is in industry's interest for them to do so. How can they accept this challenge? Where do they obtain the resources? Will they truly be able to speak for their constituents?

Typically, companies join associations for very specific and practical reasons. They need help in marketing, they want protection of some sort, they need a problem solved, they want information. It is only later (if ever) that they begin to value the more general, the longer term, benefits of memberships. For this reason they join and support vertical

associations, yet the very reasons for the existence of vertical associations often forces them to remain small, poorly funded, and narrow in scope. Their mission is to respond to the immediate needs of their membership; the longer term is a lesser priority; they therefore tend to be less than dynamic advocates.

As an example, the industrial equipment sector is very fragmented and it would appear appropriate for it to develop/create an umbrella association which very clearly recognizes these vertical interests but at the same time has the resources to deal with the broad, long range (horizontal) issues. The "catch 22" is that this creates additional expense - a very negative factor when arguing for re-organization! In any event most of the associations within the Industrial and Electrical sector recognize the problem and the need, and are open-minded towards striving for a solution.

Perhaps the government might feel it is in its interest to provide some form of support to move this matter forward in selected industrial sectors.

PART V

NATIONAL CONSENSUS

In recent years, it has become apparent that successful technology-driven countries have developed joint private/public sector consensus mechanisms to set national priorities. In 1987, for example, Prime Minister Brian Mulroney established the National Advisory Board on Science and Technology.

The creation of NABST evoked a great deal of enthusiasm and support among the industrial R&D community. The committee's first report, which was delivered to the Prime Minister in December of 1987, sets out the principles that should underlie a Canadian science and technology consensus mechanism as follows:

- * a sense of mutual trust among governments, industry, labour and the academic community
- * national leadership with a clearly defined vision of a technologically advanced and competitive Canadian economy
- * agreement that national science and technology priorities must be industry-driven
- * all important and relevant structures - provincial and federal must be involved and committed to the effort
- * industry and government participation must be at the most senior levels

Much of the initial industry enthusiasm for NABST has however disappeared.

The consensus mechanism proposed by NABST should be enlarged and aim at building consensus on the national priorities, and its mandate should be action-oriented rather than advisory.

We therefore urge the government to consider an expanded consensus mechanism which will reflect the need to change the "mindset" to recognize the seriousness of the competitiveness challenge.

The Prime Minister should create and chair a permanent "National Competitiveness Action Council" with a mandate to establish Canadian goals for all the component parts of a competitive economy and with the necessary powers to effect changes. The action-oriented Council should be composed of top level people from government, industry, labour, academia, banking and other appropriate stakeholders.

Canada needs to mobilize a national effort and develop a national sense of purpose behind the Aggressive Economy, one with a Success Ethic!

PART VI

FINDINGS AND RECOMMENDATIONS

The Prosperity Initiative created the opportunity for the associations and organizations which made up the Industrial and Electrical Sector of our economy, to meet for the first time. This is at first glance a heterogeneous sector if viewed from its product mix. Its scope ranges from farm implement manufacturing, food processing and packaging machinery, household tools and appliances as well as commercial machinery, to power generation and distribution, ship repair, resource machinery and nuclear reactors.

The participants quickly realized that time constraints did not permit discussion of those issues of concern which were specific to the some 25 associations involved in the process. They thus charged them with continuing to seek resolution at the association level and asked that only issues of majority interest be discussed on the Prosperity Agenda.

Not surprisingly, those issues addressed in the government's background papers, the Minister's speeches, the Kodak reports, the Porter report, and the scores of studies undertaken by separate associations, became the major issues of this sector. The three acknowledged issues - Trade, Learning, and Technology - thus became the focus of delegates. Two other issues - Associations, and Consensus were also added.

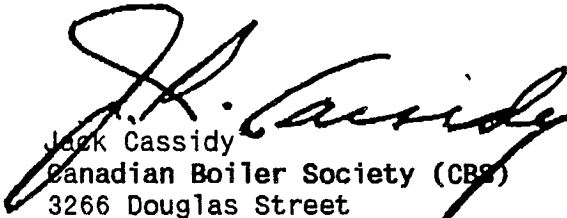
Many detailed findings and recommendations came forward in discussions and these are listed at Appendix A.


