

BRASKEM SA  
Form 6-K  
September 18, 2008

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**SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

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**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13A-16  
OR 15D-16 OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the month of September, 2008  
(Commission File No. 1-14862)**

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**BRASKEM S.A.**

*(Exact Name as Specified in its Charter)*

**N/A**

*(Translation of registrant's name into English)*

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**Rua Eteno, 1561, Polo Petroquimico de Camacari  
Camacari, Bahia - CEP 42810-000 Brazil  
*(Address of principal executive offices)***

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Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K  
in paper as permitted by Regulation S-T Rule 101(b)(1).

Indicate by check mark if the registrant is submitting the Form 6-K  
in paper as permitted by Regulation S-T Rule 101(b)(7).

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to  
the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- \_\_\_\_\_.

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**Braskem S.A.**

Appraisal report of the book value of  
shareholders' equity determined by  
means of the accounting records and  
adjusted to market prices

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**APPRAISAL REPORT OF THE BOOK VALUE OF SHAREHOLDERS'**  
**EQUITY DETERMINED BY MEANS OF THE ACCOUNTING**  
**RECORDS AND ADJUSTED TO MARKET PRICES**

To  
The Board of Directors and Shareholders of  
**Braskem S.A.**  
Camaçari - BA

1. KPMG Auditores Independentes, a company established in the city of São Paulo, at Rua Dr. Renato Paes de Barros, 33, entered in the Ministry of Finance National Corporate Taxpayers' Register under CNPJ n° 57.755.217/0001 -29, originally registered with the Regional Accounting Council of the State of São Paulo and secondary registration in the State of Bahia under n° CRC 2SP014428/O-6-S-BA, with its Company Charter registered at 2° Cartório de Registro de Títulos e Documentos e Civil de Pessoas Jurídicas de São Paulo/SP, on 6.24.87 and subsequent alterations registered at 2° Cartório de Registro de Títulos e Documentos e Civil de Pessoas Jurídicas de São Paulo/SP, with the last of these, dated March 31, 2006, registered on microfilm under n° 85448, on April 11, 2006, represented by its undersigned partner, Mr. Anselmo Neves Macedo, Brazilian, married, accountant, bearer of Identity Card RG n° 9.491.182, entered in the Individual Taxpayers' Register under CPF n° 033.169.788 -28 and registered at the Regional Accounting Council of the State of São Paulo and secondary registration under n° 1SP160482/O-6-S-BA, resident and domiciled in São Paulo/SP with office at the same address of the represented company, appointed expert by Braskem S.A. (Company) to go through with the appraisal of the book value of shareholders' equity on July 31, 2008, according to the accounting practices adopted in Brazil, adjusted to market price, presents the result of its work.

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- 2.** The appraisal report of the book value of the shareholders' equity as of July 31, 2008, which is adjusted to market prices, is intended to establish the ratio of exchange between the Company's shares and the shares of IPQ - Ipiranga Petroquímica S.A., aiming at the downstream merger of IPQ by the Company.
- 3.** The appraisal report of the book value of shareholders' equity is being issued in connection with the audit examination of the balance sheet as of July 31, 2008, prepared under the responsibility of Company Management. The accounting information of the subsidiaries Copesul - Companhia Petroquímica do Sul, Ipiranga Petroquímica S.A., Ipiranga Química S.A. and Petroquímica Paulínia S.A. on July 31, 2008 was subject to evaluation by other independent auditors, and our appraisal report, as refers to the amount of the investments in these subsidiaries, is based exclusively on the appraisal reports issued by other auditors.
- 4.** Our examinations were conducted in accordance with Auditing Standards Generally Accepted in Brazil and included, among other procedures: (a) planning of the audit work, considering the materiality of the balances, the volume of transactions and the accounting systems and internal accounting controls of the Company; b) verification, on a test basis, of the evidence and records which support the amounts; and (c) evaluation of significant accounting policies and estimates adopted by Company management.
- 5.** The amount of the adjustment to market value of the property, plant and equipment that served as a basis for the obtainment of the adjusted book value of shareholders' equity, in the total amount of seven billion, four hundred and thirty-two million, three hundred and fifty-four thousand, five hundred and thirty-one reais and ninety-six cents (R\$ 7,432,354,531.96), as indicated in Attachment I, was determined by means of an appraisal report issued by a specialized company contracted by Company Management, dated August 12, 2008, and included in this report as Attachment II.

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**6.** The inventories of finished products, raw materials and production inputs were appraised by Company Management at fair value, i.e. the amount at which these items could be traded between independent and interested parties, familiar with the subject and willing to trade in a normal transaction, without favoring and with exemption from other interests, utilizing the following assumptions:

**a.** Finished goods: calculated with a basis on the average selling prices of the products practiced with third parties in the period from July 15 to 31, 2008, deducting expenditures with freight (if applicable) and the taxes levied on sales (ICMS, PIS and COFINS). For finished products not traded either in the last fortnight of the month of July 2008, or in the last 90 days, the criterion adopted by Management was the maintenance of these inventories by the weighted average cost.

**b.** Raw materials and production inputs: the main raw materials were valued by the average cost of purchase, with a basis on the invoices contained in the Inputs Register of the month of July 2008, minus recoverable taxes (ICMS, PIS and COFINS, when applicable) and plus expenditures incurred in the purchase that are part of the cost of purchase (insurance and others).

**c.** Work in process: stated at production cost;

**d.** Storeroom inventories and others: Stated at purchase cost, minus provision for obsolescence, when applicable.

**7.** The economic value of the client portfolio, considered in intangible assets, basis to adjust the book value of shareholders equity in the total amount of three hundred and seventy million, nine hundred and eighteen thousand, seven hundred and eleven reais and twenty-nine cents (R\$ 370,918,711.29), as indicated in Attachment I, was determined by means of an appraisal report issued by a specialized company contracted by Company Management, dated August 22, 2008, and included in this report as Attachment VII.

**8.** In order to verify the evaluation, by Management, of the amounts determined under the terms described in paragraph 6 above, we applied the same audit examination procedures, mentioned in paragraph 4 above.

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9. Deferred income tax resulting from the fair value of property, plant and equipment, from the adjustment to fair value of inventories and from the appraisal of intangible assets by the economic value of the Company was determined in accordance with Resolution n° 273/98 and Instruction n° 371/02 issued by the Securities Commission (CVM).

10. The amounts of investments in the subsidiaries Copesul - Companhia Petroquímica do Sul, Ipiranga Petroquímica S.A., Ipiranga Química S.A. and Petroquímica Paulínia S.A. on July 31, 2008, were determined with a basis on the shareholders' equity of these subsidiaries, the accounting information of which was examined by other independent auditors, as mentioned in paragraph 3. The amounts of the aforementioned investments, considered for purposes of preparation of this appraisal report, are as follows:

Subsidiaries	Attach.	% interest	Investment book balance	Adj. of assets to market price	Pro-forma investment balance
Copesul Companhia Petroquímica do Sul	III	39.19%	1,513,712,942.50	56,207,618.13 (*)	1,569,920,560.63
Ipiranga Química S.A.	IV	100.00%	1,180,605,526.67	1.282.810.911.91	2,463,416,438.58
Ipiranga Petroquímica S.A.	V	25.98%	366,028,892.75	455,593,476.03	821,622,368.78
Petroquímica Paulínia S.A.	VI	100.00%	280,000,000.00	-	280,000,000.00
Total			3,340,347,361	92 1,794,612,006.08	5,134,959,368.00

(\*)net value of goodwill paid in the acquisition, in the amount of R\$ 942,426,559.65

The adjustment of assets to market price column includes the appraisal of the inventories and intangible assets defined in accordance with the assumptions of Management and of fixed assets at market prices determined with a basis on a report from a specialized company.

11. For preparation purposes of this report, the other subsidiaries of the Company were not included in the process of appraisal at market prices, considering the materiality of the involved values.

**12.** With a basis on the work executed, on the reports issued by other independent auditors and on the appraisal reports issued by the independent experts, Stima Engenharia Ltda. and APSIS Consultoria Empresarial Ltda., we concluded that the value of the assets, rights and obligations that form an integral part of the book value of shareholders' equity adjusted to market price of the Company, on July 31, 2008, summarized in Attachment I, is R\$ 14,868,959,541.41 (pro-forma book value) (fourteen billion, eight hundred and sixty-eight million, nine hundred and fifty-nine thousand, five hundred and forty-one reais and forty-one cents). The book value of the shareholders' equity, as indicated in Attachment I, is recorded in the accounting records, according to accounting practices adopted in Brazil. The market values of property, plant and equipment and of intangible assets that served as a basis to adjust the book value of shareholders' equity in the total amount of seven billion, eight hundred and three million, two hundred and seventy-three thousand, two hundred and forty-three reais and twenty-five cents (R\$ 7,803,273,243.25), as indicated in the same Attachment I, were determined according to the technical assumptions utilized by the independent experts, described in their appraisal reports, and the market value of the inventories was determined according to Management assumptions, as described in paragraph 6 above.

**13.** Without emphasizing the total book value of shareholders' equity adjusted to market prices referred to in the foregoing paragraph, we inform that:

(a) Law 11,638 was enacted on December 28, 2007, effective as of January 1, 2008. This law changed, revoked and introduced new provisions to Law no. 6,404/76 (Brazilian corporate law) and promoted changes in the accounting practices adopted in Brazil. Although this law has come into force, some amendments it has introduced are subject to normatization by the Brazilian regulatory authorities. Accordingly, the balance sheet on July 31, 2008, basis for the determination of the total book value of net assets, could require adjustments upon the formalization process of Law n° 11,638/07.

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(b) The Company and its subsidiaries Companhia Petroquímica do Sul - Copesul and Ipiranga Petroquímica S.A. - IPQ have accumulated ICMS credits over the last few years, originating substantially from the difference between the rates of incoming and outgoing of inputs and products, internal departures subject to the incentive of deferral of taxation and sales made to the foreign market. The receipt of these credits depends on the success of the deployment of Management's plans for recovery of these credits. The balance sheet on July 31, 2008, basis for the determination of the total book value of net assets, does not include any adjustments relating to the recovery of these credits as a result of this uncertainty.

(c) In view of the discussion regarding the constitutionality of Law nº 7,689/88, the Company, in a proceeding that also involves its merged companies OPP Química S.A., Trikem S.A. and Polialden Petroquímica S.A., is disputing the non-payment of Social Contribution on Income (CSL) in court. Management, with a basis on the opinion of its legal counsel, which considered the prospect of a successful outcome possible, believes that it should be successful in its claims for maintenance of non-payment and, in case of loss of the rescissory action, the decision could not have retroactive effects reaching back to the year the law appeared. Consequently, for purposes of preparation of this report, no provision was formed for possible unfavorable outcomes of the notices of tax deficiency, or for the years not yet supervised by the Internal Revenue Service in the balance sheet on July 31, 2008, basis for the determination of the book value of shareholders' equity.

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(d) OPP Química S.A., taken over by the Company in 2003, with grounds in the decision of the Federal Supreme Court (STF), which judged the Extraordinary Appeal filed by the National Treasury and fully confirmed the decision of the Federal Court of Appeals - TRF of the 4th Region, acknowledging the right to IPI credit in acquisitions of raw materials taxed at zero rate at the establishments of OPP Química, accounted for Excise Tax (IPI) credits in the amount of R\$ 1,030,125 thousand (R\$ 2,598,980 thousand restated up to July 31, 2008), which were offset with the actual IPI and other federal taxes. Although this decision was the subject matter of a Bill of Review by the National Treasury where it is not the right to the credit that is challenged, but rather imprecision of the decision regarding aspects relating to the case of untaxed inputs, the price-level restatement and the rate to be utilized for credit calculation purposes, and by the notices of tax deficiency filed against the Company. Management, based on the opinion of its legal counsel, considers the chances of success probable, for which reason no provision was recorded in the balance sheet of July 31, 2008, basis for the determination of the book value of shareholders' equity.

**14.** In compliance with the requirements of the Securities Commission, we inform that:

(a) In accordance with the professional standards established by the Federal Accounting Council, we are not aware of a direct or indirect conflict of interest, or of any other circumstance that represents a conflict of interest in relation to the services that were rendered by us, and that are described above; and

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(b) we are not aware of any action of the controlling shareholder or of the directors and officers of the Company with the objective of driving, limiting, hindering or practicing any acts that have or could have compromised the access, use or knowledge of information, bens, documents or work methodologies that are relevant for the quality of the respective conclusions.

