

AGENDA
REGIONAL MEETING OF THE MCA BOARD OF DIRECTORS
10:30 a.m. (EDT), Tuesday, October 20, 1970
Chateau Laurier (Convention Hall), Ottawa, Canada

- I. OPENING REMARKS.
- II. MINUTES OF SEPTEMBER 9, 1970, MEETING.
- III. REPORT OF THE SECRETARY-TREASURER.
 - (a) Financial Report for Four Months Ending September 30, 1970. (Enclosure)
 - (b) Emergency Increase in Fiscal 1970-71 Budget by Executive Committee to fund opposition to freight rate increase (ICC Ex Parte 267).
 - (c) Status of Membership Fee Collections.
- IV. BOARD OF DIRECTORS.
 - (a) 20th Semiannual Meeting, November 24, 1970.
 - (b) Statement on Environmental Management. (Enclosure)
 - (c) Membership Committee Report:
 - (1) Oxirane Chemical Company
 - (2) Roane Electric Furnace Division of Woodward Company, A Division of The Mead Corporation
- V. COMMITTEE APPOINTMENTS. (Enclosure)
- VI. STAFF REPORT.
- VII. PRESENTATION.

Presentation by the Canadian Chemical Producers' Association.
- VIII. ADJOURNMENT.

Next meeting of the Board of Directors will be held at 4:00 p.m. (EST), Monday, November 23, 1970, in the Board Room of the American Iron and Steel Institute, 150 East 42nd Street (38th floor, Socony Mobil Building), New York City.

CMA 069378

MINUTES of the one hundred ninety-eighth meeting of the Directors of the Manufacturing Chemists' Association, Inc., held at Chateau Laurier, Ottawa, Canada, Tuesday, October 20, 1970, at 10:30 a.m.

There were present: Clifford D. Siverd, Chairman H. E. Hirschland
 L. G. Bliss Leonard Hynes
 F. L. Byrom Robert A. Lucht
 Herschel H. Cudd Harry D. McNeeley
 Lee V. Dauler Max A. Minnig
 David H. Dawson Luther S. Roehm
 William J. Driver Jack B. St. Clair
 Clifton C. Garvin, Jr. Robert J. Whitesell
 Roger W. Gunder James R. Carnes

Alternates: Stanley H. Anonsen (for Harold E. Thayer)
 Frederick L. Bissinger (for John T. Connor)
 David N. Clark (for Lee V. Dauler)
 R. M. Coquillette (for Robert D. Goodall)
 J. P. Cunningham (for Jack B. St. Clair)
 Carl A. Gerstacker (for Herbert D. Doan)
 John L. Gillis (for Edward J. Bock)
 Edward R. Kane (for David H. Dawson)
 H. Barclay Morley (for Roger W. Gunder)
 Earl C. Ray (for Robert A. Lucht)
 Gerald S. Roberts (for Leonard Hynes)
 George W. Russell (for Clifford D. Siverd)
 Donald O. Swan (for Clifton C. Garvin, Jr.)
 R. J. Zedler (for H. E. Hirschland)

General Counsel: Lloyd Symington

Present by invitation: Edgar H. Bleckwell, Du Pont of Canada Limited
 Wilburt L. Canniff, CCPA
 J. S. Dewar, Union Carbide Canada Limited
 H. Elgee, Lignosol Chemicals
 A. G. Erdman, Monsanto Canada Limited
 D. W. Evans, Aluminum Company of Canada, Ltd.
 A. J. Foote, Shell Canada Limited
 H. B. Granholm, Nopco Chemical Canada Limited
 V. N. Hurd, Gulf Oil Canada Limited, Shawinigan
 Chemicals Division
 L. G. Lillico, Electric Reduction Company of Canada,
 Ltd., Industrial Chemicals Division
 B. H. Loper, Cyanamid of Canada Limited
 Bruce F. Macdonald, CCPA

Donald L. Mackenzie, CCPA
 Clifford S. Malone, Chemcell Limited
 Adolph Monsaroff, Domtar Chemicals Limited
 A. George Moreton, Esso Chemical Canada, A
 Division of Imperial Oil Limited
 R. F. Powell, Standard Chemical Limited
 I. C. Rush, Polymer Corporation Limited
 Paul D. Scott, Dow Chemical of Canada, Limited

I. OPENING REMARKS.

In opening the meeting, Chairman Siverd expressed the pleasure of the MCA Directors and Alternates to be in Canada and welcomed the Directors of The Canadian Chemical Producers' Association and Canadian company representatives to the Directors' Meeting. After giving a brief summary of the Manufacturing Chemists Association and its activities, Mr. Siverd requested those present to stand and introduce themselves.

II. MINUTES OF SEPTEMBER 9, 1970, MEETING.

The Minutes of the September 9, 1970, meeting of the Board of Directors were duly approved as submitted to the members.

III. REPORT OF THE SECRETARY-TREASURER.

(a) Financial Report for Four Months Ending September 30, 1970.
 The Financial Report for the four months ending September 30, 1970, was summarized by the Secretary-Treasurer.

ON MOTION, duly made and seconded,
 it was,

VOTED: That the report be accepted
 and placed on file.

(b) Emergency Increase in Fiscal 1970-71 Budget by Executive Committee to Fund Opposition to Freight Rate Increase (ICC Ex Parte 267). The Secretary-Treasurer invited attention of the Directors to Footnote (2) to the Income and Expense Statement for the period ending September 30, 1970, in which is reflected the action of the Executive Committee on September 30 in authorizing an increase in the Association's budget for fiscal 1970-71 to provide the necessary funds for services of cost specialists and legal counsel to prepare and present the Association's opposition to the 15 percent freight rate increase requested by the railroads in ICC Ex Parte 267. This action, taken by the Executive Committee under its authority in urgent matters, together with the budget increases approved for opposition to an earlier freight rate increase and for the establishment of

CHEMTREC, have resulted in an expense budget for the current year which is \$117,930 in excess of estimated income.

(c) Status of Membership Fee Collections. The Secretary-Treasurer reported that all membership fees due as of the beginning of the current fiscal year had been paid in full.