Findings

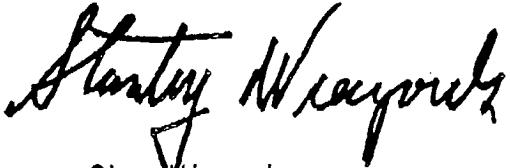
It was the finding of the Industrial and Electrical Sector that five issues, namely: Trade, Learning, Technology, Associations and Consensus, were of immediate, critical and profound concern to the sector. It was also found that because of the diversity of the sector and the constraints on time, delegates were unable to develop a plan of action. What did develop however was an appreciation of the need to collectively work towards a solution, rather than as separate and uncoordinated entities. A consensus therefore developed.


The organizations which prepared and signed this report, and which are listed on the following pages, do hereby


- * commit themselves to an ongoing collective and collaborative undertaking to resolve the issues of concern, and
- * recommend that the Prime Minister create a permanent National Competitiveness Action Council, and
- * recommend that our sector be asked to provide a delegate to that council.

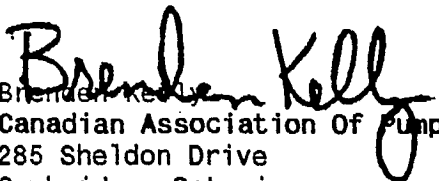

Jack Cassidy
Canadian Boiler Society (CBS)
3266 Douglas Street
Burlington, Ontario
L7N 1G9



Allan Trudelle
Canadian Fluid Power Association (CFPA)
51 Worcester Road
Rexdale, Ontario
M9W 4K2

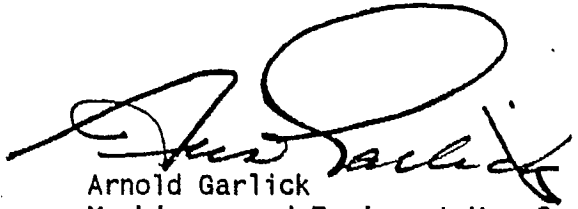

Stan Vizorek
Canadian Heat Exchangers and Manufacturers Association (CHEVMA)
3160 Steeles Avenue East, Suite 200
Markham, Ontario
L3R 4G9

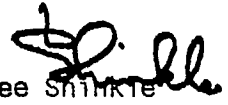

Jim Clarke
Canadian Maritime Industries Association (CMIA)
P.O. Box 1429, Station B
Suite 801, 100 Sparks Street
Ottawa, Ontario
K1P 5R4



Les Payne
Canadian Tooling Manufacturers Association (CTMA)
1425 Bishop Street, Units 8-9
Cambridge, Ontario
N1R 6J9



Brendan Kelly
Canadian Association Of Pump Manufacturers (CAPM)
285 Sheldon Drive
Cambridge, Ontario
N1T 1A6


Pierre Bourdage
Forest Engineering Research Institute of Canada (FERIC)
143 Place Frontenac
Pointe Claire, Quebec
H9R 4Z7

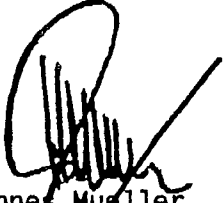

Arnold Garlick
Machinery and Equipment Manufacturers Association of Canada (MEMAC)
116 Albert Street, Suite 701
Ottawa, Ontario
K1P 5G3


Lee Shinkie
Newfoundland Ocean Industries Association (NOIA)
Box 44 Atlantic Place
Suite 805, 215 Water Street
St-John's, Newfoundland
A1C 6C9



Gerry Thompson
Petroleum Services Association Of Canada (PSAC)
P.O. Box 1510
Calgary, Alberta
T2P 2L6




Brett Filson
Prairie Implement Manufacturers' Association (PIMA)
2135 Albert Street
Regina, Saskatchewan
S4P 2V1



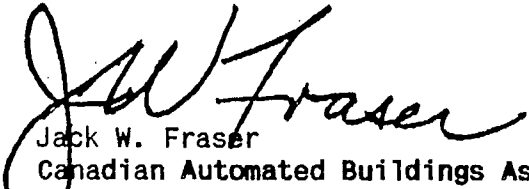
Hannes Mueller
Specialty Valve Manufacturers' Institute (SVMI)
48-2400 Lucknov Drive
Mississauga, Ontario
L5S 1T9