São Paulo, August 29, 2008

KPMG Auditores Independentes  
CRC 2SP014428/O-6-S-BA

Anselmo Neves Macedo  
Accountant CRC 1SP160482/O-6-S-BA

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Attachment I

Pro-forma balance sheet on  
July 31, 2008 with adjustments to market prices

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**Attachment to the appraisal report of the book value of shareholders' equity determined  
by means of the accounting records and adjusted to market prices of Braskem S.A.**

**Pro-forma balance sheet  
on July 31, 2008 with adjustments to market prices**

*(In reais)*

<b>Assets</b>	<b>Book value</b>	<b>Adjustments to market price</b>	<b>Pro-forma book balance</b>	<b>Liabilities</b>	<b>Book value</b>	<b>Adjustment market price</b>
<b>Current assets</b>				<b>Current liabilities</b>		
Cash and cash equivalents	35.756.867,16	-	35.756.867,16	Accounts payable to suppliers	2.173.082.424,04	
Securities	976.169.629,09	-	976.169.629,09	Loans and financing	1.411.552.987,19	
Trade accounts receivable	1.287.969.037,47	-	1.287.969.037,47	Debentures	30.700.045,20	
Inventories	1.537.829.284,90	131.236.949,51	1.669.066.234,41	Salaries and social security charges	141.181.995,80	
Recoverable taxes	305.876.774,84	-	305.876.774,84	Taxes, duties and contributions	126.990.726,90	
Other accounts receivable	145.432.352,56	-	145.432.352,56	Advances from clients	54.922.014,06	
				Other accounts payable	100.362.331,95	
	4.289.033.946,02	131.236.949,51	4.420.270.895,53			
					4.038.792.525,14	
<b>Noncurrent assets</b>				<b>Noncurrent liabilities</b>		
<b>Noncurrent assets</b>				<b>Noncurrent liabilities</b>		
Securities	15.337.687,58	-	15.337.687,58	Accounts payable to suppliers	30.976.941,77	
Accounts receivable	89.025.242,40	-	89.025.242,40	Loans and financing	3.897.351.887,84	
Inventories	20.755.851,12	-	20.755.851,12			

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Recoverable taxes	1.271.334.273,39	-	1.271.334.273,39	Debentures	800.000.000,00	
Judicial deposits	161.257.707,86	-	161.257.707,86	Taxes and contributions	1.225.896.005,69	1.983.627.548,1
Associated companies	76.799.684,29	-	76.799.684,29	Associated companies	454.394.088,95	
Other accounts receivable	42.426.315,23	-	42.426.315,23	Long-term incentive	11.262.176,73	
				Other accounts payable	120.447.967,63	
	1.676.936.761,87	-	1.676.936.761,87			
						6.540.329.068,61 1.983.627.548,1
<b>Permanent assets</b>				<b>Deferred income</b>		
Investments	3.808.267.187,16	1.794.612.006,08	5.602.879.193,24	Negative goodwill on the acquisition of investments	13.784.609,20	
Property, plant and equipment	6.602.602.220,13	7.432.354.531,96	14.034.956.752,09	Investment subsidy	5.506.776,44	
Intangible	1.196.568.973,51	370.918.711,29	1.567.487.684,80			
Deferred charges	148.468.781,46	-	148.468.781,46			
					19.291.385,64	
	11.755.907.162,26	9.597.885.249,33	21.353.792.411,59			
				<b>Shareholder's equity</b>		
				Capital	5.361.655.888,67	
				Capital reserves	457.460.576,59	
				Equity evaluation adjustment	24.885.329,05	
				Legal reserves	745.707.925,58	7.745.494.650,0
				Treasury stock	(120.036.649,38)	

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				Retained earnings	653.791.820,25		
						7.123.464.890,76	7.745.494.650,0
17.721.877.870,15	9.729.122.198,84	27.451.000.068,99				17.721.877.870,15	9.729.122.198,8

This attachment forms an integral part of the appraisal report of the book value of shareholders' equity determined by means of the accounting records and adjusted to market prices of Braskem S.A., issued by KPMG Auditores Independentes, dated August 29, 2008 and should be read and reproduced in full.

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**Appraisal Report Summary Folder**

**Methodology and Summary of  
Values**

**Base date: July 2008**

Prepared by:

**July 2008**

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**INDEX**

<b>1. INTRODUCTION</b>	<b>4</b>
<b>2. OBJECTIVE</b>	<b>4</b>
<b>3. GENERAL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS</b>	<b>4</b>
<b>4. GENERAL EVALUATION CONCEPTS</b>	<b>5</b>
4.1. EVALUATION	5
4.2. ASSET	5
4.3. TANGIBLE OR INTANGIBLE ASSET	5
4.4. PRICE AND MARKET VALUE	5
4.5. COST	5
<b>5. STANDARDS OBSERVED IN THE EVALUATIONS</b>	<b>6</b>
<b>6. GENERAL METHODOLOGY USED IN THE EVALUATIONS OF ASSETS</b>	<b>6</b>
6.1. METHODS TO IDENTIFY THE VALUE OF AN ASSET, ITS BENEFITS AND RIGHTS	6
6.1.1. <i>Direct market data comparative method</i>	6
6.1.2. <i>Involutive method</i>	7
6.1.3. <i>Evolutive method</i>	7
6.1.4. <i>Income capitalization method</i>	7
6.2. METHODS TO IDENTIFY THE COST OF AN ASSET	7
6.2.1. <i>Direct cost comparative method</i>	7
6.2.2. <i>Cost quantification method</i>	7
<b>7. METHODOLOGY IN THE EVALUATION OF URBAN LOTS</b>	<b>7</b>
7.1. LOTS AND SECTIONS - DEFINITIONS	7
7.2. CLASSIFICATION OF LOTS	8
7.3. COMPARATIVE MARKET DATA METHOD	9
7.4. COST METHOD	9
<b>8. METHODOLOGY IN THE EVALUATION OF THE BUILDINGS</b>	<b>10</b>
8.1. UNIT VALUES	10
8.2. METHODOLOGY	10
<b>METHODOLOGY IN EVALUATION OF THE MACHINES, EQUIPMENT</b>	
<b>9. AND INSTALLATIONS</b>	<b>11</b>
9.1. EVALUATION DEFINITIONS	11
9.1.1. <i>Patrimonial value</i>	11
9.1.2. <i>Residual value</i>	11
9.1.3. <i>Written Down Replacement value</i>	11
9.1.4. <i>Economic life and working life</i>	11



9.1.5. <i>Commercial value</i>	11
9.1.6. <i>Cost value</i>	11
9.1.7. <i>Depreciated value</i>	12
9.2. EVALUATION METHOD	12
9.2.1. <i>Inspection</i>	12
9.2.2. <i>Verification of the state of preservation and maintenance</i>	12
9.2.3. <i>Information collection</i>	13
9.2.4. <i>Market Situation</i>	13
9.3. GENERALLY USED CRITERIA	13
9.4. SPECIFIC CRITERIA	14
<b>10. GENERAL DATA ON THE INDUSTRIAL UNITS</b>	<b>15</b>
10.1. FIRST GENERATION PRODUCERS	15
10.2. SECOND GENERATION PRODUCERS	15
10.3. THIRD GENERATION PRODUCERS	15
10.4. PETROCHEMICAL POLES, A BRIEF HISTORY	16
10.5. BASIC SUPPLIES UNITS	17
10.5.1. <i>Basic supplies unit products</i>	17
10.5.2. <i>Capacities of the Basic supplies units</i>	18
10.5.3. <i>Basic supplies units Technologies</i>	19
10.6. POLIOLEFINAS UNITS	19
10.6.1. <i>Poliolefinas Unit Products</i>	20
10.6.2. <i>Poliolefinas Industrial Unit Capacities</i>	20
10.6.3. <i>Poliolefinas Industrial Unit Technologies</i>	20
10.7. VINILICOS UNITS	21
10.7.1. <i>PVC</i>	21
10.7.2. <i>Caustic soda and Chlorine</i>	22
10.7.3. <i>Vinyl Unit Industrial units</i>	22
10.7.4. <i>Vinyl units Industrial Capacities</i>	22
10.7.5. <i>Vinyl units Industrial Technologies</i>	22
10.7.6. <i>Alagoas Utilities Central</i>	23
10.7.7. <i>Operational data</i>	23
10.8. BUSINESS DEVELOPMENT UNIT	24
10.8.1. <i>Products from the Industrial units of the Business Development unit</i>	24
10.8.2. <i>Industrial Development Unit Business Capacities</i>	24
10.8.3. <i>Technologies of the Business Development unit Industrial units</i>	24
<b>11. RESULT OF THE EVALUATIONS AND SUMMARIES</b>	<b>25</b>
11.1. EVALUATION DATA	25
11.2. SUMMARY OF THE EVALUATION PER INDUSTRIAL UNIT	26
11.3. COMPOSITION OF THE EVALUATION FOLDERS	28

**12. TERM OF RESPONSIBILITY**

**33**

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## 1. INTRODUCTION

Stima Engenharia Ltda. company registered in CREA-SP with the no 071.708 -8, with a headquarters at Avenida Fagundes Filho, nº 141, conjunto 55/56, 5º andar, São Paulo SP, registered in the National Companies Register CNPJ under the no 06.932.665/0001 -10, having been designated to function as a market value evaluator, in the database 31 July 2008, of the fixed real estate assets of the company Braskem S.A., with a headquarters Rua Ethane, nº 1.561, Bairro COPEC, Pólo Petrochemical de Camaçari, Camaçari BA, registered in the National Companies Register CNPJ under the no 42.150391/0001 -70, present below the result of their works that will be used for the purposes of establishment of the exchange of shares in the incorporation process.

## 2. OBJECTIVE

The objective of this work is to establish the market value, for the purpose described above, of the assets belonging to Braskem S.A.

The results of the evaluation of the following types of assets are presented here: lots, buildings, improvements, installations, machines and equipment and have as a purpose to comment on the overall concepts, standards and methods used in the evaluation of these assets.

The values expressed in this evaluation are calculated for the base date of 31 July 2008, the same date on which were done the inspections, calculations, quotations and market research for the assets object of this evaluation. This report was prepared in accordance with the devices set out in article 8 of Law 6404/76.

## 3. GENERAL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS

This report is subject to the following conditions of independence, contingencies and limitations:

- a) Inspections were done in all the industrial units belonging to the Company. The goods with a significantly higher value were photographed and their technical data annotated. The assets characteristic of the installations (cables, piping, valves, instruments, automation systems and others) were inspected in a sample manner, according to normally accepted practices;
- b) The installations assets (cables, piping, valves, instruments, automation systems and others) not inspected individually, were evaluated by means of information obtained from the accounting and engineering areas of the Company, which are assumed to be true;
- c) The replacement values were obtained by means of price research with the manufacturers and suppliers of the assets. If it was impossible to obtain these quotations, alternative calculation methods were used based on the average capacity standards used by companies in the petrochemical range for budgets of their designs;
- d) The assets characteristic of the installations (cables, piping, valves, instruments, automation systems and others) had their values obtained in price composition calculations, by means of multiplication of the unit prices by the quantities supplied by the Company;

e) For the evaluation of the real estate (lots, buildings and improvements) we used the information supplied by the administration and engineering areas. In the case of divergences of information, we adopted as being correct that supplied in engineering documents.

#### **4. GENERAL EVALUATION CONCEPTS**

In order to better meet the methods, criteria and nomenclature used in this evaluation report, listed below are some of the terms defined by the evaluation technique standards.

##### **4.1. Evaluation**

This is the technical analysis, done by an Evaluation engineer, to identify the value of an asset, its costs, benefits and rights, as well as determining indicators for the viability of its economic use, for a determined purpose, situation and date.

##### **4.2. Asset**

Asset is a thing that has value, capable of use or that may be the object of rights, which forms part of patrimony.

##### **4.3. Tangible or intangible asset**

A tangible asset is that well identified materially (example: real estate, equipment, raw materials). An intangible asset is that not well identified materially (example: goodwill, brands, patents).

##### **4.4. Price and market value**

Price is the amount by which is effected, or is proposed to effect, a transaction involving an asset, a benefit or a right over it.

According to the NBR 14653-1 Evaluation of Assets Bens Part 1 General procedures ABNT Brazilian Technical Standards Association, market value is the most provable amount for which an asset can be voluntarily and consciously sold, on a reference date, with the market conditions in force.

According to the IVS International Valuation Standards, market value is the estimated amount for which, on a given evaluation date, an asset is sold voluntarily between a buyer and a seller in a free and suitable transaction in which each of the parties acts with awareness, prudence and without pressure.

##### **4.5. Cost**

This is the total of the direct and indirect spending necessary for the production, maintenance or acquisition of an asset; on a determined date and situation.

## 5. STANDARDS OBSERVED IN THE EVALUATIONS

The standards used in the preparation of this report are listed below. According to the ABNT standards - Brazilian Technical Standards Association, the values of this report at the minimum fall into the basis and accuracy as grade I. Standards observed in the issue of this report are:

NBR 14653-1 Evaluation of Assets Part 1 General Procedures ABNT Brazilian Technical Standards Association

NBR 14653-2 Evaluation of Assets Part 2 Urban Real estate ABNT Brazilian Technical Standards Association

NBR 12721 Evaluation of Unit Costs and Preparation of Construction Budgets for the Incorporation of Buildings in Condominiums ABNT Brazilian Technical Standards Association

NBR 14653-5 Evaluation of Assets Part 5: Machines, Equipment, Installations and industrial goods in general ABNT Brazilian Technical Standards Association.

Evaluation Standards for Urban Real estate from IBAPE-SP Brazilian Institute of Standards and Engineering Experts of São Paulo Year 2005 version 2

International Valuation Standards (IVS) IVS 1: Market Value Basis of Valuation; IVS 2: Valuation Bases Other Than Market Value and IVS 3: Valuation Reporting

International Valuation Standards (IVS) Guidance Note N 3 Valuation of Plant and Equipment Guiding notes N 3 Evaluation of Industrial Plants and Equipment

## 6. GENERAL METHODOLOGY USED IN THE EVALUATIONS OF ASSETS

The methodology applicable is a function, basically, of the nature of the asset evaluated, the purpose of the evaluation and the availability, quality and quantity of information collected from the market. Its choice should be justified with the objective of portraying the market behavior by means of models that rationally support the assumed value.

### 6.1. Methods to identify the value of an asset, its benefits and rights

As established in the NBR-14653 from the ABNT, the methods to identify the value of an asset, Its benefits and rights are the following:

#### 6.1.1. Direct market data comparative method

In this method the identification of the market value of the asset is done by means of technical treatment of the attributes of comparable elements, constituents of the sample.

6.1.2. Involutive method

That which identifies the market value of the asset, based on its efficient use, based on a study model of the technical-economic viability, through a hypothetical undertaking compatible with the characteristics of the asset and with the market conditions in which it is placed, considering the viable scenarios for the execution and sale of the product.

6.1.3. Evolutive method

Identifies the value of the asset by the sum of the values of its components. In case the purpose is the identification of the market value the sales factor should be considered.

6.1.4. Income capitalization method

This is a method which identifies the value of the asset, based on the capitalization of its forecast net income, considering the viable scenarios.

**6.2. Methods to identify the cost of an asset**

As established in NBR-14653 from the ABNT, the methods to identify the cost of an asset, are the following:

6.2.1. Direct cost comparative method

Identifies the cost of the asset by means of technical treatment of the attributes of comparable elements, constituents of the sample

6.2.2. Cost quantification method

Identifies the cost of the asset or its parts by means of synthetic or analytic estimates as from the amounts of services and respective direct and indirect costs.

**7. METHODOLOGY IN THE EVALUATION OF URBAN LOTS**

**7.1. Lots and sections - Definitions**

Urban Real Estate is that situated within the urban perimeter defined by the law. The lots are portions of land resulting from the parceling of urban land.

