

# MANAGEMENT'S REPORT

## 74 TO THE SHAREHOLDERS OF NOVA CHEMICALS CORPORATION

The Consolidated Financial Statements and other financial information included in this annual report have been prepared by management. It is management's responsibility to ensure that sound judgment, appropriate accounting principles and methods and reasonable estimates have been used in the preparation of this information. They also ensure that all information presented is consistent.

Management also is responsible for establishing and maintaining internal controls and procedures over the financial reporting process. The internal control system includes an internal audit function and an established business conduct policy that applies to all employees. In addition, the Company has adopted a code of ethics that applies to its Chief Executive Officer, Chief Financial Officer and Corporate Controller. The business conduct policy and the code of ethics can be viewed on NOVA Chemicals' website ([www.novachemicals.com](http://www.novachemicals.com)). Management believes the system of internal controls, review procedures and established policies provide reasonable assurance as to the reliability and relevance of financial reports. Management also believes that NOVA Chemicals' operations are conducted in conformity with the law and with a high standard of business conduct.

During the past year, we have directed efforts to improve and document the design and operating effectiveness of internal control over external financial reporting. The effectiveness of internal control over financial reporting has been subjected to audit by the shareholders' auditors. As at year-end, we have reported that internal control over financial reporting is effective. In compliance with Section 302 of the United States Sarbanes-Oxley Act of 2002, NOVA Chemicals' Chief Executive Officer and Chief Financial Officer will provide to the Securities and Exchange Commission a certification related to NOVA Chemicals' annual disclosure document in the U.S. (Form 40-F). The same certification will be provided to the Canadian Securities Administrators.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board carries out this responsibility principally through its Audit, Finance and Risk Committee. The Committee, which consists solely of independent directors, reviews the financial statements and annual report and recommends them to the Board for approval. The Committee meets with management, internal auditors and external auditors to discuss internal controls, auditing matters and financial reporting issues. Internal and external auditors have full and unrestricted access to the Audit, Finance and Risk Committee. The Committee also recommends a firm of external auditors to be appointed by the shareholders.



**JEFFREY M. LIPTON**  
Chief Executive Officer

March 5, 2009  
Calgary, Canada



**LARRY A. MACDONALD**  
Senior Vice President & Chief Financial Officer

# MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The following report is provided by management in respect of NOVA Chemicals' internal control over financial reporting (as defined in Rules 13a-15f and 15d-15f under the United States Securities Exchange Act of 1934):

75

1. NOVA Chemicals' management is responsible for establishing and maintaining adequate internal control over financial reporting for NOVA Chemicals.
2. Management has used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework to evaluate the effectiveness of NOVA Chemicals' internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of NOVA Chemicals' internal control over financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of NOVA Chemicals' internal controls, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of NOVA Chemicals' internal controls are not omitted and is relevant to an evaluation of internal control over financial reporting.
3. NOVA Chemicals' Consolidated Financial Statements include the accounts of the INEOS NOVA joint venture via proportionate consolidation in accordance with Canadian GAAP. Management is unable to evaluate the effectiveness of internal control within the joint venture due to the fact that NOVA Chemicals does not have the right or authority to evaluate the internal controls of the joint venture and does not have the access necessary, in practice, to evaluate those controls. Management's conclusion regarding the effectiveness of internal controls does not extend to the internal controls of the joint venture. The 2008 Consolidated Financial Statements of NOVA Chemicals included \$526 million and \$299 million of total and net assets, respectively, related to the INEOS NOVA joint venture as of December 31, 2008, and \$1,845 million and \$112 million of revenues and net loss, respectively, for the year then ended.
4. Management has assessed the effectiveness of NOVA Chemicals' internal control over financial reporting, as at December 31, 2008, and has concluded that such internal control over financial reporting is effective. There are no material weaknesses in NOVA Chemicals' internal control over financial reporting that have been identified by management.
5. Ernst & Young LLP, who has audited the Consolidated Financial Statements of NOVA Chemicals for the year ended December 31, 2008, has also issued a report on internal controls under Auditing Standard No. 5 of the Public Company Accounting Oversight Board (United States). This report is located on page 77 of this Annual Report.