IV. BOARD OF DIRECTORS.

(a) 20th Semiannual Meeting, November 24, 1970. Mr. Driver reported the completion of plans for the 20th Semiannual Meeting at The New York Hilton on November 24, 1970, and briefly summarized the program of discussion panels which has been arranged. He reported that Senator Birch Bayh of Indiana had accepted the Association's invitation to be the banquet speaker. The agreement of Mrs. Virginia Knauer, President Nixon's Special Assistant for Consumer Affairs, to be the luncheon speaker was previously announced. Those present were urged to submit their registrations prior to October 30, the deadline for inclusion of registrants' names in the meeting program.

(b) Statement on Environmental Management. Chairman Siverd invited the attention of those present to the statement on environmental management, copy appended as Exhibit A, which had been read at the preceding meeting of the Board and forwarded thereafter to Directors for their comments. Exhibit A therefore contains minor revisions recommended by Directors in the draft statement as approved by the Executive Committee and presented at the September Board meeting.

(c) Membership Committee Report. Chairman St. Clair of the Membership Committee reported that applications had been received from Oxirane Chemical Company and Roane Electric Furnace Division of Woodward Company, A Division of The Mead Corporation, and that in the opinion of the Membership Committee, the applicants were qualified under the Association's Bylaws.

ON MOTION, duly made and seconded,
it was,

VOTED: That the applicants be elected
to membership in the Association.

V. COMMITTEE APPOINTMENTS.

The following committee appointments were approved.

(a) Government Relations Committee.

Myron V. Anthony, Stauffer Chemical Company
Kimball C. Firestone, Firestone Tire & Rubber Company
Charles T. Marck, The Dow Chemical Company
Lester G. Shapiro, Engelhard Minerals & Chemicals Corporation

- (b) Labels and Precautionary Information Committee.
Clarence Lowery, Matheson Coleman & Bell, Division of
Will Ross, Inc.
- (c) Legal Advisory Committee.
Richard E. Manning, E. I. du Pont de Nemours & Company
- (d) Mechanical Technical Committee.
Hallett B. Addoms, Hooker Chemical Corporation
Harry M. Anderson, Chevron Chemical Company
- (e) Patent Committee.
John B. Clark, Monsanto Company
J. J. Hagan, American Cyanamid Company
- (f) Plastics Committee.
J. E. Eger, Enjay Chemical Company
- (g) Transportation and Distribution Committee.
Frederic E. Allen, Jr., E. I. du Pont de Nemours & Company
Grant Arnold, Ethyl Corporation
R. N. Rear, Borden Chemical, Division of Borden Inc.
Robert J. Sullivan, Shell Chemical Company
Douglas E. Tennis, Rexene Polymers Company
Robert L. Weber, Kaiser Chemicals, Division of
Kaiser Aluminum & Chemical Corporation
- (h) Transportation Equipment Committee.
Frank E. Brunjes, Shell Chemical Company

VI. STAFF REPORT.

Mr. Driver reported upon the status of pending legislation of interest to the Association, as well as the progress being made toward establishment of CHEMTREC and in MCA committee consideration of the proposal for a national laboratory for environmental studies, his written staff report, forwarded to Directors in advance of the meeting, being attached hereto as Exhibit B.

VII. PRESENTATION.

Chairman Siverd introduced Mr. E. H. Bleckwell, Chairman of the Board of Directors of The Canadian Chemical Producers' Association, for a presentation on the Canadian chemical industry, its size and contribution to the Canadian economy, together with a comparison of the roles of the chemical industries of Canada and the United States, copy attached hereto as Exhibit C. (Note: This presentation has been marked confidential for the purpose of limiting distribution to members of the MCA and CCPA Boards of Directors.)

Following conclusion of Mr. Bleckwell's presentation, General Bruce F. Macdonald, President of The Canadian Chemical Producers' Association, presented a summary of actions being taken by the Canadian Government and The Canadian Chemical Producers' Association to find solutions to some of the industry problems pointed out by Mr. Bleckwell, copy of his presentation being appended as Exhibit D.

Chairman Siverd expressed appreciation to Mr. Bleckwell and General Macdonald for their interesting and comprehensive presentations pointing up the mutuality of interests and problems of the chemical industries of Canada and the United States.

* * * * *

There being no further business to come before the meeting, it was unanimously resolved to adjourn.


James R. Carnes
Secretary-Treasurer

Certified Correct:


Clifford D. Siverd
Chairman of the Board

STATEMENT ON ENVIRONMENTAL MANAGEMENT

The chemical industry will continue to cooperate actively with Federal, state, and local governments, and with other industry and its own communities, to bring about a clean, wholesome, and attractive environment.

The Federal Government, in our view, has the primary responsibility for setting policies and priorities for environmental quality. The interpretation of Federal policy in terms of abatement programs, and the enforcement of the controls thereby imposed, should be on a regional or state basis.

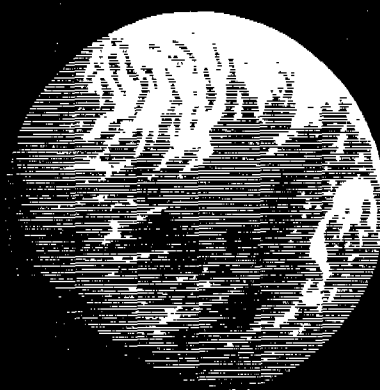
We believe that industry and regional or state authorities should cooperate in establishing goals for environmental quality and in setting timetables for progressive steps toward these goals. New plants should be designed to be compatible with these goals. Older plants must be brought into conformity on a schedule of priorities that recognizes both the impact of their operation on the environment and the technological problems of control.

We believe that allowable emissions should be strictly limited, but rationally related to environmental quality goals, and vigorously and consistently enforced. Penalties for violations should be appropriate and certain.

Products achieve acceptance in the marketplace because they fulfill a need -- provide a benefit -- to society. In many instances, they also impose some threat of undesired and unintended effect that degrades the environment, either in use or when discarded. We of the chemical industry pledge an intensified and continuing effort to work with government and responsible public groups to identify and anticipate such pressures upon ecology, and to design our products and their methods of use to maximize social values and minimize social costs.

We will continue to promote enlightened views within our industry on its responsibilities for protection of the environment and, through the activities of our technical committees, to assist each MCA member to meet those responsibilities.