Lotting is the sub-division of unused land into lots destined to buildings, with the opening up or new roads, public grounds or prolonging, modification or extension of existing roads.

Urbanizable land is a large extension of land capable of receiving urban infrastructure works, seeking its efficient use, by means of sub-division, dismantling or implantation of undertakings.

## 7.2. Classification of lots

Real estate is an asset constituted of land and any eventual improvements incorporated in it. It may be classified as urban or rural, as a function of its situation, use or vocation.

Classification of land, according to its use capacity, is done as a function of the following factors:

Physical characteristics of the land, such as localization, situation, topography, etc.;

The effective use of similar lots, situated in the same region;

Limitations to the use of the land (restrictions or rights of way), imposed by the competent powers;

Vocation of the real estate is given as the use most economically suited of the real estate as a function of its characteristics and surroundings, respecting legal limitations;

The characterization of the region where the real estate is situated is fundamental for an analysis of its value and evaluation. For this the following data is collected:

General aspects: analysis of the economic, political and social conditions, when relevant to the market, including previous non typical uses or stigmas;

Physical aspects: relief conditions, predominant nature of the soil, environmental conditions;

Localization: situation within the urban context, with an indication of the main poles of influence;

Use and occupation of the ground: the existing occupation versus the zoning laws and use of the ground in the municipality, do decide upon the tendencies for short and medium term modifications;

Urban infrastructure: roading system, public transport, garbage collections, drinking water, electric power, telephones, data transmission, communications and television cable networks, sanitary sewage, rainwater and piped gas;

Existing activities: business, industries and services;

Community equipment: safety, education, health, culture and leisure. Classification of the lots is done as a function of the following data:

Localization: situation in the region and public roads, with an indication of the limits and frontiers;

Current and vocational use, versus the legislation in force;

Physical aspects: dimensions, shape, topography, surface, soil, compared with the documentation available;

Urbana infrastructure available;

Physical and legal restrictions to its use.

According to the text from the ABNT NBR 14653-1, in what affects the choice of the methodology we have:

The methodology chosen should be compatible with the nature of the asset evaluated, the purpose of the evaluation and the market data available. For identification of the market value, whenever possible prefer the direct market data comparative method.

For obtaining the unit value of the land in each locale to be evaluated, market research of offers or real sales of lots similar to that being analyzed is always done.

In front of the unit price found in the market research and applying to it the criteria of the aforesaid standards the final value of the land is calculated.

### **7.3. Comparative market data method**

Consists of determining the value of the land by direct comparison with other similar ones, by means of their sale prices, bearing in mind the common and/or similar characteristics, admitting those that produce the same income to have an equal value or keeping between them a linear proportionality.

In the search of offers of the lots, there was placed an emphasis on sales of other fractions, whose localizations and characteristics were comparable with those of the asset to be evaluated. The values obtained were adjusted through correction coefficients for shape, size and localization.

For those lots where it was not possible to obtain an evaluation of the market price, by means of consultations (unpopulated zones, without agricultural value, road zones in inhospitable regions etc), fiscal indices were used which reflected the evaluation of these lands.

### **7.4. Cost method**

Consists of determining the value of the additions and improvements, by means of the preparation of summary or detailed estimates of all the parts that comprise the final value of the real estate evaluated. The principal costs that compose the works are: Primary (material and labor) and Secondary (administrative, profit, constructor, designs, taxes, services and financial). The criterion used in this evaluation for determining the market values of the lots was the Comparative Market Data Method .



## **8. METHODOLOGY IN THE EVALUATION OF THE BUILDINGS**

For performing the evaluation of the buildings and improvements, it is necessary to understand the following aspects:

Constructive, qualitative, quantitative and technological aspects, compared with the documentation available;

Architectonic, landscaping and functional aspects, including environmental comfort;

Suitability of the building in relation to the recommendable uses for the region;

Occupation conditions.

The buildings were evaluated by the cost of reproduction method, based on Civil Construction Unit Costs, or that is, always updated unit values, cited in innumerable publications and surveys of prices of materials and services.

The costs resulting from these studies considered all the determining market price factors. As a consequence, no other addition, whether as *fait accompli* or whether under the pretext of *sales factor* was admitted.

### **8.1. Unit Values**

The unit values are updated by means of the use of computers, thus obtaining a record of innumerable estimates and costs, for performing a large variety of services and materials employed in civil construction.

These costs, taken at the time of the date base of the current work, are used in the composition of the costs of each constructive phase and each building to be evaluated.

### **8.2. Methodology**

In the services of evaluation of the buildings there are performed various stages that may be summarized thus: Survey, collection of plans and other constructive details of each building.

During and after the inspection of the buildings, checking the plants and other documents supplied with the real situation of each building. Survey of the quantities of services and materials for each constructive stage (such as earthworks, structure, finishing, special installations, etc.) for each building.

There are listed, with the use of computers, the quantities surveyed with the costs of each one of them for the date base of the evaluation reports, thus obtaining the replacement cost for each constructive stage and for the whole building.

Use of a depreciation factor for each constructive stage (when applicable) according to the apparent age and the remaining working life (probable) of the building.

Predictions of the remaining working life of the assets, the remaining physical life of the assets, the scope of the current work, determined according to technical parameters by the use of the depreciation factor, in accord with the Brazilian Evaluation Standards, using as parameters for determination of the depreciation factor the following aspects:

Apparent age of the assets;

Apparent state of the assets;

State of preservation of the assets;

Reform and maintenance plans (preventive and corrective) executed on the assets;

Operational regime of the assets;

Obsolescence level of the assets.

## **9. METHODOLOGY IN EVALUATION OF THE MACHINES, EQUIPMENT AND INSTALLATIONS**

### **9.1. Evaluation definitions**

So that we can describe the methodologies used in the evaluation process of the assets contained in this report, it is necessary to cite some definitions that are important for proper understanding.

#### 9.1.1. Patrimonial value

Is the corresponding to the totality of the assets of a person or company.

#### 9.1.2. Residual value

Is the sum representing the value of the asset at the end of its working life.

#### 9.1.3. Written Down Replacement value

Is the difference between the market value and the cost of recreating an asset, when positive.

#### 9.1.4. Economic life and working life

Economic life is the economic operational life of an asset, whilst working life is the period for functional use of an asset.

#### 9.1.5. Commercial value

Is the value currently attributed to business transactions under normal market conditions for an identical or similar asset to that under consideration.

#### 9.1.6. Cost value

Is the value of the price effectively paid for the asset or thing, plus the direct expenses necessary to take possession of it, such as packaging, taxes, shipping, legal expenses (deeds, etc.) and that fall directly on the price paid or disbursements.

#### 9.1.7. Depreciated value

Is the value of the asset or thing after the deduction of all the parts attributable to physical depreciation, use and obsolescence.

### **9.2. Evaluation method**

The stages to perform evaluation of the machines, equipment and installations are stated below, in the various phases which comprise the work.

#### 9.2.1. Inspection

An inspection is indispensable for performing the evaluation work. In exceptional cases, when it is impossible to access the evaluating asset, it is admissible to use a paradigm situation, provided that agreed between the parties and explicated in the report.

The inspection has as its objective to know and characterize the asset by evaluating it and its suitability to its market segment, from there resulting the conditions for guiding data collection.

During the inspections, the evaluator does a survey of technical data and the physical characteristics and the use of the asset and other relevant factors for the formation of its value.

During the inspection the evaluator notes the characteristics of the asset evaluating, surveying technical data, analyzing the aspects aimed at the state of preservation and maintenance.

#### 9.2.2. Verification of the state of preservation and maintenance

The analysis of the state of preservation and maintenance, are factors of the utmost importance to arrive at a judicious conclusion as to the value of the asset being evaluated. For better understanding, the definitions of these two variables are:

**Preservation:** Act or effect of protected from damage, decadence, prejudice and other risks, through careful verification, of the use and conditions and permanence of the technical and functional characteristics of the building and its installations and equipment.

**Maintenance:** Set of activities to be done to preserve, maintain or recover the functional capacity of the asset and its constituent parts, without however altering its operational capacities or working life time.

Nowadays, maintenance may be divided into preventive, corrective and predictive. Preventive maintenance, the most common, seeks to avoid the occurrence of failures in the functioning of the asset, by means of constant tests and cleaning of the components, contributing to maintaining the machines and the environment in perfect working order, offering the maximum of efficiency in the execution of their activities.

Predictive maintenance, based on data which state the wear and degradation of the asset, seek to forecast the working lifetime of its components. The state of the machines should be observed frequently, so that pieces are replaced at opportune moments, avoiding unexpected stoppages.

And, finally, corrective maintenance, has its place when defects and failures, caused by the use and age of the asset, are detected by means of preventive maintenance, which without correction may bring unexpected expenses.

The difference between maintenance and repair. maintenance in its various modalities, in the last analysis, seeks to maintain the asset functioning. Even in corrective maintenance, the defects and failures to be corrected, by their nature, even if not sufficient to cause the asset to stop functioning, but which may, at any time, if not corrected, may generate serious losses for the company.

#### 9.2.3. Information collection

During the inspection stages, data is collected relative to the characteristics of each one of the assets, plans being checked, documents, projects, i.e., everything that may clarify any aspects relevant to the evaluation.

The following tasks are done during the data collection phase:

- market research seeking data with the attributes most similar possible to the asset being evaluated;

- identification of the information sources, whenever possible certifying the information so as to increase the reliability of the researched data;

- identification of the relevant characteristics of the market data collected;

- search for market data preferably with the same characteristics as the asset being evaluated (same age, capacities, etc.).

#### 9.2.4. Market Situation

In the collection of market data relative to offers it is sought to note information on the time of exposure in the market and, in the case of transactions, checking the forms of payment made and the dates on which they occur.

### 9.3. Generally used criteria

The valuation of machines, equipment and installations, as a rule is done by the reproduction or replacement cost method.

The general criteria used in the evaluation of the machines, equipment and other current assets, follow the standard used in the large majority of the works of evaluating current assets, or that is, based on the establishment of a new replacement value for the asset, by means of research with the manufacturers, suppliers, representatives, etc.

The establishment of the market value in the use of the asset was established observing the state of maintenance, preservation and the characterization of its technical obsolescence.

The new replacement value of the asset may be considered as the sum of the acquisition price of the machines, equipment, installations, furniture, utensils and computer equipment, or generically of an asset; with all the implied imposts, taxes, costs of transport to the work area, with the cost of the materials for installation, respective labor, including that which refers to special or normal finishings, such as ordinary or special painting, thermal insulation, etc.

Depreciation: up to this point valuation has been spoken of as a function of its provable cost of reproduction or replacement, without any mention of depreciation resulting from the age, the use and obsolescence. Depreciation may be defined as the inevitable loss of the value of the factory, equipment and materials throughout time, caused by chemical action or corrosion; physical action (deterioration, old age, abrasion, normal wear and deferred maintenance or repairs); unsuitability and obsolescence.

The depreciation coefficient is what adjusts the market value of the asset. Applying the depreciation due to the price (or cost) of replacement, one finds the market value.

#### **9.4. Specific criteria**

The installations assets (cables, piping, valves, instruments, automation systems and others) were valued through calculation of their cost composition, by means of multiplication of the unit prices by the quantitative supplied by the company.

For the composition of costs we use factors for the following costs: labor, engineering, management, installations and assemblies. These factors were obtained in research done together with the manufacturers and the engineering and design department and in specialized engineering literature.

If it was unable to obtain the value of the asset from the manufacturer, we made use of unit values as a function of the nominal or installed capacity, supplied by the manufacturers of similar equipment for the effects of design calculations.

The age attributed to each one of the items evaluated was a function of the acquisition data (contained in the patrimonial control register), and the information obtained in the engineering and maintenance departments. The working life expectancy and the residual value percentage (scrap value) also were obtained in research with the manufacturers and in specialized engineering literature.

## 10. GENERAL DATA ON THE INDUSTRIAL UNITS<sup>1</sup>

The petrochemical sector transforms crude petroleum sub-products, principally naphtha or natural gas, into consumable and industrial assets used for various purposes. The Brazilian petrochemical sector as a rule, organized into first, second and third generation producers based on the transformation phase of the various raw materials or petrochemical supplies.

### 10.1. First Generation Producers

The Brazilian first generation producers, denominated crackers fractionate or crack the naphtha, its principal component, into basic petrochemicals. The cracking units buy naphtha, which is a sub-product of the petroleum refining process, principally from Petrobras, as well as other suppliers situated outside Brazil. The basic petrochemicals produced by the naphtha cracking units include:

olefins, principally ethane, propane and butadiene; and

aromatics, such as benzene, toluene and xilenes.

Braskem, Copesul, the Petroquímica União and Rio Polymers operate the four naphtha cracking units in Brazil and sell these basic petrochemicals to second generation producers, who in the specific case of Braskem, to second generation producers that integrate the company. The basic petrochemicals, which have a gassy or liquid form, are firstly transported to the second generation producers plants, in general situated close to the naphtha cracking units, by means of pipelines, to undergo additional processing.

### 10.2. Second Generation Producers

The second generation producers process the basic petrochemicals bought from the naphtha cracking units, producing intermediate petrochemicals. These intermediate petrochemicals include:

polyethylene, polystyrene and PVC (produced from ethane);

polypropylene and acrylonitrile (produced from propane);

Hexamethylenediamine (produced from benzene); and

polybutadiene (produced from butadiene).

There are 36 second generation producers operating in Brazil. The intermediate petrochemicals are produced in a sold form in plastic pellets or powder and are transported firstly by truck to third generation producers who, in general, are not situated close to the second generation producers. Braskem and Rio Polymers are currently the only Brazilian integrated first and second generation petrochemical companies.