**JEFFREY M. LIPTON**  
Chief Executive Officer

March 5, 2009  
Calgary, Canada



**LARRY A. MACDONALD**  
Senior Vice President & Chief Financial Officer

# INDEPENDENT AUDITORS' REPORT ON FINANCIAL STATEMENTS

Under Canadian Generally Accepted Auditing Standards and the Standards of the Public Company Accounting Oversight Board (United States)

## 76 TO THE SHAREHOLDERS OF NOVA CHEMICALS CORPORATION

We have audited the Consolidated Balance Sheets of NOVA Chemicals Corporation as at December 31, 2008 and 2007, and the related Consolidated Statements of Income (Loss), Comprehensive Income (Loss), Changes in Shareholders' Equity, and Cash Flows for each of the years in the three-year period ended December 31, 2008. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian Generally Accepted Auditing Standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, these Consolidated Financial Statements present fairly, in all material respects, the financial position of NOVA Chemicals Corporation as at December 31, 2008 and 2007, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2008, in conformity with Canadian Generally Accepted Accounting Principles.

As discussed in Note 2 to the Consolidated Financial Statements, in 2008 the Corporation made changes to its methods of accounting for inventories and its Deferred Share Units Plan, in 2007 made changes to its methods of accounting for stock-based compensation, financial instruments and hedges and also changed its presentation of equity and changes in equity, including reporting of comprehensive income. As discussed in Note 21 in 2007, the Corporation made changes to its methods of accounting for uncertainty in income taxes and defined benefit pension and other post-retirement plans. In addition as described in Note 19, the Corporation has restated its segment reporting for the year ended December 31, 2006.

We have also audited, in accordance with the Standards of the Public Company Accounting Oversight Board (United States), NOVA Chemicals Corporation's internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 5, 2009, expressed an unqualified opinion thereon

The logo for Ernst & Young LLP, featuring the company name in a white, cursive script font on a black rectangular background.

ERNST & YOUNG LLP

Chartered Accountants

March 5, 2009

Calgary, Canada

# INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROLS

Under Standards of the Public Company Accounting Oversight Board (United States)

## TO THE SHAREHOLDERS OF NOVA CHEMICALS CORPORATION

77

We have audited NOVA Chemicals Corporation (NOVA Chemicals or the Corporation) internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). NOVA Chemicals' management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on the effectiveness of the Corporation's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with Generally Accepted Accounting Principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with Generally Accepted Accounting Principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As indicated in Management's Annual Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of the INEOS NOVA joint venture, included in NOVA Chemicals' 2008 Consolidated Financial Statements and constituting \$526 million and \$299 million of total and net assets, respectively, as of December 31, 2008, and \$1,845 million and \$112 million of revenues and net loss, respectively, for the year then ended. Our audit of internal control over financial reporting of NOVA Chemicals did not include an evaluation of the internal controls over financial reporting of the INEOS NOVA joint venture.

In our opinion, NOVA Chemicals maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the COSO criteria.

We have also audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the Consolidated Balance Sheets of NOVA Chemicals Corporation as at December 31, 2008 and 2007, and the Consolidated Statements of Income (Loss), Comprehensive Income (Loss), Changes in Shareholders' Equity, and Cash Flows for each of the years in the three-year period ended December 31, 2008, and our report dated March 5, 2009, expressed an unqualified opinion thereon.



ERNST & YOUNG LLP

Chartered Accountants

March 5, 2009  
Calgary, Canada

## CONSOLIDATED STATEMENTS OF INCOME (LOSS)

<i>year ended December 31 (millions of U.S. dollars, except number of shares and per share amounts)</i>	2008	2007	2006
Revenue	\$7,366	\$6,732	\$6,519
Feedstock and operating costs (excluding depreciation)	6,852	5,597	5,662
Selling, general and administrative	225	200	202
Research and development	52	50	51
Foreign exchange gains (Note 20)	(117)	—	—
Restructuring charges (Note 13)	37	86	985
Depreciation and amortization	273	246	299
	<b>7,322</b>	<b>6,179</b>	<b>7,199</b>
Operating income (loss)	44	553	(680)
Interest expense, net (Note 8)	(156)	(175)	(168)
Other (losses) gains (Note 14)	(2)	20	1
	<b>(158)</b>	<b>(155)</b>	<b>(167)</b>
(Loss) income before income taxes	(114)	398	(847)
Income tax recovery (expense) (Note 15)	66	(51)	144
Net (loss) income	<b>\$ (48)</b>	<b>\$ 347</b>	<b>\$ (703)</b>
Weighted-average number of common shares outstanding (millions)			
— Basic	83	83	83
— Diluted	83	84	83
Net (loss) income per common share (Note 10)			
— Basic	<b>\$ (0.57)</b>	<b>\$ 4.19</b>	<b>\$ (8.52)</b>
— Diluted	<b>\$ (0.57)</b>	<b>\$ 4.16</b>	<b>\$ (8.52)</b>