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ENVIRONMENTAL MANAGEMENT

A statement
by the
Manufacturing
Chemists
Association

Founded in 1872, the Manufacturing Chemists Association is the oldest chemical trade organization in the Western Hemisphere. Its member companies represent more than 90 per cent of the production capacity of basic industrial chemicals within the United States and Canada.

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STAFF REPORT
October 19-20, 1970
by
William J. Driver

THE LEGISLATURE

A Congressional recess from October 14 to November 16 has now been scheduled. Legislative implications for the chemical industry in a lame duck session can be interpreted two ways. It could take some of the political heat out of controversial legislation, but it could also allow additional time for the enactment of measures which would otherwise be disposed of through sine die adjournment.

JOB SAFETY

Industry pressure forced the House to postpone floor action on occupational safety and health legislation until after the recess.

Few issues on Capitol Hill have evoked a larger volume of protests than H.R. 16785, the job safety bill introduced by Rep. Dominick Daniels (D.-N.J.) and backed by trade unions.

It would empower the Secretary of Labor to set occupational health and safety standards, police compliance, and punish violators--all in contradiction of the "separation of powers" inherent in our system. The Daniels bill vests excessive and arbitrary powers in the Secretary of Labor and its provisions could be used as leverage in collective bargaining, labor disputes and strike situations.

A bipartisan substitute bill, introduced by Representatives William A. Steiger (R.-Wis.) and Robert L. F. Sikes (D.-Fla.), would eliminate many of the objectionable features of the Daniels bill while improving health and safety standards.

Current focus on job safety is in the Senate where floor action was tentatively set for October 12 on S.2193, introduced by Senator Harrison A. Williams, Jr. (D.-N.J.), and reported by the Senate Committee on Labor and Public Welfare. This bill has certain provisions which, from an industry standpoint, are more objectionable than the Daniels version. Senator Jacob Javits, (R.-N.Y.), added an amendment to S.2193 which would establish a National Commission on State Workmen's Compensation Laws.

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Such a Commission would examine "serious questions" which have been raised concerning "the fairness and adequacy of present workmen's compensation laws in the light of the growth of the economy, the changing nature of the labor force, increases in medical knowledge, changes in the hazards associated with various types of employment, new technology creating new risks to health and safety, and increases in the general level of wages and the cost of living."

This would be the precursor of Federal jurisdiction over state workmen's compensation which Javits has frequently advocated.

An advisory has been sent to legislative contacts in member companies urging prompt opposition to S.2193 (the Williams bill) and support of S.4404 which will be offered as a substitute by Senator Peter H. Dominick (R.-Col.). The Dominick bill is the Senate counterpart of the Steiger/Sikes bill in the House.

Representatives Steiger and Sikes were featured speakers at the season's first Chemical Forum Luncheon on October 5. Both urged vigorous industry action to support their measure in the House and Dominick's in the Senate.

TAX ON LEAD ADDITIVES

Opposition to President Nixon's proposed tax on lead motor fuel additives was voiced by MCA in a statement to the House Ways and Means Committee. The legislation in question would impose a tax of \$4.50 per pound on lead used in the refining of gasoline.

We stated that the proposed tax would be discriminatory as a revenue producing measure and ineffective in achieving its announced objective of reducing air pollution. We argued that the measure would be a piecemeal approach to environmental control without proper evaluation of the adequacy or need for the legislation.

There appears little or no prospect that the Administration proposal will make any headway on Capitol Hill.

EQUAL EMPLOYMENT

By a vote of 47 to 24, the Senate on October 1 approved a bill endowing the Equal Employment Opportunity Commission with "cease and desist" powers. The Senate rejected by 41 to 27 a substitute measure supported by business which would have authorized the Commission to go to court to seek enforcement of its decisions.

Business spokesmen were successful in adding a provision to the bill for a General Counsel, appointed by the President and approved by the Senate, thus somewhat mitigating the Commission's monopoly of power.

A similar bill has been reported out by the House Education and Labor Committee. It is presently before the Rules Committee -- held there for the time being by the opposition of business and a segment of organized labor.

AIR QUALITY

By a unanimous 73-0 vote on the Muskie Air Quality Standards bill, the Senate expressed its determination to impose tough controls on environmental pollution. It now goes to conference with the House to resolve the disparate provisions.

The more moderate House version, which passed 374-1 and which takes into account economic feasibility is, of course, preferred by industry. Present indications are that the House conferees intend to stand firm. However, Senate conferees take with them the unanimous mandate of that body.

MCA is working with other Washington-based organizations in striving to effect the changes advocated in my letter to House and Senate conferees.

* * *

The Air Quality Committee arranged a workshop on air pollution control problems associated with sulfuric acid manufacturing processes on October 14-15, in Chicago. Both tail gas treatment and process modification approaches to emission controls were considered.

MERCURY

Of 25 MCA member companies with identifiable interest in mercury, 17 favor exploring the desirability of a collectively supported study on mercury in the environment. A meeting for this purpose was set for October 14. Representation included the Chlorine Institute, National Agricultural Chemicals Association, and National Paint, Varnish, and Lacquer Association to avoid duplication of effort in any planning that might be initiated.

INTERNATIONAL DEVELOPMENTS

A crisis has arisen for the International Labor Organization as a result of Congressional refusal to appropriate funds for the 25% American contribution to its budget. The Congressional action was taken after the AFL-CIO, supported by the Chamber of Commerce

of the United States, voiced to a House Subcommittee vigorous complaints as to the trend of affairs within the ILO, which culminated in the appointment of a Soviet citizen as an Assistant Director-General.

The matter was subsequently discussed at a gathering of business (including MCA) representatives, convened by the Chamber. It was generally agreed that the United States could not, without setting a very damaging precedent, withhold a payment to which it was obligated under international agreement.

The legal alternative--withdrawal from the ILO, subject to the two years' notice required--commanded no immediate support. There was agreement that the objective of business should be to restore the ILO to its original tripartite (government-business-labor) basis, from which it has departed in recent years due to the entrance and activities of the Soviet Union and other Communist states.

The next step, as the business representatives see it, is to press for Senate and House hearings at which American concerns about the ILO could be thoroughly aired. It is recognized that the AFL-CIO will set the pace, with the Chamber in a supporting role. These recommendations will go to the Labor and International Committees of the Chamber, and thence to its Board of Directors.