### 10.3. Third Generation Producers

The third generation producers, denominated transformers, buy the intermediate petrochemicals from the second generation producers and transform them into final products, including:

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<sup>1</sup> Source:

[http://v1.braskem.infoinvest.com.br/modulos/arquivo\\_IAN.asp?arquivo=00482050.WAN&codcvm=004820&language=ptb](http://v1.braskem.infoinvest.com.br/modulos/arquivo_IAN.asp?arquivo=00482050.WAN&codcvm=004820&language=ptb)



plastics (produced from polyethylene, polypropylene and PVC);

acrylic fibers (produced from acrylonitrile);

nylon (produced from Hexamethylenediamine);

elastomers (produced from butadiene); and

disposable packagings (produced from polystyrene).

The third generation producers manufacture various consumer and industrial goods, including receptacles and packaging materials, such as bags, film and bottles, cloths, detergents, paints, auto parts, toys and consumer electronics goods. There are more than 6000 third generation producers operating in Brazil.

#### **10.4. Petrochemical poles, a brief history**

The production of first and second generation petrochemicals in Brazil is concentrated around the four principal petrochemical poles. These are:

Camaçari Petrochemical pole, situated in Camaçari in the state of Bahia, where Braskem operates a naphtha cracking unit;

São Paulo Petrochemical pole, situated in Capuava, in the state of São Paulo or São Paulo Petrochemical pole, where the a Petroquímica União operates the naphtha cracking unit;

Triunfo Petrochemical pole, situated in Triunfo, in the state of Rio Grande do Sul, where Copesul operates the naphtha cracking unit; and

The Rio de Janeiro Petrochemical pole, situated in Duque de Caixas, in the state of Rio de Janeiro, where Rio Polymers operates the naphtha cracking unit.

Each Petrochemical pole has a single first generation producer, also called raw materials center, and several second generation producers who buy supplies from the raw materials center.

The Camaçari Petrochemical pole started its activities in 1978. The Camaçari Petrochemical pole consists of 28 second generation producers situated around the Braskem raw materials center. At the end of the 2005 year this raw materials center showed an annual ethane production capacity ethane of 1,280,000 tons, that, according to Braskem estimates, responded for approximately 37.3% of the ethane production capacity in Brazil.

The São Paulo Petrochemical pole, the oldest Petrochemical pole in Brazil, started its activities in 1972. Petroquímica União is the raw materials centre of this Petrochemical pole, supplying first generation petrochemicals to 11 second generation producers. In December 2005 Petroquímica União showed an annual ethane production capacity of 500,000 tons.

The Triunfo Petrochemical pole started its activities in 1982. Copesul, in which Braskem holds a share participation of 29.5%, is the raw materials centre of this pole, supplying first generation petrochemicals to six second generation producers. On the 31 December 2005, Copesul showed an annual ethane production capacity of 1.135,000 tons.



A fourth Petrochemical pole constructed in Duque de Caxias, in the state of Rio de Janeiro, the Rio Polymers Integrated Complex, a Brazilian petrochemical company, was inaugurated in June 2005. Rio Polymers is the raw materials centre of this Petrochemical pole, supplying first generation petrochemicals to two second generation producers. On 31 December 2005 Rio Polymers had an annual production capacity of 520,000 tons of ethane.

### 10.5. Basic supplies units

On December 2005, the Basic Supplies Unit had one of the largest annual average productive capacities of all the first generation producers in Latin America.

olefins, such as ethane, propane grade and chemical grade vs, butadiene, isoprene and butane-1;

aromatics, such as benzene, toluene, para-xilene and ortho-xilene;

fuels, such as automotive gasoline and LPG; and

MTBE, C9 Solvent and Pyrolise C9.

The Basic Business Unit supplies defines the term unit for various plants connected together so as to produce olefins, aromatics or utilities. Consequently, the production capacity of the Aromatics 1 and 2 Units represents the sum of the production capacities of the various plants integrating the units.

The Basic supplies units manufacture a broad range of basic petrochemicals principally for employment in the manufacture of intermediate petrochemical products.

#### 10.5.1. Basic supplies unit products

The following table shows the principal products manufactured by the basic Supplies Unit, their intermediate derived products and their most common end uses.

Basic Petrochemical Products	Intermediate Products Derived from the Basic Petrochemical Products	Common end uses
<b>Olefins</b>		
Ethane	Low density/low linear density Polyethylene (1)	Garbage bags, film for packaging, toys, domestic utilities, electrical insulation, paper coverings
	High density Polyethylene (1)	Blow molded plastic bottles (like milk bottles)
	Ethane oxide, used to produce ethylene glycol	polyester fibers and PET resin
	Dichloromethane, used to produce PVC (2)	Pipes, wall linings, stuffing, floor coverings
	Ethyl benzene, used to produce SM and to follow OS	Disposable cups and receptacles, high impact plastics
Propane (polymer grade)	Polypropylene (1)	Bases for carpets, bags, bottles, diapers, raffia bags
	Acrylonitrile	Clothing, plastics

Basic Petrochemical Products	Intermediate Products Derived from the Basic Petrochemical Products	Common end uses
	Propane oxide	Polyurethane foam for furniture and insulation, cleaning and lining compounds
Butadiene	Synthetic rubber, elastomers, resins	Tires, shoes, hoses, surgical gloves
Butane-1	Low linear density Polyethylene (1)	Garbage bags, packaging film, toys, domestic utilities, electrical insulation, paper liners
<b>Aromatics</b>		
Benzene	Ethyl benzene (used in the manufacture of monomer	Disposable cups and receptacles, high impact plastics
	Cumane	Epoxies
	Cyclohexane and cyclohexanone (3)	Nylon
	Linear Alkyl Benzene	Detergents
	Hexamethylenediamine (3)	Nylon
	Ammonia Sulphate (3)	Fertilizers
Isoprene	Styrene-isoprene-styrene (SIS)	Adhesives
Toluene	Toluene di-isocyanate (TDI)	Urethane foam
		Solvents
Para-xilene	Purified terephthalic acid and Diimethyl terephthalate (DMT) (3)	Film and polyester fibers, PET resin (3)
Ortho-xilene	Anhydride thalic and plasticizants	Flexible PVC products
<b>Others</b>		
MTBE		Additives for increasing the octane of gasoline
C9Solvent		Solvents and thinners
C9 Pyrolise		Additives for increasing the octane of gasoline
<b>Fuels</b>		
Automotive Gasoline		Fuel for internal combustion motors
LPG		Cooking gas

(1) Produced by the Poliolefinas Unit.

(2) Produced by the Vinílicos Unit.

(3) Produced by the Business Development Unit.

#### 10.5.2. Capacities of the Basic supplies units

The table below shows the name of the plant, the principal products and the annual production capacity for each one of the principal Basic Supplies Units and basic petrochemical plants.

Name	Principal Products	Annual Production capacity

		(in tons, except automotive gasoline and LPG)
<b>Olefins 1 and 2 Plants</b>	Ethane	1,280,000
	Propane	550,000
<b>Aromatics units 1 and 2 Plants:</b>		
Butadiene plants 1 and 2	Butadiene	175,000
MTBE plants 1 and 2	MTBE	140,000
Butane plant -1	Butane-1	35,000
Isoprene plant	Isoprene	19,000
	Dicyclo-pentadyene	24,000
<b>Sulfolene 1, 2 and 3 Plants</b>	Coperaf 1 (1)	120,000
<b>BTX Fractioning 1 and 2 Plants</b>	Benzene	427,000
	Toluene (2)	42,000
<b>Fractioning C8+ Plant</b>	Mixed Xilenes (2)	40,000
	Ortho-Xilene	62,000

Name	Principal Products	Annual Production capacity
		(in tons, except automotive gasoline and LPG)
	C9 Solvent (1)	30,000
<b>Production and Para-Xilene Unit Parex</b>	Para-Xilene	203,000
<b>Formulation Plant</b>	Automotive Gasoline (3)	600,000
	LPG	25,000

(1) Solvents;

Effective production may exceed the production capacity of certain plants when the excess capacity of other (2) aromatic unit plant is used.

(3) Automotive Gasoline and LPG in cubic meters per year.

#### 10.5.3. Basic supplies units Technologies

Technological processes are used from a variety of sources which are implemented by Braskem through the construction or improvement (upgrading) of the installations, including:

Technology ABB Lumus Global developed in conjunction by the Research and Development Center - CENPES, of Petrobras and TECHNIP and technology developed by Linde AG, used in the olefin plants; and

Technology developed by Nippon Zeon, a Japanese petrochemical company, used in the butadiene plants.

These non exclusive contracts do not provide, in general, for payment to said companies in stages specified in the contracts, however, meanwhile, royalties are not paid in a continuous manner, as will be better commented upon later.

There are also used technologies resulting from non exclusive contracts from various sources for specific production processes, including:

Technology Petroflex, used in the MTBE plants;

Technology developed by the Japan Synthetic Rubber Company, used in the isoprene plant;

Technology developed by Universal Oil Products, or UOP, used in the sulpholane plants, in the parex plant and in the BTX fractioning plants; and

Technology licensed from Mobil, used in the conversion of toluene to benzene and xilenes.

#### 10.6. Poliolefinas units

The Braskem Poliolefinas Unit is integrated by the operations done by the Braskem units, producing the following products:

polyethylene, including PEBD, PEBDL; and

polypropylene.

## 10.6.1. Poliolefinas Unit Products

A wide range of polyethylene and polypropylene products is manufactured for use in consumer goods and industrial applications, including:

- plastic film for packaging food and non food products;
- bottles, supermarket bags and other receptacles for consumer goods;
- auto pieces and domestic utilities.

## 10.6.2. Poliolefinas Industrial Unit Capacities

Currently Braskem holds and operates six plants situated in the Camaçari Petrochemical pole and the Triunfo Petrochemical pole. In the last two years, there was an expansion of the annual production capacity of the polypropylene plants in the Triunfo Petrochemical pole of an aggregate of 100 thousand tons. In view of this, in December 2005, the plants showed a total annual production capacity of 650,000 tons of polypropylene and 710,000 tons of polyethylene.

The table below shows the localization, the principal products, annual production capacity as at December 2005, of each one of the polyolefin plants

Localization (Petrochemical pole)	Principal Products	Annual Production Capacity
		(in tons)
Triunfo (South)	PEBD	215,000
	Polypropylene (1)	100,000
	Polypropylene (2)	560,000
	PEAD/PEBDL (3)	265,000
Camaçari (Northwest)	PEAD/PEBDL (3)	210,000
	PEAD/PEUAPM	144,000

(1) This plant is currently to be found inactive.

Reflects the combined production capacity and annual production of the two polypropylene plants situated in the

(2) Triunfo Petrochemical pole.

Plant with a swing unit, capable of producing two types of resins. The capacity varies according to the effective (3) production.

## 10.6.3. Poliolefinas Industrial Unit Technologies

There are several contracts signed (non exclusive and perpetual) with various petrochemical companies who are leaders in the use of certain technologies and catalyzers in the Poliolefinas Business Unit, as described in following:

In 1978 Mitsubishi technology was acquired, under a licensing contract that continues to be used in the PEAD plant (slurry) in the Camaçari Petrochemical pole. The royalties due resulting from the terms of the licensing contract with Mitsubishi are already full paid, there not being any more confidentiality terms in said contract.

In 1988, in force in 1992, a contract was signed with the predecessor of Univation Technologies, according to which there was conferred the right to the use of the Unipol® catalyzer technology for the production of Polyethylene. The Unipol® technology is used to produce high and low density polyethylene, in the Camaçari Petrochemical pole.



In 1987, in force in 1991, contracts were signed with the Basell Technology Company B.V., the largest worldwide manufacturer of polypropylene and leader in polypropylene technology, for the use of the Spheripol® technology necessary for the construction and operation of the polypropylene plant situated in the Triunfo Petrochemical pole. Under the terms of these contracts, this technology may be used in the current and future plants. Thus, a second plant was constructed based on this technology, which entered into operation in 1997.

In 1995, in force in 1999, contracts were signed with Basell Polyolefine GmbH for the use of the Spherilene® technology. Royalties are paid in a quarterly manner, under the terms of these licensing contracts, based on the volume of polyethylene produced with the use of this technology, employed in the PEAD/PEBDL swing plant, situated in the Triunfo Petrochemical pole.

In 2003, there was signed a contract with Univation Technologies according to which was conferred the right to use the metallocene technology (process and product) and related catalyzers. Royalties are paid quarterly based on the volumes of PEBDL and very low density polyethylene produced with the use of the metallocene technology, in the Unipol® polyethylene plant, situated in the Camaçari Petrochemical pole.

In 2004 Braskem signed a contract with Basell Polyolefine Itália SPA under which it acquired the right to use the Spheripol® technology for the construction and operation of the Paulínia polypropylene plant in existing and future plants.

## **10.7. Vinílicos Units**

The Braskem Vinílicos Unit is the only vertically integrated PVC producing unit in Brazil. Production of PVC is integrated by means of the production of chlorine and other raw materials. The Vinílicos Unit also manufactures and sells caustic soda, EDC and chlorine.

### **10.7.1. PVC**

PVC is a versatile polymer, and the world production volume of PVC is the greatest amongst all the commercial plastics. The various PVC resins produced by Braskem are sold in bags or raw form and are transported to third generation producers by truck, train or, in some cases, ship.

Approximately 94% of the PVC production is in the form of a PVC suspension. The PVC resins produced through the suspension process are most widely used, including in the manufacture of pipes, sheets, floors, shoes, laminated products, cable insulation, electric conduits, packaging, and medical applications. The PVC resins produced by the dispersion processes are more specialized products, being used in the manufacture of toys, synthetic leather, materials for floors, covers and bottle seals, treatment for corrosion prevention in automobiles and wall paper linings.

The Braskem Vinílicos Unit also produces EDC (dychloroethane), the principal component employed in the production of PVC.

#### 10.7.2. Caustic soda and Chlorine

The Braskem Vinílicos Unit also produces caustic soda and chlorine. Caustic soda is a basic primary chemical product sold to manufacturers of aluminum, paper and cellulose, petrochemicals and other chemical substances, soaps and detergents and residue treatment plants. Caustic soda is also employed in the textile industry, making the cloths more absorbent and improving the dyeing power, as well as in the processing of foods and galvanoplasty. Almost all the caustic soda produced by the Vinílicos Unit is sold to their parties, and the around 6% remaining is consumed by Braskem.