See accompanying Notes to Consolidated Financial Statements.

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

<i>year ended December 31 (millions of U.S. dollars)</i>	2008	2007	2006
Net (loss) income	<b>\$ (48)</b>	<b>\$ 347</b>	<b>\$ (703)</b>
Other comprehensive (loss) income:			
Unrealized gain (loss) on available-for-sale securities, net of tax of \$0	1	(1)	—
Unrealized (loss) gain on translation of self-sustaining foreign operations	(149)	235	54
	<b>(148)</b>	<b>234</b>	<b>54</b>
Comprehensive (loss) income	<b>\$ (196)</b>	<b>\$ 581</b>	<b>\$ (649)</b>

See accompanying Notes to Consolidated Financial Statements.

# CONSOLIDATED BALANCE SHEETS

<i>December 31 (millions of U.S. dollars)</i>	2008	2007 <sup>(1)</sup>
<b>ASSETS</b>		
Current assets		
Cash and cash equivalents	\$ 74	\$ 118
Accounts receivable (Note 3)	290	608
Inventories (Note 4)	529	882
Prepaid expenses and other assets	34	20
Future income taxes (Note 15)	68	—
Restricted cash (Note 8)	49	4
	<b>1,044</b>	1,632
Investments and other assets (Note 5)	182	177
Property, plant and equipment, net (Note 6)	2,808	3,047
	<b>\$4,034</b>	\$4,856
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities		
Bank loans	\$ 2	\$ 3
Accounts payable and accrued liabilities (Note 7)	781	1,183
Long-term debt due within one year (Note 8)	380	254
	<b>1,163</b>	1,440
Long-term debt (Note 8)	1,270	1,540
Deferred credits and long-term liabilities (Note 9)	302	265
Future income taxes (Note 15)	385	510
	<b>3,120</b>	3,755
<b>SHAREHOLDERS' EQUITY</b>		
Common shares	508	505
Contributed surplus	25	27
Accumulated other comprehensive income	464	612
Deficit	(83)	(43)
	<b>914</b>	1,101
	<b>\$4,034</b>	\$4,856
<b>Contingencies and commitments (Notes 8, 18 and 20)</b>		

(1) In 2008, NOVA Chemicals reclassified certain balance sheet amounts. The prior period was restated. See Notes 2, 3 and 7.

See accompanying Notes to Consolidated Financial Statements.

On behalf of the board:



**KERRY L. HAWKINS**  
Director



**JEFFREY M. LIPTON**  
Director

# CONSOLIDATED STATEMENTS OF CASH FLOWS

80 <i>year ended December 31 (millions of U.S. dollars)</i>	2008	2007	2006 <sup>(1)</sup>
<b>OPERATING ACTIVITIES</b>			
Net (loss) income	\$ (48)	\$ 347	\$(703)
Depreciation and amortization	273	246	299
Future income tax recovery (Note 15)	(123)	(58)	(219)
Other losses (gains) (Note 14)	2	(20)	(1)
Stock option expense (Note 11)	2	2	8
Unrealized loss (gain) on derivatives	87	(21)	20
Unrealized foreign exchange gain	(119)	—	—
Non-cash restructuring charges (Note 13)	25	61	907
	<b>99</b>	<b>557</b>	<b>311</b>
Changes in non-cash working capital:			
Accounts receivable	281	(53)	50
Inventories	317	(232)	11
Future income taxes	(68)	—	—
Other current assets	(40)	(4)	(2)
Accounts payable and accrued liabilities	(354)	176	(57)
	<b>136</b>	<b>(113)</b>	<b>2</b>
Changes in non-current assets and liabilities	37	(115)	37
Cash provided by operating activities	<b>272</b>	<b>329</b>	<b>350</b>
<b>INVESTING ACTIVITIES</b>			
Proceeds on sales of assets, investments and other capital transactions	—	6	3
Property, plant and equipment additions	(166)	(156)	(198)
Turnaround costs, long-term investments and other assets	(44)	(42)	(48)
Acquisition of production rights	—	(30)	—
Cash used in investing activities	<b>(210)</b>	<b>(222)</b>	<b>(243)</b>
<b>FINANCING ACTIVITIES</b>			
(Decrease) increase in current bank loans	(1)	2	—
Increase (decrease) in revolving debt	37	(4)	108
Long-term debt additions	1	1	5
Long-term debt repayments	(128)	(12)	(308)
Affiliate long-term notes	—	—	3
Common shares issued	3	8	3
Options retired for cash (Note 11)	—	(6)	(2)
Common share dividends	(31)	(31)	(29)
Cash used in financing activities	<b>(119)</b>	<b>(42)</b>	<b>(220)</b>
Increase in cash due to exchange rates	13	—	—
(Decrease) increase in cash and cash equivalents	<b>(44)</b>	<b>65</b>	<b>(113)</b>
Cash and cash equivalents, beginning of year	118	53	166
Cash and cash equivalents, end of year	<b>\$74</b>	<b>\$ 118</b>	<b>\$ 53</b>
Cash tax payments, net of refunds	<b>\$ 47</b>	<b>\$ 62</b>	<b>\$ 53</b>
Cash interest payments	<b>\$ 190</b>	<b>\$ 172</b>	<b>\$ 168</b>

(1) In 2008, NOVA Chemicals reclassified certain balance sheet amounts. The prior periods were restated. See Notes 2, 3 and 7.

See accompanying Notes to Consolidated Financial Statements.

# CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

<i>year ended December 31 (millions of U.S. dollars)</i>	2008	2007	2006
<b>Common shares</b>			
Balance at beginning of year	\$ 505	\$ 497	\$ 494
Common shares issued	3	8	3
Balance at end of year	\$ 508	\$ 505	\$ 497
<b>Contributed surplus</b>			
Balance at beginning of year	\$27	\$ 25	\$ 16
Contribution of post-retirement plans to INEOS NOVA (Note 16)	(4)	—	—
Stock option compensation cost	2	2	9
Balance at end of year	\$ 25	\$ 27	\$ 25
<b>Reinvested (deficit) earnings</b>			
Balance at beginning of year	\$ (43)	\$ (354)	\$ 381
Net (loss) income	(48)	347	(703)
Adoption of inventory full costing (Note 2)	39	—	—
Common share dividends	(31)	(31)	(29)
Stock options retired for cash	—	(5)	(3)
Balance at end of year	\$ (83)	\$ (43)	\$ (354)
<b>Accumulated other comprehensive income</b>			
Balance at beginning of year	\$ 612	\$ 378	\$ 324
Other comprehensive (loss) income:			
Unrealized (loss) gain on translation of self-sustaining foreign operations	(149)	235	54
Unrealized gain (loss) on available-for-sale securities	1	(1)	—
Balance at end of year	\$ 464	\$ 612	\$ 378
<b>Total shareholders' equity</b>	<b>\$ 914</b>	<b>\$1,101</b>	<b>\$ 546</b>
<b>Common shares<sup>(1)</sup></b>			
Balance at beginning of year	83,054,528	82,561,272	82,364,899
Common shares issued for cash on exercise of stock options (Note 11)	105,197	357,683	129,007
Common shares issued as share appreciation rights on exercise of stock options (Note 11)	1,164	135,573	67,366
Balance at end of year <sup>(2)</sup>	83,160,889	83,054,528	82,561,272

(1) Unlimited number of authorized voting common shares without par value, non-voting first preferred shares and non-voting second preferred shares. Currently only common shares are issued and outstanding.

(2) Stated common share capital for legal purposes at Dec. 31, 2008, 2007 and 2006 was \$1,643 million, \$1,640 million and \$1,632 million, respectively.

See accompanying Notes to Consolidated Financial Statements.