Dr. Norman Aspin
Electrical And Electronic Manufacturers Association Of Canada (EEMAC)
10 Carlson Court, Suite 500
Rexdale, Ontario
M9W 6L2



Dr. Gordon MacNabb
Precarn Associates Inc.
30 Colonnade Road
Nepean, Ontario
K2E 7J6



Jack W. Fraser
Canadian Automated Buildings Association (CABA)
1700 Montreal Road, M59
Ottawa, Ontario
K1A 0R6

John Webb

John Webb
CANDU Owners Group
5775 Yonge Street, Room N5C2
Toronto, Ontario
M2M M4W

Neil M. Hale

Neil M. Hale
Canadian Battery Association (CBA)
One Yonge Street, 14th Floor
Toronto, Ontario
M5E 1J9

John Reid

Honourable John Reid
Canadian Nuclear Association (CNA)
144 Front Street West, Suite 725
Toronto, Ontario
M5J 2L7

Bill Adams

Dr. Bill Adams
Electric Vehicle Association of Canada (EVAC)
33 Mann Street
Ottawa, Ontario
K1N 6N5

Wallace Head

Wallace Head
Canadian Electrical Association
1 Westmount Square, Suite 1600
Montreal, Quebec
H3Z 2P9

Brian Fox

Brian Fox
The Society of Plastics Industry of Canada (SPIC)
1262 Don Mills Road, Suite 104
Don Mills, Ontario
M3B 2W7

APPENDIX A - DETAILED FINDINGS AND RECOMMENDATIONS

A. Human Resources and Learning:

1. Training of management should be a first priority (page 5)
2. Attitudes need to change (page 7)
3. The needs of wealth creating industry must be stressed (page 8)

B. Technology:

4. Branch plants must be encouraged to do more R&D in Canada and to use this knowledge to their corporate Canadian advantage. (page 10)
5. Canadian industry must give leadership to industrial R&D programs and government funding should be redirected to enhance and complement them. (page 10)
6. Important to undertake detailed discussions between government and industry on the important role of venture capital in Canadian industry. (page 10)
7. Industry undertakes to continue to work with the Departments of Finance and Revenue to improve the efficiency of delivery of R&D tax credits. (page 11)
8. Industry recommends a form of Registered R&D Tax Savings Plan and a R&D Tax Deferral Plan to assist SMEs. (page 11)
9. Support for industrial R&D should focus on the "D". (page 12)
10. Governments should support industry-led consortia or clusters which are prepared to participate in longer term research in cooperation with academic research leaders. (page 12)
11. The commercial offices in Canadian embassies should assist industry in locating appropriate foreign technology. (page 12)

C. Trade:

12. To help achieve competitiveness, industry recommends speedy removal of all interprovincial barriers to trade. (page 13-14)
13. Canadian management of foreign-owned corporations must show the benefits of operating in Canada and obtain their share of the corporate pie. (page 14)

14. Canadian managers must develop strategies to sell and support their products. (page 15)
15. Business and governments to adopt an industrial clusters strategy. (page 15)
16. More use should be made of export consortia. (page 15)
17. Governments should improve the competitiveness of international trade financing. (page 16)
18. Efforts by the Canadian government and/or the Bank of Canada are necessary to instill a trading culture in our commercial banks. (page 16-17)

D. Government Role and Responsibility

19. Industry views the government's primary role as that of creating a climate in which Canadian industry can become globally competitive. (page 18)
20. It is imperative that governments restructure and streamline their internal organization. (page 18)
21. Governments can assist by agreeing and using national standards in many areas, such as education and training, the environment, and energy efficiency. It is important that national standards be developed in consultation with industry. (page 18)
22. Canadian governments must give high priority to the elimination of the barriers to inter-provincial trade. (page 18)
23. Industrial clusters strategy should be considered at the national level. (page 19)

E. Associations Leadership Role

24. Government may wish to provide support to associations in selected industrial sectors. If government wants associations to do more, it should consider encouraging and assisting associations to better respond to the needs of the public and private sectors. (page 20)

F. National Consensus

25. The Prime Minister should create and chair a permanent action-oriented "National Competitiveness Action Council" with a mandate to establish national goals and priorities. (page 22-23)

HF1479 .P73 I5 QUEEN c.2
Prosperity initiative : rep
ort of the industrial & ele
ctrical equipment sector

INDUSTRY CANADA/INDUSTRIE CANADA



65194