Chlorine is a basic primary chemical product employed in a large variety of industries, having applications in the treatment of water and in chemical and pharmaceutical production. Braskem consumes approximately 85% of its chlorine production for the production of dichloroethane (EDC) and sells the greater part of the remaining chlorine to a company situated in the Camaçari Petrochemical pole, connected by means of a specific pipeline.

#### 10.7.3. Vinyl Unit Industrial units

Braskem has five vinyl production units. Two are situated in the Camaçari Petrochemical pole, and two others are situated in the state of Alagoas. The fifth unit is situated in the city of São Paulo.

#### 10.7.4. Vinyl units Industrial Capacities

The following table shows the name and localization, basic products, annual production capacity as at 31 December 2005, in relation to each one of the vinyl plants.

<b>Localization (Petrochemical pole)</b>	<b>Principal Products</b>	<b>Annual Production Capacity (in tons)</b>
Camaçari (Northwest)	PVC	250,000
Camaçari (Northwest)	Caustic Soda	73,000
	Chlorine	64,000
Maceió (Alagoas)	Caustic Soda	460,000
	Chlorine	400,000
	EDC	520,000
Marechal Deodoro (Alagoas)	PVC	240,000
Vila Prudente (São Paulo)	PVC	6,000

#### 10.7.5. Vinyl units Industrial Technologies

Several non exclusive contracts were signed with various petrochemical companies, leaders in the use of the technology in the Vinyl Business Unit. There was obtained the right to use the vinyl chloride monomer manufacturing technology from the Oxyvinils Company and PVC from the Mitsubishi Chemical Corporation. There were also signed technology contracts for the manufacture of chlorine, signed with Denora (used in Bahia), Eltech (used in Alagoas) and EVC (used for the production of ethane dichlorate). As well Braskem has 25 patents and 6 brands in Brazil related to the PVC business.



The vinyl plant situated in the Camaçari Petrochemical pole employs mercury cell technology for the production of chlorine, this technology may no longer be used in new petrochemical industrial units under the terms of recent Brazilian legislation, due, in part, to environmental concerns relative to mercury emissions resulting from this industrial process. The Brazilian government may require that the use of more up to date diaphragm technology is used than is employed in the Alagoas plant, or membrane technology.

#### 10.7.6. Alagoas Utilities Central

The Alagoas Utilities Central is the owner of a large continuous area, part being destined to industries and a part reserved for environmental protection. The Utilities Central operates in the Multifábrica pole of Marechal Deodoro in Alagoas with the objective of optimizing the operations and costs of chlorine-chemical pole companies.

Amongst the operations in the Utilities Central we have: capture and adduction of water, water treatment, generation of steam and compressed air. The Central also supplies treatment services for liquid effluents; collection, transport and disposal of solid residues, incineration, and distribution of industrial gases and support. As a supplier of products the Central sells chloric acid and others.

#### 10.7.7. Operational data

Below is a spreadsheet of the annual production of utilities and products that the Utilities Central produces and supplies.

Products	Current Qty/ year	Max Capacity /year	Measurement Unit
Raw water	2,165,302	6,480,000	m <sup>3</sup>
Steam 42 (*)	339,463	1,008,000	t
Chloric acid Incineration (**)	18,124	28,000	t
Clarified water	1,797,799	6,132,000	M <sup>3</sup>
Demineralized water	896,769	1,226,400	M <sup>3</sup>
Drinking water	68,524	105,120	M <sup>3</sup>
Power (steam turbine)	5,819	10,265	Kwh
Steam 15 (***)	27,015	37,500	t
Treatment of Effluents	1,350,000	2,628,000	M <sup>3</sup>
Incineration	6,310	10,000	t
Solid Residues	3,378	41,000	m <sup>3</sup>

(\*) Part of the V42 is converted into V15 in the turbine where the power is generated

(\*\*) Acid at 25% recovered in the incineration of organic-chlorates

(\*\*\*) Recovery steam from the incinerator thermal power

**10.8. BUSINESS DEVELOPMENT UNIT**

The Business Development unit produces PET resin, DMT, Hexamethylenediamine, cyclohexane, cyclohexanone and ammonia Sulphate.

**10.8.1. Products from the Industrial units of the Business Development unit**

PET is used in industrial packaging of soft drinks, medicines, cleaning products, mineral water and food products, and Hexamethylenediamine is employed in the manufacture of Nylon-6 textile threads. Braskem also produces DMT, which is used in the production of PET, ammonia Sulphate for use as a fertilizer, and cyclohexane and cyclohexanone, both for use in paint solvents, pesticides, natural resins, oils and rubber. The Business Development unit conducts its industrial operations in two plants situated in the Camaçari Petrochemical pole.

Hexamethylenediamine is a raw material (monomer) that constitutes the base of the production of Nylon-6 fibers, resins and film for engineering, being a structural material in the motor and electronics industries. PET is currently one of the most widely used polymers in the industry, being employed in the manufacture of the majority of plastic bottles, plastic receptacles and textile fibers.

**10.8.2. Industrial Development Unit Business Capacities**

The Business Development unit operates two plants in the Camaçari Petrochemical pole. As at December 2005, these plants showed a total annual production capacity of 78,000 tons of PET (currently deactivated) and 62,000 tons of Hexamethylenediamine.

The table below shows the localization, principal products, and current annual production capacity for each one of the Business Development unit plants.

<b>Localization (Petrochemical pole)</b>	<b>Principal Products</b>	<b>Annual Production Capacity (in tons)</b>
Camaçari (Northwest)	PET (deactivated)	78,000
	DMT (deactivated)	80,000
Camaçari (Northwest)	CPL	62,000
	Cyclohexane	72,000
	Cyclohexanone	55,000
	Ammonia Sulphate	114,000

**10.8.3. Technologies of the Business Development unit Industrial units**

Braskem signed various non exclusive contracts with several petrochemical companies leaders in the use of technology in the Business Development unit which include:

HPO Technology, licensed by DSM, used in the Hexamethylenediamine plant;

Nobel Dynamite Technology, used in the DMT plant; and

DUPONT and UOP Sinco S.r.l. Technologies, licensed by Chemtex International Inc., used in the production of PET resin (polyester) bottle grade as from DMT.

**11. RESULT OF THE EVALUATIONS AND SUMMARIES****11.1. Evaluation data**

<b>Evaluation data</b>	
Requester:	<b>BRASKEM S.A.</b>
Assets the property of:	<b>BRASKEM S.A.</b>
Localization of the assets:	<p><b>Assets for the following Industrial units :</b>            (the addresses are listed in Table - I of item 11.2)</p> <p style="text-align: center;"> <b>Maceió Chlorine-Soda</b>  <b>Marechal Deodoro PVC</b>  <b>Camaçari Basic supplies</b>  <b>Supplies TMP</b>  <b>Supplies Tancagem Leste</b>  <b>Supplies Novo PQ Esferas SE 35</b>  <b>Supplies ADACS</b>  <b>Supplies UTE-II</b>  <b>Supplies SÃO-II</b>  <b>Supplies UCJ</b>  <b>Camaçari Hexamethyle nediamine</b>  <b>Camaçari Chlorine-Soda</b>  <b>Camaçari Polyethylenes 1</b>  <b>Camaçari Polyethylenes 2</b>  <b>Camaçari Polyethylenes 3</b>  <b>Camaçari PVC</b>  <b>Triunfo Polyethylenes</b>  <b>Triunfo Polypropylenes</b>  <b>São Paulo PVC</b>  <b>Tegal</b> </p>
Base date for the values	<b>July 31, 2008</b>
Purpose:	<b>Evaluation for incorporation and merger.</b>
Type of value shown:	<b>Market value for purchase</b>
Classification as to the economic sector:	<b>Secondary Sector base industry</b>
Classification according to the situation of the assets:	<b>Assets installed, integrated to the operational and administrative</b>
Classification of the types of assets evaluated:	<b>Lots, buildings, improvements, installations, machines and</b>
Grade basis: (according to ABNT NBR 14653- 5:2006 Tab-4)	<b>The report is classified as GRADE II as to its basis</b>

Values of the lots:	<b>R\$ 118,927,600.00 (one hundred and eighteen million, nine hundred and twenty seven thousand six hundred reais)</b>
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Evaluation data	
Values of the buildings and improvements:	<b>R\$ 1,167,382,260.00 (One billion, one hundred and sixty seven million, three hundred and eighty two thousand two hundred and sixty reais)</b>
Values of the machines, equipment and installations:	<b>R\$ 11,334,513,033.00 (eleven billion three hundred and thirty four million, five hundred and thirteen thousand and thirty three reais)</b>
Total value Evaluated:	<b>R\$12,620,822,893.00 (twelve billion, six hundred and twenty million, eight hundred and twenty two thousand, eight hundred and ninety three reais)</b>

### 11.2. Summary of the Evaluation per Industrial Unit

Denomination of the Unit	Address	Type of asset Evaluated	Market value
<b>Maceió Chlorine- Soda</b>	Avenida Assis Chateaubriand. 5260 Pontal da Barra - Maceió. AL Brasil	Lots	6,060,000.00
		Buildings and improvements	95,665,260.00
		Machines. equipment and installations	865,302,917.00
		<b>Total</b>	<b>967,028,177.00</b>
<b>Marechal Deodoro PVC</b>	Rodovia Divaldo Suruagy. km 12. II Pólo Clorinequímico de Alagoas Marechal Deodoro AL Brasil	Lots	2,105,000.00
		Buildings and improvements	42,328,310.00
		Machines. equipment and installations	574,178,703.00
		<b>Total</b>	<b>618,612,013.00</b>
<b>Central de Raw materials Basic supplies</b>	Rua Eteno. 1561 Pólo Petroquímico de Camaçari Copec Camaçari. BA Brasil	Lots	54,343,000.00
		Buildings and improvements	532,626,030.00
		Machines. equipment and installations	6,651,899,647.00
		<b>Total</b>	<b>7,238,868,677.00</b>
<b>Camaçari Hexamethylenedi amine</b>	Rua Hidrogênio. 2318 Pólo Petroquímico de Camaçari Copec Camaçari. BA Brasil	Lots	2,719,000.00
		Buildings and improvements	36,625,610.00
		Machines. equipment and installations	229,437,618.00
		<b>Total</b>	<b>268,782,228.00</b>
<b>Camaçari Chlorine- Soda</b>	Rua Oxigênio. 765 Pólo Petroquímico de Camaçari Copec Camaçari. BA Brasil	Lots	2,522,000.00
		Buildings and improvements	27,698,590.00
			148,341,964.00

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		Machines. equipment and installations	
		<b>Total</b>	<b>178,562,554.00</b>

<b>Camaçari Polyethylenes 1</b>	Rua Eteno. 1582 Pólo Petroquímico de Camaçari - Copec Camaçari. BA Brasil	Lots	1,907,000.00
		Buildings and improvements	37,298,790.00
		Machines. equipment and installations	343,798,903.00
		<b>Total</b>	<b>383,004,693.00</b>

26

Denomination of the Unit	Address	Type of asset Evaluated	Market value
<b>Camaçari Polyethylenes 2</b>	Rua Hidrogênio. 3,520 Pólo Petroquímico de Camaçari Copec Camaçari. BA Brasil,	Lots	2,087,000.00
		Buildings and improvements	36,662,940.00
		Machines. equipment and installations	286,136,295.00
		<b>Total</b>	<b>324,886,235.00</b>
<b>Camaçari Polyethylenes 3</b>	Rua Benzeno, nº 2391, COPEC, Camaçari, BA - Brasil	Lots	3,328,000.00
		Buildings and improvements	80,247,600.00
		Machines, equipment and installations	576,529,812.00
		<b>Total</b>	<b>660,105,412.00</b>
<b>Camaçari PVC</b>	Rua Hidrogênio, 3342 Pólo Petrochemical de Camaçari Copec Camaçari, BA Brasil	Lots	2,420,000.00
		Buildings and improvements	38,298,910.00
		Machines, equipment and installations	413,651,413.00
		<b>Total</b>	<b>454,370,323.00</b>
<b>Triunfo Polyethylene</b>	III Pólo Petroquímico BR 386 - Rodovia Tabai Canoas, km 419 Triunfo, RS Brasil	Lots	7,070,000.00
		Buildings and improvements	66,268,780.00
		Machines, equipment and installations	553,902,870.00
		<b>Total</b>	<b>627,241,650.00</b>
<b>Triunfo Polypropylene</b>	III Pólo Petroquímico Via Oeste Lote 5 - Passo Raso Triunfo, RS Brasil	Lots	4,928,000.00
		Buildings and improvements	56,553,490.00
		Machines, equipment and installations	521,915,202.00
		<b>Total</b>	<b>583,396,692.00</b>
<b>São Paulo PVC</b>	Rua Guamiranga, 1674 Vila Prudente São Paulo, SP Brasil	Lots	9,097,000.00
		Buildings and improvements	16,718,550.00
		Machines, equipment and installations	26,494,945.00
		<b>Total</b>	<b>52,310,495.00</b>
<b>Basic supplies TMP</b>	Via Matoim, s/nº, Porto de Aratú, Municipality of Candeias, Sate of Bahia BA	Lots	5,106,500.00
		Buildings and improvements	17,388,730.00

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	Brasil	Machines, equipment and installations	136,869,695.00
		<b>Total</b>	<b>159,364,925.00</b>

<b>Basic supplies Tancagem Leste</b>	Rua Eteno, 1561 Pólo Petroquímico de Camaçari Copec Camaçari, BA Brasil	Lots	6,370,000.00
		Buildings and improvements	34,531,640.00
		Machines, equipment and installations	0.00
		<b>Total</b>	<b>40,901,640.00</b>

<b>Basic supplies Parque de Esferas SE 35</b>	Rua Eteno, 1561 Pólo Petroquímico de Camaçari Copec Camaçari, BA Brasil	Lots	2,980,600.00
		Buildings and improvements	14,082,570.00
		Machines, equipment and installations	0.00
		<b>Total</b>	<b>17,063,170.00</b>