* * *

The Tariff Commission will hold public hearings beginning November 4 as part of its investigation of the competitive position of U. S. industries, an undertaking requested by the President. At least one segment (ferroalloys) of the membership appears interested in having its views presented, possibly through the Association.

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At the request of the Department of Commerce, John G. Tritsch, staff representative on international trade, attended the third session of the Chemical Industry Committee in Geneva, Switzerland, September 23 - 25 as a technical advisor to the U. S. delegate. The Committee is a permanent group within the Economic Commission for Europe, a branch of the United Nations.

This activity is being followed closely since it is necessary to parry attempts by Eastern block nations to gain technology through studies, seminars and plant visits. In addition, statistical reports in development show promise of usefulness if channelled in the right directions.

METRIC STUDY

MCA's position regarding conversion to the metric system was presented in August at the first National Metric Study Conference. Held in Deerfield, Massachusetts under the auspices of the National Bureau of Standards, the Conference was one facet of the study authorized by Congress.

As reported at that conference, the chemical industry sees no reason for a change but would cooperate in a nationwide program of metrication considered to be in the country's overall interest. The cost would be significant, but would be minimized by a well-coordinated national plan.

The conference reached no specific conclusions. However, the tenor of the closing discussions indicated that:

1. The United States has no urgent need to adopt the metric system in its manufacturing industry. Probably no other country in the world has this freedom of choice.
2. The engineering standards of the United States, though in need of improvement, represent a better and more complete basis for world-wide industrial efficiency than any international standards now in existence.
3. It may serve U. S. interests to take steps to make its engineering standards available for adoption as international standards. We understand this is the sense of an interim report within the Department of Commerce. This program could be implemented apart from conversion.

The Mechanical Technical Committee feels that no official MCA action in the metric field is needed now, but will continue to monitor developments. When the study report from the Department of Commerce is submitted to Congress in August 1971, appointment of a more broadly representative MCA policy or advisory committee may be appropriate.

PUBLIC RELATIONS

Victor H. Peterson, Director of Public Relations, will address chemical industry members of the Association of National Advertisers on October 24. The group's annual meeting is being held at the Homestead in advance of the ANA Annual meeting. He will report on the public's view of the chemical industry.

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Dr. Bernard Oser's remarks on the topic, "Food Additives--Mountains or Molehills?" were well received by members attending the Annual Meeting of Newspaper Food Editors in San Francisco. MCA hosted the closing session on September 25.

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The Association's "Boutique Chimique" exhibit will be on display in Milwaukee, October 26-28 at the Annual Meeting of the National Association of Extension Home Economists. Over 1200 are expected to attend.

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MCA will be represented at the Regional Meeting of College Teachers of Textiles and Clothing in Chicago, October 23. Harry Townsley of Union Carbide will speak on "Fibers of the Future."

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Climaxing two years of effort, the Association will be represented at the Grocery Manufacturers of America's "Forum" on November 11. James Asbeck of Goodrich will be one of three panelists addressing the subject, "The Nature of Change in Consumer Ecological Awareness."

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Through contacts with the General Federation of Women's Clubs, MCA materials are being made available to all GFWC state conservation chairmen.

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The Association's audio-visual efforts continue to receive wide acceptance. To date 26 of 49 television stations offered the three-minute "Smithsonian Plastics" feature have used it. Also, an estimated 90 percent of NBC-TV affiliated stations have used a three-minute film on the MCA-sponsored water pollution control research project at Virginia Polytechnic Institute. An additional 40 of 49 television stations offered a one-minute version of the story have used it.

* * *

The Chemical Industry Council of Northern California continues its active dialogue with influential segments in the Bay area. On November 24, Michael McCloskey, Executive Director of the Sierra Club, will be the CIC Round Table guest speaker. A

series of talks before high school chemistry classes are planned by the speakers bureau. And, Putney Westerfield, publisher of Fortune Magazine, will speak at CIC/Northern California's Annual Chemical Progress Week Luncheon on April 23, 1971.

This CIC was also responsible for booking Dr. Oser on a local television "talk" show while he was in San Francisco representing MCA at the Food Editors Conference.

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The Manager of Environmental Quality Information participated in the Canadian Chemical Producers Association workshop, "Survival Day -- Public Relations Aspects for the Chemical Industry" held in Toronto last month. He discussed the U. S. industry's experience in Earth Day "Teach-Ins."

EDUCATION

Staff members of MCA, ACS and AIChE have begun work on a joint information program about careers in the chemical industry, a project resulting from conferences earlier this year with Dr. Byron Riegel and Mr. A. L. Conn. The initial thrust will be at the junior high school level.

* * *

It was my pleasure to present the American Chemical Society with MCA's citation "...for outstanding contributions to chemistry and chemical engineering education" at the Society's Annual Meeting in Chicago last month. It was accepted by Dr. Wallace R. Brode, ACS' Immediate Past President.

This was the second of three citations recommended for 1970 by the Education Activities Committee. In August the first award was made to the New England Association of Chemistry Teachers. A third award was presented to the American Gas Association at its annual meeting on October 13.

STAFF ADDITIONS

On September 15, Howard B. Brown joined the Technical Staff as Staff Representative and Secretary of the Water Resources and Solid Wastes Management Committees. Mr. Brown was formerly Manager of Operations and Facilities Planning for the Rollins-Purle Division, (Rollins International, Inc.), Wilmington, Delaware.

On September 27, Dr. Robert E. Varnerin, joined the staff as Manager of Education. He was formerly Chairman of the Department of Chemistry, Fairfield University, Fairfield, Connecticut, and will succeed Dr. William E. Chace, Director of Education, who retires October 30.

Remarks by
E.H. Bleckwell

to

The Joint Meeting of the
Boards of Directors

of

The Manufacturing Chemists' Association

and

The Canadian Chemical Producers' Association

Ottawa, Ontario

October 20, 1970

Confidential

to

M.C.A. & C.C.P.A.

Board Members

THE ROLE OF THE CHEMICAL INDUSTRY

With the assistance of our nation's statisticians, I would like to present some broad aggregates which are intended to measure the size of the Canadian chemical industry and its contribution to overall business activity in this country. For comparative purposes, I shall also show similar data for the United States. My aim will be to show not only the similarity which exists between the role of chemicals in our respective countries, but also to point out those areas where our performance has differed.