27



Denomination of the Unit	Address	Type of asset Evaluated	Market value
<b>Basic supplies ADACS</b>	Rua Eteno, 1561 Pólo Petroquímico de Camaçari Copec Camaçari, BA Brasil	Lots	3,044,200.00
		Buildings and improvements	7,891,610.00
		Machines, equipment and installations	0.00
		<b>Total</b>	<b>10,935,810.00</b>
<b>Basic supplies UTE-II</b>	Rua Eteno, 1561 Pólo Petroquímico de Camaçari Copec Camaçari, BA Brasil	Lots	1,790,200.00
		Buildings and improvements	6,396,090.00
		Machines, equipment and installations	0.00
		<b>Total</b>	<b>8,186,290.00</b>
<b>Basic supplies SÃO-II</b>	Rua Eteno, 1561 Pólo Petroquímico de Camaçari Copec Camaçari, BA Brasil	Lots	891,100.00
		Buildings and improvements	7,424,000.00
		Machines, equipment and installations	0.00
		<b>Total</b>	<b>8,315,100.00</b>
<b>Basic supplies UCJ</b>	Rua Eteno, 1561 Pólo Petroquímico de Camaçari Copec Camaçari, BA Brasil	Lots	0.00
		Buildings and improvements	3,140,380.00
		Machines, equipment and installations	0.00
		<b>Total</b>	<b>3,140,380.00</b>
<b>Tegal</b>	Rua Matoim, s/n, Baía de Aratú, Candeias, BA - Brasil	Lots	159,000.00
		Buildings and improvements	9,534,380.00
		Machines, equipment and installations	6,053,049.00
		<b>Total</b>	<b>15,746,429.00</b>
<b>Grand Total</b>		Lots	118,927,600.00
		Buildings and improvements	1,167,382,260.00
		Machines, equipment and installations	11,334,513,033.00
		<b>Total</b>	<b>12,620,822,893.00</b>

Grand Total

R\$ 12,620,822,893.00

(twelve billion, six hundred and twenty million, eight hundred and twenty two thousand, eight hundred and ninety three reais)

### **11.3. Composition of the evaluation folders**

The current evaluation report is comprised of 33 books, distributed as follows:

#### **Summary Folder Folder 1**

This is the current folder with the following contents: objective, standards, methodology company data, summary of the values evaluated, any eventual limitations and the term of responsibility for the report.

**Folder 2**

Has within its contents the evaluation of the land, buildings and improvements of the Chlorine unit - Soda Maceió situated at Avenida Assis Chateaubriand, 5260, Pontal da Barra, Municipality of Maceió, State of Alagoas.

**Folder 3**

Has within its contents the evaluation of the land, buildings and improvements of the Marechal Deodoro PVC unit situated at Rodovia Divaldo Suruagy, km 12, II Pólo Cloro-químico de Alagoas, Municipality of Marechal Deodoro, State of Alagoas.

**Folder 4**

Has within its contents the evaluation of the land, buildings and improvements of the Basic supplies unit (internal areas of the Raw materials Central) situated at Rua Eteno, 1561, Pólo Petrochemical de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 5**

Has within its contents the evaluation of the land, buildings and improvements of the Basic supplies Unit (external areas of the Raw Materials Central) situated at Rua Eteno, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 6**

Has within its contents the evaluation of the land, buildings and improvements of the Hexamethylenediamine unit situated at Rua Hidrogênio, 2318, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 7**

Has within its contents the evaluation of the land, buildings and improvements of the Chlorine - Soda unit situated at Rua Oxigênio, 765, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 8**

Has within its contents the evaluation of the land, buildings and improvements of the PE-1 unit (Polyethylene 1) situated at Rua Ethane, 1582, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 9**

Has within its contents the evaluation of the land, buildings and improvements of the PE-2 unit (Polyethylene 2) situated at Rua Hidrogênio, 3520, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 10**

Has within its contents the evaluation of the land, buildings and improvements of the PE-3 unit (Polythene) situated at Rua Benzene, nº 2391, COPEC, Camaçari, BA - Brasil, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 11**

Has within its contents the evaluation of the land, buildings and improvements of the PVC unit - Camaçari situated at Rua Hidrogênio, 3342, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 12**

Has within its contents the evaluation of the land, buildings and improvements of the Triunfo Polyethylene unit situated in the III Pólo Petroquímico, BR 386 - Rodovia Tabai Canoas, km 419, Municipality of Triunfo, State of Rio Grande do Sul.

**Folder 13**

Has within its contents the evaluation of the land, buildings and improvements of the Triunfo Polypropylene unit situated at III Pólo Petroquímico, Via Oeste Lote 5 - Passo Raso, Municipality of Triunfo, State of Rio Grande do Sul.

**Folder 14**

Has within its contents the evaluation of the land, buildings and improvements of the São Paulo unit PVC situated at Rua Guamiranga, 1674, Bairro da Vila Prudente, Municipality of São Paulo, State of São Paulo.

**Folder 15**

Has within its contents the evaluation of the land, buildings and improvements of the TEGAL Unit Rua Matoim, s/n, Baía de Aratú, Municipality of Candeias, State of Bahia.

**Folder 16**

Has within its contents the photographic documentation, the summaries and listings of the evaluation of the machines, equipment and installations of the Chlorine-Soda unit Maceió situated at Avenida Assis Chateaubriand, 5260 Pontal da Barra Municipality of Maceió, State of Alagoas.

**Folder 17**

Has within its contents the photographic documentation, the summaries and listings of the evaluation of the machines, equipment and installations of the Marechal Deodoro PVC unit situated at Rodovia Divaldo Suruagy, km 12, II Pólo Cloro-químico de Alagoas, Municipality of Marechal Deodoro, State of Alagoas.

**Folder 18**

Has within its contents part 1 of 6 of the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Basic supplies unit (internal and external areas of the Raw Materials Central) situated at Rua Ethane, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 19**

Has within its contents part 2 of 6 of the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Basic supplies unit (internal and external areas of the Raw Materials Central) situated at Rua Ethane, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 20**

Has within its contents part 3 of 6 of the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Basic supplies unit (internal and external areas of the Raw Materials Central) situated at Rua Ethane, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 21**

Has within its contents part 4 of 6 of the evaluation of the machines, equipment and installations of the Basic supplies unit (internal and external areas of the Raw Materials Central) situated at Rua Ethane, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 22**

Has within its contents part 5 of 6 of the evaluation of the machines, equipment and installations of the Basic supplies unit (internal and external areas of the Raw Materials Central) situated at Rua Ethane, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 23**

Has within its contents part 6 of 6 of the evaluation of the machines, equipment and installations of the Basic supplies unit (internal and external areas of the Raw Materials Central) situated at Rua Ethane, 1561, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 24**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Hexamethylenediamine unit situated at Rua Hidrogênio, 2318, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 25**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Chlorine-Soda unit situated at Rua Oxigênio, 765, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 26**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the PE-1 unit (Polyethylene 1) situated at Rua Eteno, 1582, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 27**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the PE-2 unit (Polyethylene 2) situated at Rua Hidrogênio, 3520, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 28**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the PE-3 unit (Politeno 3) situated at Rua Benzene, nº 2.391, esq. Rua Hidrogênio, Pólo Industrial de Camaçari, Municipality of Camaçari, State of Bahia.

**Folder 29**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the PVC-Camaçari unit situated at Rua Hidrogênio, 3342, Pólo Petroquímico de Camaçari Copec, Municipality of Camaçari, State of Bahia.

**Folder 30**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Triunfo Polyethylene unit situated at the III Pólo Petroquímico, BR 386 - Rodovia Tabai Canoas, km 419, Municipality of Triunfo, State of Rio Grande do Sul.

**Folder 31**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Triunfo Polypropylene unit situated at the III Pólo Petroquímico, Via Oeste Lote 5 - Passo Raso, Municipality of Triunfo, State of Rio Grande do Sul.

**Folder 32**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the São Paulo unit - PVC situated at Rua Guamiranga, 1674, Bairro da Vila Prudente, Municipality of São Paulo, State of São Paulo.

**Folder 33**

Has within its contents the photographic documentation, the summaries and the listings of the evaluation of the machines, equipment and installations of the Tegal unit - Terminal de Gases Ltda. and is situated at Via Matoim, s/nº, Porto Aratu, Municipality of Candeias, State of Bahia.

**12. TERM OF RESPONSIBILITY**

This report presents the result of the evaluation of the assets belonging to Braskem S/A.

The fixed and current assets were inspected physically and evaluated by qualified technical professionals, seeking to check their physical and operational characteristics and their states of preservation.

This evaluation was prepared according to the standards of IBAPE - Brazilian Institute for Evaluations and Engineering reports, the ABNT - Brazilian Technical Standards Association and IVS - International Valuation Standards.

This report is subject to the following conditions of independence, contingencies and limitations:

- This evaluation was prepared with the specific purpose defined in the topic Objective . Its use for any other purpose, or date base different from that specified, as well as the partial extraction of data without the full text will not show reliability;
- None of the members of Stima Engenharia Ltda., participants in this work, have currently or plan to have in the future interest of any kind in the assets included in this report;
- We consider that the information obtained from third parties is reliable and was supplied in good faith;

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- Stima Engenharia Ltda. Does not assume any responsibilities for physical or economic factors that may affect the opinions presented in this report, that occur after the date base established here;
- The current work and evaluation report are based on documents and plans supplied by the technical areas of Braskem. The evaluators, therefore, do not assume any responsibility for legal or engineering materials, outside those implicit in the exercise of their specific functions in this case, established under laws, codes or own regulations;
- It should be noted that all the values stated in this report (lots, buildings, improvements, installations, machines and equipment) refer to cash values. There was also not considered any debts or mortgages that perchance operate the evaluated assets. The existence of such facts, if there are any, was not brought to the knowledge of the evaluators;
- The report is based on data collected in physical inspections done on the base date of July 2008, and reflects the set of assets physically existing in the accounts for lots, buildings, improvements, installations, machines and equipment and their respective technical and operational characteristics as at this date;
- Also considered in the values evaluated are the investments and expenses recorded in the accounts for work in progress, even if the project or investment had not yet been concluded;
- The date base of the current work, or that is, the time at which are based all the analyses of the values is 31 July 2008;
- Acceptance of this report presupposes agreement with the terms of this declaration of independence, contingencies and limitations.

São Paulo, 12 August 2008.

**Stima Engenharia Ltda.**  
CREA-SP 071.708 -8



(A free translation of the original in Portuguese)

**COPEL - Companhia  
Petroquímica do Sul  
Appraisal Report on Stockholders' Equity  
Adjusted "pro forma" by the Inventories, Fixed and  
Intangible Assets Appreciation at July 31, 2008**

---

(A free translation of the original in Portuguese)

**Appraisal Report on Stockholders' Equity  
Adjusted "pro forma" by the Inventories and Fixed Assets and  
Intangible Assets Appreciation at July 31, 2008  
of COPESUL - Companhia Petroquímica do Sul**

1 PricewaterhouseCoopers Auditores Independentes, professional partnership established in the capital of the state of São Paulo, located at Av. Francisco Matarazzo, 1400, (Torre Torino, Floors 9, 10, 13, 14, 15, 16 and 17 - Agua Branca), primary registered with the Regional Accounting Council (CRC) of the State of São Paulo under No. 2SP000160/O-5, with a branch registered in the city of Porto Alegre, state of Rio Grande do Sul, located at Rua Mostardeiro, 800, (Floors 8 and 9 - Moinho dos Ventos), ZIP 90430-000, registered secondarily with the Regional Accounting Council (CRC) of the State of Rio Grande do Sul under No. 2SP000160/O-5 FRS, and enrolled in the National Corporate Taxpayers Register (CNPJ/MF) under No. 61,562,112/0006-35, with its partnership deed registered at the 4th Registry Office of Deeds and Documents of São Paulo, SP, on September 17, 1956, and subsequent amendments registered at the 2nd Registry Office of Deeds and Documents of São Paulo, SP, with the last amendment dated June 29, 2008, having been registered in microfilm under No. 96,041, on July 30, 2008, represented by its undersigned partner, Mr. Gilberto Bagaiolo Contador, Brazilian, married, accountant, holder of Identity Card No. 4,546,598-8-SSP/SP, enrolled in the Individual Taxpayers Register (CPF) under No. 861,271,368-49 and with the Regional Accounting Council of the State of Rio Grande do Sul (CRC) under No. 1RS069038/O-0, with office located in the same address of the grantor partnership, was appointed as expert by COPESUL - Companhia Petroquímica do Sul ( Company ), to proceed with an appraisal prepared based on the stockholders' equity at July 31, 2008 in accordance with Brazilian Corporate Law, Law 6.404/76 Article 264, adjusted "pro forma" by the result of the inventories valuation at realizable value and by the appreciation of fixed and intangible assets. The result of this appraisal work, exclusively to support the incorporation process of the Company by Ipiranga Petroquímica S.A, is presented below.

COPE SUL - Companhia Petroquímica do Sul

2 The appraisal of the stockholders' equity mentioned above was made in conjunction with the audit of the balance sheet of the Company at July 31, 2008. This balance sheet was prepared under the responsibility of the Company's management, with the specific purpose of supporting the incorporation of COPE SUL - Companhia Petroquímica do Sul by Ipiranga Petroquímica S.A.

3 We conducted our audit in accordance with approved Brazilian auditing standards, including NPA - 14 Appraisal Reports issued by Independent Auditor at September 24, 2007, issued by the Institute of Independent Auditors of Brazil (IBRACON), which require that we perform the audit to obtain reasonable assurance about whether the financial statements are fairly presented in all material respects. Accordingly, our work included, among other procedures: (a) planning our audit taking into consideration the significance of balances, the volume of transactions and the accounting and internal control systems of the Company, (b) examining, on a test basis, evidence and records supporting the amounts and the financial information disclosed; and (c) assessing the accounting practices used and significant estimates made by management.

4 The portions added to the stockholders' equity of COPE SUL - Companhia Petroquímica do Sul, at July 31, 2008, arise from assumptions made and amounts calculated by management, for purposes of the statement and calculation of the related "pro forma" adjustments amounts by the result of the valuation of its inventories at realizable values and by the appreciation of fixed and intangible assets, considering the following aspects:

(a) The inventories include adjustments arising from the "pro forma" asset appreciation, considering the related realizable values, as follows:

(i) Finished Products: presented at realizable value, calculated based on the average sales price to third parties based on the invoices issued by the Company in up to 15 days prior to July 31, 2008, deducted from freight expenses, variable selling expenses and taxes on sales.