Industry Shipments

Last year the shipments of the Canadian chemical industry, which is made up of more than 1,125 establishments, exceeded \$2.5 billion.⁽¹⁾ This represented 6% of the nation's output for all manufactured goods. If we also include production of man-made fibres which, while a chemical operation, is allocated by the Dominion Bureau of Statistics to the textile industry, this ratio rises to 7% and was almost equal to the automobile and pulp and paper industry. In fact chemicals and man-made fibres rank as Canada's sixth largest manufacturing industry. In this regard we in Canada are, relatively speaking, about as important as the United States chemical industry,⁽²⁾ where shipments amounted to 7.6% of the total for all manufacturing.⁽³⁾

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- Sources: (1) Canada, Census of Manufacturers, D.B.S. Daily, and D.B.S. 31-001
(2) U.S. statistics include man-made fibres production as part of the chemical industry.
(3) U.S.A. - Statistical Abstract, 1970

Employment, Wages and Salaries

The Canadian chemical industry provides direct employment opportunities for 77,000 people.⁽⁴⁾ This represents 4.7% of all manufacturing employment, compared to 4.4% in the United States.⁽⁵⁾

Average wages and salaries paid by Canadian chemical firms are currently running about \$150 per week.⁽⁶⁾ This is almost 20% higher than the national average. It will come as no surprise to you however, to learn that the average level of chemical industry remuneration in the United States is roughly 30% higher than here in Canada.

Productivity

We would take more comfort from our lower level of wages and salaries were it not for the fact that this advantage is more than offset by lower productivity. In recent years value added per chemical worker has averaged about \$16,000 per annum.⁽⁷⁾ In the United States this rather crude measure of productivity works out to \$28,000.⁽⁸⁾ Thus while wages and salaries are higher south of the border, unit labour costs are roughly 20% lower than in Canada.

Research and Development

While chemical producers account for 6 - 7% of all manu-

Sources: (4), (7) Canada, Census of Manufacturers
(6) D.B.S. - 72-002
(5), (8) U.S.A. - Statistical Abstract 1970

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facturing production, we represent over 13% of all industrial research and development spending in Canada. Despite the fact that we spend relatively more of our sales dollar on research and development than do most other manufacturing industries in Canada, our effort pales when compared with the United States. Canada as a nation devotes one-half of one percent of its national income to R. & D. The comparable U.S. ratio is 2.0%. Similarly the Canadian chemical industry spends 1.9% of its sales dollar on this vital area of activity, compared to 3.9% in the United States. It would appear, therefore, that for many reasons which will emerge later in this talk, Canadian firms cannot afford to support a full-scale research and development effort. (9), (10) Nevertheless, Canadian chemical firms spend roughly \$45 million annually for research and development, which of course is augmented by the research efforts of our parent companies.

Capital Investment

In order to implement the findings of our scientists and engineers as well as to keep pace with market requirements, the Canadian chemical industry is at present investing between \$200 and \$300 million per year in new plant capacity. This represents on average about 10% of the capital outlays of all manufacturing, a ratio which is almost identical with that existing in the United States. (11)

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- Sources: (9) Canada - D.B.S. Daily, D.B.S. 13-527
(10) U.S.A. - Statistical Abstract 1970
(11) D.B.S. 61-205

Prices

Our industry record on pricing has also been similar to that which has existed in the United States. The government's official selling prices index for chemical products has risen by only 1.2% during the past ten years. Over the same period Du Pont of Canada has experienced a 20% reduction in average selling prices. Thus in no way can it be said that chemical prices have contributed to the buildup of inflationary pressures in Canada today. The same situation appears to exist in the U.S. where the wholesale price for chemical products in 1969 was within one percentage point of the figure which existed in 1961. (12), (13)

Profits

In both countries the coincidence of rising costs of production and stable or declining prices has contributed in a major way to the downward trend in industry profitability. After-tax profits as a percent of gross investment declined in the United States during the decade of the '60's - from 6.4% in 1961-62 to 4.6% in 1968-69. In Canada the decade started with a significantly lower rate of return, namely 3.9%, but the decline has been much more precipitous. During the '60's the Canadian chemical industry experienced a 42% reduction in its return on investment to the point where we are now down to just over 2%.

These broad statistics give some general indication of the contribution, as well as the comparative performance, of the

Source: (12) D.B.S. 62-002

(13) Survey of Current Business

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Canadian and U.S. chemical industries. However, I purposely ended this survey of statistics with profits because the type of environment which has existed in Canada in recent years and which has led to such a serious decline in profitability will, if continued, undermine the potential for the Canadian industry, with the result that past growth trends will bear little if any relationship to future activity.

CURRENT STATUS OF THE INDUSTRY

When one is aware of the contribution made by the chemical industry to the economies of such countries as Germany and Japan; and when one believes, as I do, that the chemical industry could make a similar contribution to Canada, then it is difficult not to be profoundly concerned at today's trends in Canada.

In recent years the industry's progress has fallen far short of that achieved in other industrially advanced countries. In fact, since 1958 the rate of increase in Canada's chemical production has been less than three-quarters of that achieved in the United States, one-half of that in Europe, and one-third of that in Japan.⁽¹⁴⁾ This performance cannot, however, be attributed to a shortfall in domestic demand. During the same period the Canadian market for chemicals, for example, grew more rapidly than in the United States. Canada has the technical knowledge, the natural resources and, to a considerable extent, the capital

Source: ⁽¹⁴⁾ O.E.C.O "The Chemical Industry"

needed for the chemical industry to keep pace with market growth. Yet, we are falling behind.

One of the major reasons is to be found in the large and growing level of imports. In 1969, for example, chemical production for the domestic market was equivalent to 73% of domestic consumption, which left a gap of 27% to be met by imports. And the situation is deteriorating rapidly - during the first six months of 1970 almost 66% of the increase in Canadian chemical consumption was supplied by imports.⁽¹⁵⁾ In man-made fibres the situation was even more disturbing. The increase in imports this year to date has been more than double the advance in Canadian requirements with the result that domestic output has actually declined.

The extent to which foreign producers serve Canadian needs varies considerably between the different sectors of the chemical industry. In fertilizer production, for example, we have a raw material advantage and domestic producers not only supply virtually the entire Canadian market but generate a trade surplus of over \$150 million per year. In inorganic chemicals, where transportation costs often act as an effective barrier to imports, the Canadian economy is nearly self-sufficient. But when one examines the new organic chemicals, particularly plastics, the story is quite different.

Canada's trade balance on plastics, for example, has

Source: ⁽¹⁵⁾ D.B.S. 65-002, 65-004, 65-005, 65-007, 31-001

deteriorated from a small surplus in 1958 to a 360 million pound deficit in 1969. Canadian producers' domestic sales now account for only 60% of the Canadian market.⁽¹⁶⁾ If this trend continues through to 1975, we will be supplying less than one-half of our nation's annual consumption of plastics.

The explanation for this rapid increase in imports is that Canada, unlike other industrial nations, exposes domestic producers to intense competition from abroad. In fact even before the Kennedy Round of tariff reductions, Canada's chemical industry had one of the lowest levels of protection in the world. And when to the Kennedy Round Concession you add the impact of our appreciated dollar, you find the chemical industry in an extremely vulnerable position indeed.

FUTURE GROWTH

Under these conditions, what will be the future growth and development of the chemical industry in Canada?

Chemical demand in this country is closely related to general economic activity and, more particularly, to the output of goods-producing industries. At Du Pont we have specified this relationship in a mathematical model which we use as the basis of forecasts for Canadian chemical consumption by 1975. We are experiencing a slowing in economic activity during 1970, and expect that this will carry through at least the first half of 1971, to be followed by strong growth to 1976, with a range of G.N.P. forecasts. The lower assumes that the Economic Council's target of

Source: (16) "Canadian Plastics"

a 5.5% per annum increase in economic activity will be achieved. We believe that this is a very modest goal indeed, and that our national objective should be closer to 7% per year. Our upper projection for chemical markets, therefore, is predicated on this more optimistic assumption.

Based on these two projections of overall economic activity in Canada, we estimate that the domestic market for chemicals, expressed in constant 1970 prices, will increase from \$2.9 billion for 1969 to between \$3.9 and \$4.1 billion for 1975. Thus, in only six years chemical markets in Canada will grow by roughly 40 percent.

To project even further, if Canada is able to achieve a reasonably acceptable rate of economic growth during the remainder of the century, in about 35 years the Canadian market for chemicals and man-made fibres will be as large as is the United States market today.

Canadian Chemical Output

Thus, the outlook for Canadian chemical markets is bright. The big, unknown question is: will domestic producers participate in this anticipated increase in markets?

For forecast purposes, three alternate import assumptions can be made; first, the continuation of the present trend towards a much larger trade deficit; second, that the federal government will take action to prevent the chemical trade deficit from deteriorating further, beyond the present level of over \$400

million per year; and third, that policies will be implemented to eliminate the trade deficit during the coming five years.

These alternate assumptions have widely different implications for chemical industry production, investment and employment.

Under the first assumption - that is, of a continuation of the present trend towards greater import penetration - Canadian production will advance from the current level of almost \$2.5 billion to between \$3.2 and \$3.4 billion by 1975. These production figures imply annual trade deficits in the order of \$700 million.

If the trade deficit can be held to present levels, Canadian chemical output will advance somewhat more rapidly, to between \$3.5 and \$3.7 billion.

If, on the other hand, this nation could eliminate its deficit on chemical trade, Canadian producers could look for annual sales of between \$3.9 and \$4.1 billion by 1975.

Industry Capital Expenditures

We estimate that an annual outlay of over \$300 million would be necessary for the chemical industry to maintain its present trend of expansion. This figure is based on past relationships between production increases and capital expenditures.

If the country adopted policies to encourage domestic manufacturers to participate fully in the expected growth in markets and, in fact, to eliminate the trade deficit, we would have to expand capital expenditures by a further 50%, to roughly

\$450 million per annum.

However, this matter of chemical industry investment requires some further elaboration, because unless a reasonably favourable investment climate prevails, any estimates based on past relationships would obviously cease to be valid.

First of all, the industry is essentially international because of the technological orientation to this business and because this technology can be readily purchased and duplicated anywhere on the globe. Certainly in many instances the absence of raw materials presents no overwhelming problems. Japan, for example, lacks almost all the essential raw materials and yet has one of the most competitive, dynamic chemical industries in the world.

The main point, then, is that for many segments of chemicals and plastics, no country has a natural advantage. In fact in today's situation, where barriers to trade are being reduced or eliminated, the location of new plants is dictated by that combination of conditions which gives the lowest possible costs consistent with the largest possible markets.

At the present time a Canadian location would not seem to meet this general criterion, except where certain raw material, transportation or patent advantages prevailed.

As I have already suggested, our labour costs are higher, relative to productivity, than any industrially advanced nation except Britain. Similarly the cost of government in Canada is

high both absolutely and relative to our competition. Interest rates are consistently higher in Canada than in the United States, a not unimportant item for a capital-intensive industry such as chemicals.

These considerations add up to a situation which is indeed difficult for Canadian chemical producers and which, particularly because of the extent of foreign ownership which exists, contains the seeds of some pretty fundamental changes in the industry during the years ahead.

To U.S. business, Canada is not usually considered a "foreign country" and I think it is safe to say that geographically, economically and socially, Canada and the U.S. form a single area which is gradually becoming more and more integrated in spite of political differences. In fact, had it not been for an effective tariff wall I doubt very much whether many of Canada's subsidiary firms would ever have been established. And were it not for the continued existence of tariff protection - on both sides of the border - the pressure for total rationalization of Canadian and U.S. operations would be overpowering.

As tariff barriers are reduced this pressure for some form of rationalization is mounting and is causing reverberations in political and other quarters.

I would therefore like to turn briefly to some of the important issues which will demand the attention of both Canadian management and parent company officers during the coming decade.

MATTERS OF CONCERN TO PARENT-SUBSIDIARY RELATIONSHIPS

Technology Development - Impact on Canada

Tariff reductions have coincided with improvements in technology which have increased significantly the size of an economic plant. However, the Canadian market is too small to justify fully economic plants for a large and growing number of products, and existing Canadian facilities are rapidly becoming unprofitable.