For the cases in which no sales occurred in the mentioned period, the invoices issued up to 90 days prior to July 31, 2008, were used for the calculation of the realizable value. Finished products that did not present invoicing in the previously mentioned periods, were maintained at the average book cost.

(ii) Work in process: stated at production cost.

(iii) Raw Materials and Inputs: stated at average purchase cost.

COPEsul - Companhia Petroquímica do Sul

(iv) Warehouse materials and others: stated at the average purchase cost, less provision for obsolescence recorded in books.

(b) The fixed and intangible assets of COPEsul - Companhia Petroquímica do Sul, considers the "pro forma" recognition of these assets appreciation at July 31, 2008, totaling R\$ 5,835,922,899.69 , calculated exclusively based on appraisal reports issued by the independent experts Stima Engenharia Ltda. (Attachment II) and APSIS Consultoria Empresarial Ltda. (Attachment III), respectively, which, net of fixed and intangible assets book value, reflects the "pro forma" adjustment of R\$ 3,842,987,194.95.

(c) Deferred income tax and social contribution on the appreciation of fixed and intangible assets and on the appreciation of inventories valuation of COPEsul - Companhia Petroquímica do Sul, were calculated in accordance with the effective legislation.

(d) The subsidiaries were not object of these evaluations for "pro forma" adjustments purpose, based on materiality assumptions adopted by management.

5 In order to verify management evaluation of the amounts determined in the terms described in paragraphs 4(a), and 4(c) above, we applied the same audit procedures mentioned in paragraph 3 above.

6 Based on our work, we conclude that the amount of the assets, rights and obligations which form the stockholders equity of COPEsul - Companhia Petroquímica do Sul, in accordance with the Company's balance sheet at July 31, 2008, summarized in the Attachment I, is R\$ 4,010,848,455.35. The book value of stockholders' equity, as shown in Attachment I, is recorded in books, in accordance with accounting practices adopted in Brazil. The market value of fixed and intangible assets, which was the basis for the adjustment of stockholders' equity, as stated in Attachment I, in the amounts of R\$ 3,646,301,331.61 and R\$ 196,685,863.34, respectively, were determined in accordance with the technical assumptions used by the independent experts, described in their appraisal reports, presented in Attachments II and III, and the inventories realizable value was determined in accordance with management assumptions, as described in paragraph 4(a) above.

COPEL - Companhia Petroquímica do Sul

7 This appraisal report is subject to the approval at the same Stockholders Meeting that will approve the incorporation process of the Company, pursuant to the terms effective in Brazilian corporate legislation and related regulatory standards.

8 In conformity with the standards of NPA 14 of September 24, 2007 - Appraisal Reports issued by an Independent Auditor, issued by the Institute of Independent Auditors -IBRACON and with the Brazilian Securities Commission (CVM) Instruction 319 of December 3, 1999, we confirm that:

(i) in accordance with the professional standards established by the Federal Accounting Council through Resolution 821/1997, we are not aware of any conflicts of interest, whether direct or indirect, or any other circumstance which otherwise represents a conflict of interest in relation to the service above, and

(ii) we are not aware of any action by the majority stockholder or the company's management intended to influence, restrain, impair or practice any actions which have or might have compromised access to, use of or awareness of information, assets, documents or work methodologies that are material to the quality of this report.

Porto Alegre, August 22, 2008

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5 "F" RS

Gilberto Bagaiolo Contador  
Contador CRC 1RS069038/O-0

**Attachment I to the Appraisal Report on Stockholders Equity Adjusted pro forma"  
By the Inventories, Fixed and Intangible Assets Appreciation of August 22, 2008**

**COPEsul - Companhia Petroquímica do Sul**

**Summarized "Pro Forma" Balance Sheet at July 31, 2008**

**In reais**

Assets	Corporate legislation	"pro forma adjustments arising from appreciation	pro forma adjusted balances	Liabilities stockholders equity	Corporate legislation	"pro forma adjusted balances
Current assets				Current liabilities	1,162,678,205.70	
Cash and cash equivalents	685,139.02		685,139.02			
Marketable securities	9,868,907.63		9,868,907.63	Non Current liabilities		
Trade accounts receivable	209,145,326.69		209,145,326.69	Long term liabilities		
Inventories	680,443,579.13	18,295,119.00	698,738,698.13	Financing Related companies	292,718,311.64	
Taxes recoverable	135,465,417.10		135,465,417.10	Taxes and contributions payable	1,224,081,709.20	
Prepaid expenses	3,800,319.61		3,800,319.61			1,312,833.00
Advance to suppliers and other	2,795,585.00		2,795,585.00	Provisions	127,545,586.30	
Other	10,685,429.72		10,685,429.72			
					1,644,345,607.14	1,312,833.00
	1,052,889,703.90	18,295,119.00	1,071,184,822.90			
Non current assets				Stockholders equity		
Long term receivables	1,089,911,759.34		1,089,911,759.34	Capital	770,127,211.03	
				Revaluation reserves	46,108,457.92	

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Permanent assets				Revenue reserves	646,166,459.19	2,548,44
Investments In subsidiaries	123,058,574.02		123,058,574.02		1,462,402,128.14	2,548,44
Other investments	3,023,577.17		3,023,577.17			
Property and equipment	1,119,801,180.39	3,646,301,331.61	4,766,102,512.00			
Intangible assets	873,134,524.35	196,685,863.34	1,069,820,387.69			
Deferred charges	7,606,621.81		7,606,621.81			
	2,126,624,477.74	3,842,987,194.95	5,969,611,672.69			
	4,269,425,940.98	3,861,282,313.95	8,130,708,254.93		4,269,425,940.98	3,861,28

\* \* \*

This Attachment is an integral and inseparable part of the Appraisal Report on the Stockholders' Equity Adjusted pro forma" by the inventories, fixed and intangible assets appreciation of COPESUL - Companhia Petroquímica do Sul, issued by PricewaterhouseCoopers Auditores Independentes, at August 22, 2008.

**Appraisal Report Folder 1**

July 2008

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**INDEX**

<b>1. INTRODUCTION</b>	<b>4</b>
<b>2. OBJECTIVE</b>	<b>4</b>
<b>3. OVERALL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS</b>	<b>4</b>
<b>4. OVERALL APPRAISAL CONCEPT</b>	<b>5</b>
4.1. APPRAISAL	5
4.2. ASSET	5
4.3. TANGIBLE OR INTANGIBLE ASSET	5
4.4. PRICE AND MARKET VALUE	5
4.5. COST	6
<b>5. STANDARDS OBSERVED IN THE APPRAISALS</b>	<b>6</b>
<b>6. OVERALL METHODOLOGY USED IN APPRAISING ASSTES</b>	<b>6</b>
6.1. METHODS TO APPRAISE THE VALUE OF AN ASSET, ITS OUTCOMES AND RIGHTS	7
6.1.1. <i>Market data direct comparative method</i>	7
6.1.2. <i>Involution method</i>	7
6.1.3. <i>Evolution method</i>	7
6.1.4. <i>Income capitalization method</i>	7
6.2. METHODS TO IDENTIFY THE COST OF AN ASSET	7
6.2.1. <i>Direct cost comparison method</i>	7
6.2.2. <i>Cost quantification method</i>	7
<b>7. METODOLOGY FOR APPRAISING URBAN PLOTS</b>	<b>8</b>
7.1. PLOTS AND TRACTS - DEFINITIONS	8
7.2. CHARACTERIZATION OF PLOTS	8
7.3. MARKET DATA COMPARATIVE METHOD	9
7.4. COST METHOD	10
<b>8. METHODOLOGY FOR APPRAISING BUILDINGS</b>	<b>10</b>
8.1. UNIT VALUES	10
8.2. METHODOLOGY	10
<b>9. METHODOLOGY FOR APPRAISING MACHINES, EQUIPMENT AND INSTALLATIONS</b>	<b>11</b>
9.1. APPRAISAL DEFINITIONS	11
9.1.1. <i>Equity value</i>	11
9.1.2. <i>Valor residual</i>	11
9.1.3. <i>Accomplishment advantage factor</i>	12
9.1.4. <i>Economic life and lifecycle</i>	12
9.1.5. <i>Commercial value</i>	12

9.1.6.	<i>At cost value</i>	12
9.1.7.	<i>Depreciated value</i>	12
9.2.	APPRAISAL METHOD	12
9.2.1.	<i>Inspection</i>	12
9.2.2.	<i>Verification of conservation and maintenance status</i>	13
9.2.3.	<i>Data collection</i>	13
9.2.4.	<i>Market situation</i>	14
9.3.	OVERALL CRITERION ADOPTED	14
9.4.	SPECIFIC CRITERIA	14
<b>10.</b>	<b>RESULT OF APPRAISALS AND SUMMARIES</b>	<b>16</b>
10.1.	APPRAISAL DATA	16
10.2.	SUMMARY PER LOCATION	17
10.3.	CONTENTS OF APPRAISAL FOLDERS	17
<b>11.</b>	<b>TERM OF RESPONSABILITY</b>	<b>18</b>

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## 1. INTRODUCTION

**Stima Engenharia Ltda.**, a company registered in CREA-SP under no. 071.708 -8, with headquarters at Av. Fagundes Filho, no. 141, conjunto 55/56, 5º andar, São Paulo - SP, enrolled in the National Corporate Taxpayer Registry - CNPJ under no. 06.932.665/0001 -10, having been appointed to perform as market value appraiser on the base date of July 31, 2008, for the fixed assets of the company **COPEsul - Companhia Petroquímica do Sul**, headquartered at BR-386 - Rodovia Tabai - Canoas, km 419, Southern Petrochemical Pole, in the Municipality of Triunfo, State of Rio Grande do Sul, enrolled in the National Corporate Taxpayer Registry - CNPJ under no. 88.948.492/0001 -92, herein below presents the result of its endeavors, which shall be used for the purpose of incorporation.

## 2. OBJECTIVE

The objective of this report is to define the market value of assets belonging to the industrial unit of COPEsul Companhia Petroquímica do Sul located in the Municipality of Triunfo - RS, for the above referred purpose.

The appraisal results herein presented refer to the following types of assets: plots, buildings, property improvements, installations, machines and equipment. This folder is intended to outline and comment on the overall concepts, norms and methods applied in the appraisals of these assets.

The values set forth in this appraisal are calculated for the base date of July 31, 2008, the same date on which the inspections, calculations, quotations and market surveys of the assets the object of this appraisal were carried out.

This report was prepared in accordance with the provisions set forth in article 8 of Law 6.404/76 and the amendments of Law 11.638/07.

## 3. OVERALL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS

This report is subject to the following conditions of independence, contingencies and limitations:

- a) Inspections were performed of all industrial units belonging to the Company. The more relevant assets from the point of view of value were photographed and the images presented in the items on photographic documentation. Typical assets of the installations (cables, piping, valves, instruments, automation systems and others) were randomly inspected pursuant to commonly accepted practice;
- b) Installation assets (cables, piping, valves, instruments, automation systems and others) not inspected individually, were appraised by means of information obtained from the Company's accounting and engineering areas, and assumed to be accurate;
- c) Replacement values were obtained through price surveys conducted at manufacturers and suppliers of such assets. Whenever such quotations could not be obtained, one resorted to calculation methods of the values based on average capacity standards used by companies in the petrochemical or chemical industries for budgeting their projects;



d) Typical installation assets (cables, piping, valves, instruments, automation systems and others) were valued through cost composition calculations, by multiplying unit prices by the quantitative parameters supplied by the Company;

e) To appraise real estate property (plots, buildings, and property improvements) we resorted to information supplied by the administration and engineering areas. Whenever information diverged, we assumed the information supplied by the Engineering Department in documents and blueprints was accurate.

#### **4. OVERALL APPRAISAL CONCEPT**

To better understand the methods, criteria and terminology used in this appraisal report, below we list some of the terms as they are defined by technical appraisal norms.

##### **4.1. Appraisal**

Appraisal consists of the technical analysis performed by an Appraisal Engineer, to identify the value of an asset, its costs, outcomes and rights, as well as to establish feasibility indicators for its economic utilization, for a certain purpose, situation and date.

##### **4.2. Asset**

An asset is something of value, susceptible to being used, or that may be an object entitling to a right, which is a part of equity.

##### **4.3. Tangible or intangible asset**

A tangible asset is such that is well identified in material terms (example: real estate property, equipment, raw materials). An intangible asset is such that is not identifiable in material terms (example: goodwill, brands and patents).

##### **4.4. Price and market value**

Price is the amount for which one effects, or intends to effect, a transaction involving an asset, outcome or right associated therewith.

According to NBR 14653-1 Appraisals of Assets Part 1 Overall Procedures ABNT Brazilian Association of Technical Norms, market value is the most probable amount for which one would voluntarily and consciously negotiate an asset, on a reference date, pursuant to prevailing market conditions.

According to IVS International Valuation Standards, market value is the estimated amount, on an appraisal date, for which one would voluntarily negotiate an asset between a buyer and a seller in a free and legitimate transaction, in which each party acts based on knowledge, prudence and without duress.

#### 4.5. Cost

Cost is the sum of direct and indirect expenses necessary for production, maintenance or acquisition of an asset, on any given date and under any given circumstance.

#### 5. STANDARDS OBSERVED IN THE APPRAISALS

The standards used in the preparation of this report are listed below. According to the ABNT standards - Brazilian Technical Standards Association, the values of this report at the minimum fall into the basis and accuracy as grade I.