An increasing proportion of Canadian business now faces this dilemma - it cannot justify on a return basis the new investment needed to install world-scale modern facilities unless it can penetrate foreign (and particularly U.S.) markets. Our industry is comprised mainly of subsidiaries of U.S. companies which supply their non-Canadian business from other sources. Thus large segments of our industries are not free to make their own world-scale expansion plans, because they rely on parent company technology which is licensed to them for use in Canada only, because U.S. tariffs or corporate relationships keep them from U.S. markets, and because cost structures and foreign tariffs keep them from other markets.

Significant reductions in employment in these industries and cutbacks in earlier expansion plans now are appearing frequently in the press. Political repercussions are likely, and there will undoubtedly be attempts to place the blame on the parent-subsidiary relationship of much of Canadian industry.

Continentalism

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Economic pressures in Canada have always favoured North-

South trade patterns rather than national East-West patterns, and now technological change is increasing the pressure for continental rationalization of manufacturing. The automotive pact is looked upon as the first major industry to be rationalized, although the farm implement industry provides an earlier example.

Continental rationalization would undoubtedly result in more effective use of total North American resources. But because of the greatly unequal economic, social and political power between Canada and the U.S., rationalization would not necessarily benefit Canada. For example:

- (i) Balance of payments. If the farm implement business is any guide - and it is the only real example we have of free North American trade - Canada's balance of payment in manufactured products would deteriorate sharply. This has not occurred in the automotive field because of safeguards which guarantee a minimum Canadian content.
- (ii) Management opportunities. Because a rationalized industry needs only one management, (which would inevitably be located in the U.S.), the opportunities in Canada for our highly skilled, well educated people would be greatly reduced.
- (iii) U.S. policies would have a much greater impact than heretofore on Canadian economic decisions, and this could severely limit effective economic independence.
- (iv) Rationalization, once implemented, would be very hard to reverse. To a very great extent, therefore, Canada would

be boxed into a situation from which there would be very little chance of escape if this were ever deemed necessary. And I think that it is a fair question to ask, whether, even given all the best intentions in the world, U.S. economic policies and needs would always coincide with the requirements for maximum Canadian economic development.

Economic Nationalism

Largely because of these implications of a growing U.S. economic presence in Canada, there has been a resurgence of economic nationalism. Many Canadian politicians (e.g. J.J. Greene) have begun to realize that past policies are in fact adding to the pressure for continental rationalization. We must therefore expect an increase in emotional reactions against greater foreign control of our industry.

Extraterritoriality of U.S. Laws

There have always been objections by Canada whenever an American law, policy or guideline is applied to a U.S. international corporation in such a way as to affect the policies or operations of its Canadian subsidiary. Such incidents may well increase in the future, if the U.S., in attempting to alleviate its balance of payments deficit or because of conflicts such as in Viet-Nam and the Middle East, issues directives on foreign investment, dividends or trading by its corporations which also affect foreign-based subsidiaries.

Labour Union Domination

Most Canadian labour unions (except for the C.N.T.U. in

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Quebec) are locals of U.S. international unions. Policy tends to be established in the U.S.; often advisers during negotiations with Canadian employers come from U.S. headquarters. The automotive industry offers a good example of total integration of union activities in Canada and the U.S. under the domination of U.S. union leaders. There is a tendency for Canadian politicians and others to become increasingly concerned over U.S. influence in this important sector.

Canadian Resources, Oil Policy, Water, Etc.

I would not, of course, want to leave you with the impression that Canada is defenseless in its attempts to negotiate or achieve a workable economic relationship with the United States. Canadian resources have always been important to the U.S., as well as a major source of income for Canada. Negotiations are currently underway concerning oil and gas shipments, and frequent references are made to the possibility of sharing our water resources. It has frequently been suggested that Canada use America's need for our raw materials as a bargaining weapon in achieving access to U.S. markets for our manufactured products. We have certainly not done this successfully in the past, but greater use of this weapon is to be expected in the future.

Conclusions

It would therefore appear that chemical industry management in Canada will be facing some pretty dramatic changes in its environment, and will have to wrestle with some pretty thorny

problems. Apart from the pressure for continental rationalization, the combination of technical change, adverse cost patterns and tariff rate reductions has brought about a dramatic change in the industry's pattern of growth and profitability. Its expansion plans have been curtailed, and it has reduced significantly the numbers of both salaried and payroll workers.

Recognizing the worsening situation, the government (Department of Industry, Trade and Commerce) and the industry, through its association, the Canadian Chemical Producers' Association, cooperated in a joint study of the industry which was completed early in 1969. As a result of that study, a joint committee of government and industry officials was set up to develop policy or other actions designed to reverse the adverse trends and to ensure that the industry (rated as one of the most productive users of Canadian resources) would succeed in future.

The joint committee is making excellent progress and hopes to develop practical modifications for operating and trading patterns that will ensure a sound future for the industry in Canada. However, as a report on the work of this committee will be dealt with by Maj. Gen. Bruce MacDonald, I shall go no further except to say that I hope my remarks to you this morning have in some small way indicated the importance of the results of this study group to Canadian chemical producers.

20/10/70

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REMARKS BY
B.F. Macdonald
to
THE JOINT MEETING OF THE
BOARDS OF DIRECTORS
of
THE MANUFACTURING CHEMISTS' ASSOCIATION
and
THE CANADIAN CHEMICAL PRODUCERS' ASSOCIATION
Ottawa, Ontario

October 20, 1970

INTRODUCTION

Mr. Bleckwell has presented a comparison of our Canadian chemical industry to yours in the United States and he has pinpointed various problems. My task is to tell you of the actions we are taking in an effort to find solutions.

Our Association had its genesis in 1962 as a result of problems the industry was having with government in regard to tariffs. The pleas of industry were not listened to; tariffs were reduced and one after another serious problems have emerged, much as industry forecast they would. Initially government was sceptical of the validity of industry's complaints chiefly because at that time profits were relatively good, at least by Canadian standards.

In the period 1966/67 the then Minister of Industry determined to make an in-depth study of the Canadian chemical industry and he invited industry co-operation. CCPA member companies agreed; other segments of the industry were less interested. There followed a two year study conducted by government with full CCPA participation. This study was completed in April 1969. In summary it indicated that:

- (a) by any measurement criteria the Canadian chemical industry is among the most productive and beneficial of all Canadian industries.

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(b) the industry is faced with certain very serious problems. Mr. Bleckwell has outlined these problems for you.

These results may seem prosaic but in two respects they were vitally important. Firstly, a government department, the Department of Industry, Trade and Commerce and then other departments and agencies such as Finance, Tariff Board, Economic Council of Canada, and National Energy Board were now in full possession of the facts and verified as accurate many claims which previously were believed only by industry. Secondly, the study served to quantify and substantiate a great many claims which previously had never been proven.

For various reasons it was agreed that the Chemical Industry Study would not be made public. However, copies were made available to each member company and, of course, to the government people concerned.

In May 1969 the Minister of Industry, Trade and Commerce announced that a continuing committee of government and industry would be established to carry on the work. The first phase had been designed to establish the facts and it resulted in an agreed government -- industry diagnosis of chemical industry ills. The second phase now seeks to establish what alternative cures may be possible, how much they may cost and how much they may hurt.

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The continuing government -- industry committee functions at two levels but the bulk of the work has devolved upon a group known as the Joint Chemical Committee (JCC). It consists of four government people and four senior chemical industry people plus a secretariat and a number of people who sit in as observers. In the past sixteen months, the committee has met ten times. Many of the early meetings involved complex and lengthy discussions which, over a period of time, have resulted in a great understanding and mutual respect. I think it is safe to say that now, perhaps for the first time, public servants in the Department of Industry, Trade and Commerce understand our problems and viewpoints and we understand theirs. The essentiality and importance of this cannot be overestimated.

For the first ten months our studies and discussions were based on the assumption that the Canadian chemical industry was a single entity. Our attempts to find solutions that met the needs of the entire diverse industry were completely unsuccessful. It was finally concluded that our assumption was wrong. Our industry is not a single entity, but rather it is comprised of a number of segments that are largely distinct from each other with diverse problems requiring differing cures.

With this revised concept in mind, we held a lengthy session last May and at that time it was agreed that for purposes of examining the viability of our industry we would divide it into the following segments:

- (1) Complexes - large scale required for viability. High

technology, high growth products

- (a) Refinery based chemicals e.g. polyethylene, propylene etc. Commodity type chemicals associated closely with refinery production;
 - (b) Performance oriented chemicals e.g. polyethylene, polystyrene and other synthetic resins. Particular qualities based on proprietary knowledge of importance. These products are derived from (a) and (c);
 - (c) Specification petrochemicals e.g. styrene monomer ethylene glycol, phenol. Wide variety of commodity type chemicals derived from (a). Generally produced in single product units;
 - (d) Nitrogen chemicals e.g. ammonia fertilizers. Large volume, low priced, market limited by freight costs. Free access to U.S. market exists.
- (2) Commodity Type Chemicals e.g. sulphuric acid, chlorine, hydrochloric acid, caustic soda, phosphorous, soda ash, etc. Largely inorganic, low priced -- market limited by freight costs, relatively more mature technology.
- (3) Market Oriented Chemicals e.g. textile auxiliaries, pulp and paper additives, catalysts, etc. Oriented to specific end uses, low volume batch type production,

high priced, high technology, lower capital intensive-
ness in some cases. Potential high growth in some
areas.

Following on from this segmentation, it was agreed
the SCC work toward providing the Department and CCPA with
recommendations for policy changes intended to improve the
viability of the various segments. It was agreed that segments
1 (a), and (b), and (c) should be given priority attention
inasmuch as we believed that corrective action was most urgent
in these three cases.

This proposed program was agreed to by the Department
of Industry, Trade and Commerce and by the Board of Directors
of the CCPA. It was also agreed to jointly hire a consultant
who, together with one member of the CCPA staff and one staff
member from Industry, Trade and Commerce would undertake to
collate and interpret the information forwarded by member
companies in response to a lengthy questionnaire sent out to
member companies. I should stress that the confidential
replies submitted by companies were seen only by the consultant
and were de-sensitized before being passed to the various
planners.

This is the stage we are now at. Data from member
companies has been received and it is now being reviewed and
interpreted. No findings are yet available but, there are some
general indications which approximate the following:

- (a) the trade imbalance pertaining to petrochemicals is increasing rapidly
- (b) profit margins are slipping
- (c) the Canadian market is so small that internal rationalization is no solution to our problem
- (d) Canada must manufacture on a world scale and then export in order to pay for our chemical imports. Failing this, our imbalance in chemical trade may become overwhelming.

TIMETABLE

If everything goes according to plan the Joint Chemical Committee hopes to have completed its studies by mid December and have CCPA approval. Thereafter, the Government must make its decisions. It is probable that during this decision making stage some further joint studies and discussions will be necessary but this is conjecture. It is hoped that the governments decision will be received sometime in the first quarter of 1971.

SOLUTIONS

Clearly there are no quick or easy solutions and the deep concern of all of us about the future of our industry will be evident.

Looking to the future there appear to be even greater difficulties ahead both for Canada and the United States. In Europe, there is the likelihood that Britain will join the

European Common Market. In the Far East, there is the expanding power of Japan and behind that the enigma of China. In the face of these circumstances, it would suggest that the U.S. and Canada are likely to become more interdependant rather than less. Neither politics nor economics can alter the geographic fact that we jointly occupy the northern portion of this great continent.

Certainly we face grave problems, but look for a moment to Japan and back to the year 1946 when that small island was defeated and devastated. They had no tradition of a great pre-war petrochemical industry yet, look at them today. Here we sit on our great continent with great natural resources and the best technology in the world. If we can't find a solution to our problems, we are suggesting that our political and economic skills are inferior to the Japanese. I cannot believe this to be true.

Canadians are determined to move their economy from a major emphasis on raw material production into the next stage of industrialization, wherein there will be more specialization and greater industrial development based on our indigenous resources. We must begin to base more of our economic growth, not on the sale of raw products, but on the upgrading of them for world markets. This is very pertinent to energy considerations, because as we move into the new industrial age of

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materials, there will be increasing need for products based on hydrocarbons. In other words, we must develop petrochemical and related products within our country and gain access for these products to the large consumer markets of the United States and the world. Thus, when we talk about Canada-United States trade in energy resources, Canadians envisage a full right to compete in the United States market on a fully competitive basis for the sale of some of the more sophisticated petrochemical products of our energy source materials.