Standards observed in the issue of this report are:

NBR 14653-1 Appraisals of Assets Part 1 Overall Procedures ABNT Brazilian Association of Technical Norms

NBR 14653-2 - Appraisals of Assets Part 2 Urban Real Estate - ABNT Brazilian Association of Technical Norms

NBR 12721 Appraisals of Unit Costs and Preparation of Construction Budget for the Incorporation of Condominium Buildings - ABNT Brazilian Association of Technical Norms

NBR 14653-5 Appraisals of Assets Part 5: Machines, Equipment, Installations and industrial assets in general - ABNT Brazilian Association of Technical Norms

Urban Real Estate Appraisal Norm of IBAPE-SP Brazilian Appraisal and Expert Engineering Analysis Institute of São Paulo Year 2005 version 2

International Valuation Standards (IVS) IVS 1: Market Value Basis of Valuation; IVS 2: Valuation Bases Other Than Market Value and IVS 3: Valuation Reporting

International Valuation Standards (IVS) Guidance Note no. 3 Valuation of Plant and Equipment Orientation Notes No. 3 Appraisal of Industrial Plants and Equipment.

#### 6. OVERALL METHODOLOGY USED IN APPRAISING ASSETS

The applicable methodology is basically a function of the nature of the asset under Appraisal, the purpose of the Appraisal and the availability, quality and quantity of the information collected in the market. One's choice must be justified, with the objective of portraying market behavior using models that rationally lend support to the credibility of the calculated value.

## **6.1. Methods to appraise the value of an asset, its outcomes and rights**

As set forth in NBR-14653 of ABNT, the methods to appraise the value of an asset, its outcomes and rights, are the following:

### **6.1.1. Market data direct comparative method**

By this method, an asset's market value is determined by means of technical criteria applied to attributes of comparable elements that comprise a given sample.

### **6.1.2. Involution method**

This is the method that determines an asset's market value based on its efficient usage, in turn based on a technical-economic feasibility study, by means of a hypothetical compatible undertaking with the same characteristics as those of such asset and under the conditions of the market it belongs to, while taking into account feasible scenarios for executing and marketing such product.

### **6.1.3. Evolution method**

This is the method that identifies an asset by the sum of values of its components. If the intent is to determine an asset's market value, then the commercialization factor must be considered.

### **6.1.4. Income capitalization method**

This is the method that determines the value of an asset, based on the current capitalization of its expected net income, while considering feasible scenarios.

## **6.2. Methods to identify the cost of an asset**

As set forth in norm NBR-14653 of ABNT, the methods to determine the cost of an asset are the following:

### **6.2.1. Direct cost comparison method**

This method determines an asset's cost by means of technical criteria applied to attributes of comparable elements that comprise a given sample.

### **6.2.2. Cost quantification method**

This method determines the cost of an asset and its parts through synthetic or analytical budgets based on the quantity of service rendered and the respective direct and indirect costs.

## 7. METODOLOGY FOR APPRAISING URBAN PLOTS

### 7.1. Plots and tracts - Definitions

Urban real estate property is such as located within an urban perimeter as defined by law. Plots are portions of land resulting from the dividing up of urban areas.

The dividing up of land extensions into plots ( loteamento ) is a subdivision of a tract of land intended for buildings, with the opening of new roads, public spaces or the extension, modification or expansion of existing roads.

An tract suited for urbanization is a large plot of land appropriate for receiving urban infrastructure works, aimed at its efficient usage, by dividing it up, separating it from a larger land extension, or for implementing an undertaking.

### 7.2. Characterization of plots

Real estate is an asset comprising a plot and possible improvements incorporated thereto. It can be classified as urban or rural, based on its location, use or purpose.

A plot s classification, according to its use, occurs based on the following factors:

Physical characteristics of the plot, such as location, situation, topography, etc.;

Actual use of similar plots located in the same region;

Usage limitations of a given plot (restrictions or bondage) imposed by competent authorities;

A real estate property s use results from it being economically the most suited from the perspective of its own and surrounding characteristics, subject to compliance with legal limitations.

The characterization of the region where any real estate property is located is essential for the analysis of its value and its appraisal. That is why the following data is collected:

Overall aspects: analysis of economic, political and social conditions, whenever relevant for the market, including atypical former uses or associated stigmas;

Physical aspects: topographic conditions, predominant type of soil, environmental conditions;

Location: situation in the urban context, showing the main influence poles;

Soil usage and occupation: comparison of the current occupation with laws on dividing up and use of a municipality s soil, to then conclude about change trends in the short and medium term;



Urban infrastructure: road system, collective transportation, solid waste collection, drinking water, electric power, telephone, cable networks for data transmission, communication and television, sanitary sewage, rain water and channeled gas;

Current activities: trade, industry and services;

Community equipment: safety, education, health, culture and leisure.

The characterization of plots occurs based on the following data:

Location: situation in the region and as related to public roads, with indications as to limits and boundaries;

Current and intended use in comparison with legislation in force;

Physical aspects: dimensions, form, topography, surface, soil, for comparison with available documentation;

Available urban infrastructure;

Physical and legal restrictions applicable to use.

In accordance with the ABNT NBR 14653-1 text, as related to methodology selection:

The selected methodology must be compatible with the nature of the selected asset, the purpose of the Appraisal and the available market data. To define market value, whenever possible one should prefer the market data direct comparative method.

To obtain a plot's unit value at each site to be Appraised, a market survey of offers or actual sales is always conducted with respect to plots similar to the one under analysis.

In view of the unit price thus determined in market surveys, while applying the above referred to criteria, a plot's final value is calculated.

### **7.3. Market data comparative method**

This method consists of determining a plot's value by direct comparison with other similar ones, by comparing their sales prices, considering common and/or similar characteristics, while concurring that those that generate the same amount of income should have the same value or should be in a proportionate linear relation.

In the search for plots, emphasis was placed on the sale of other fractions, whose locations and characteristics are compatible with those of the asset to be Appraised. The values obtained were adjusted using coefficients to correct form, size and location.

Areas in the Triunfo Petrochemical Pole are negotiated by Copesul itself, which holds title to the pole's plots with and without infrastructure. Plot transactions in the region are rare; however the Company has a reference value that is used when submitting offers. To appraise plots of the industrial area we used said referential unit value.



#### **7.4. Cost method**

This method consists of determining the value of improvements and improvements to real estate property by drawing up summarized or detailed budgets of all items comprising the final value of any appraised real estate property. The main costs that make up the works are: Primary (material and labor) and Secondary (administrative, profit, building, project, taxes, services and financial costs). The criterion used in this evaluation to determine plot market values was the Market Data Comparative Method .

### **8. METHODOLOGY FOR APPRAISING BUILDINGS**

For performing the appraisal of buildings and improvements to real estate property, the following aspects need to be well understood:

Constructive, qualitative, quantitative and technological aspects, compared with the available documentation;

Architectural, landscape and functional aspects, including environmental comfort;

Adjustment of any given building with respect to a region's recommended uses;

Occupational conditions.

Buildings were appraised using the reproduction cost method, based on Civil Construction Unit Costs , i.e., always up-to-date unit values, supported by a variety of publications and price surveys on materials and services.

Costs resulting from such studies take into consideration all determinant market price factors. Consequently, there is no room for any add-ons, whether due to the accomplishment advantage factor or to reflect a commercialization factor .

#### **8.1. Unit values**

Unit values are updated by using computers, resulting in a registry of innumerable budgets and costs, and covering a broad variety of services and materials supplied for civil construction works.

Such costs, reflected to this report's base date, are used in composing costs of each construction phase and of each building to be appraised.

#### **8.2. Methodology**

The building appraisal services are rendered in several phases, which can be summarized as follows: Data and blueprint collection, and of other constructive details of each building.

During and after inspection of buildings, the comparison of blueprints and other documents provided, containing each building's actual situation.

Determination of the volume of services and materials for each constructive phase (such as earthmoving, building of the framework, finishing, special installations, etc) of each building.

By resorting to computers, the volumes determined are listed along with the cost of each on the base date of the appraisal reports, thus resulting in the replacement cost of each constructive phase and for the building as a whole.

Use of a depreciation factor in each construction phase (when applicable), in accordance with the apparent age and the (probable) remaining life of a building.

By remaining life of assets, one should understand the expected remaining physical life of assets, which is the scope of this report, determined according to technical parameters for applying said depreciation factor pursuant to Brazilian Appraisal Norms, while using the following items as parameters for determining the depreciation factor:

Apparent age of assets;

Apparent state of assets;

Conservation state of assets;

Reform and maintenance plan (preventive and corrective) performed for assets;

Operation modulus of assets;

Obsolescence phase of assets.

## **9. METHODOLOGY FOR APPRAISING MACHINES, EQUIPMENT AND INSTALLATIONS**

### **9.1. Appraisal definitions**

In order to describe the methodologies used in the appraisal process of assets set forth in this report, one must mention some important definitions for better understanding.

#### **9.1.1. Equity value**

This is the amount that corresponds to the total assets held by an individual or corporate person.

#### **9.1.2. Valor residual**

This is the amount that corresponds to any given asset at the end of its life.

### 9.1.3. Accomplishment advantage factor

This is the difference between market value of an asset and the cost of redoing it, whenever such difference is positive.

### 9.1.4. Economic life and lifecycle

Economic life is the operational time span of an asset, whereas its lifecycle is its functional time span.

### 9.1.5. Commercial value

This is the value currently given an asset in commercial transactions under normal market conditions or to an asset identical or similar to the one under Appraisal.

### 9.1.6. At cost value

This is the price actually paid for an asset or good, plus direct expenses necessary to become the holder of such asset or good, such as packaging, taxes, freight, legal expenses (deeds, etc.), which directly encumber the price paid or reimbursement therefore.

### 9.1.7. Depreciated value

This is the value of an asset or good after deducting all amounts relative to physical depreciation, use and obsolescence.

## **9.2. Appraisal method**

The phases in which to appraise machines, equipment and installations are informed below, in the different sections that comprise this report.

### 9.2.1. Inspection

Inspection is indispensable for executing the appraisal work. Exceptionally, when access to the Appraised asset is not possible, one may admit resorting to a paradigm situation, provided agreed upon by the parties and set forth in the report.

The inspection is aimed at knowing and characterizing the appraised asset and its suitability for its market segment, resulting in conditions to orient data collecting.

During inspections, the appraiser goes about collecting technical data, on physical characteristics and on an asset's use, along with other relevant factors to define value.

Upon performing an inspection, the appraiser takes notes on an appraised asset's characteristics, surveys technical data, while analyzing aspects related to its state of conservation and maintenance.

### 9.2.2. Verification of conservation and maintenance status

The analysis of the state of conservation and maintenance is one of the most important factors to reach a judicious conclusion concerning the value of an Appraised asset. For better understanding, the definition of these two variables is:

**Conservation:** The act or effect of safeguarding from damage, decay, loss and other risks, through thorough verification, its use and conditions of use and the preservation of technical and functional characteristics of a building, its installations and equipment.

**Maintenance:** The set of activities to be undertaken to conserve, maintain or recover the functional capacity of an asset and its constituent parts, while in no way affecting its operational capacity or lifecycle.

In our day and age, maintenance can be divided in preventive, corrective and predictive. Preventive maintenance, the more common, seeks to avoid the occurrence of errors in an asset's functioning, through constant testing and cleaning of its components, contributing to keeping the machines and the environment in perfect functional conditions, offering maximum efficiency in performing its activities.

Predictive maintenance, based on data on an asset's wear and decay, seeks to estimate the life of its components. The state of machinery must frequently be monitored, to allow for parts' replacement at the right moment, avoiding unexpected downtime.

Finally, corrective maintenance occurs when defects and errors, caused by an asset's use and age, are detected through preventive maintenance, and may result in unexpected expenses if not corrected.

The difference between maintenance and repair. Maintenance, in its several modalities, ultimately seeks to keep an asset functioning. Even in corrective maintenance, defects and errors must be corrected even if due to their nature they do not result in an asset breaking down, because otherwise at any given moment they may cause the Company severe damage.

### 9.2.3. Data collection

During the inspection phase, the collection of data on the characteristics of each asset is performed, examining blueprints, documents, projects in short everything that may clarify relevant aspects for the Appraisal.

In the data collection phase the following tasks are performed:

Market surveys seeking data on attributes resembling those of the asset under Appraisal in the closest manner possible;

Identification of information sources, whereas, whenever possible, information shall always be certified to increase reliability of researched data;

Identification of relevant characteristics of collected market data;

Search for market data, preferably with the same characteristics of the Appraised asset (same age, capacity, etc.)

#### 9.2.4. Market situation

Upon the collection of market data on offers one seeks to obtain information on time of exposure to the market and, in the case of transactions being effected, the payment modality adopted and the date on which they occurred.

### 9.3. Overall criterion adopted

The valorization of machines, equipment and installations was effected by the reproduction or replacement cost method.

Overall criteria used in appraising machines, equipment and all other movable assets followed the standard used in most movable asset appraisal work, i.e., they were based on setting a new value for a replacement asset by surveying manufacturers, suppliers, representatives, etc.

Establishing an asset's going market value occurred by observing its state of maintenance, conservation and characterization of its technical obsolescence.

An asset's new replacement value can be summarized as being the sum of all its acquisition price items, along with all taxes, fees, transportation costs to the construction site, as well as the cost of materials for installation work, the respective labor, also as concerning special or normal finishing, such as ordinary or special paint, thermal isolation, etc.

Depreciation: until now the focus has been on value based on the probable reproduction or replacement cost, without reference to depreciation resulting from age, use and obsolescence. Depreciation can be defined as inevitable loss of value of a factory, equipment and materials over time, caused by chemical action or corrosion, physical action (decay, decrepitude, abrasion, normal wear, deferred maintenance or repairs), inadequateness and obsolescence.

The depreciation coefficient is what adjusts an asset's market value. By applying depreciation due to replacement price (or cost), one comes up with the market value.

### 9.4. Specific criteria

Installation assets (cables, piping, valves, instruments, automation systems and others) were valued by calculating the cost composition, multiplying unit prices by the quantities informed by the Company.

In composing costs, we used factors for the following costs: labor, engineering, management, installations and assembly. Such factors were obtained in surveys conducted at manufacturers and in the engineering and project departments, as well as from specialized engineering literature.

In it not being possible to obtain an asset's value from a manufacturer, we resorted to unit values based on nominal or installed capacity, informed by manufacturers of similar equipment for the sake of project calculations.

The age assumed for each appraised asset was a function of the acquisition data (as registered in the equity control registry) and the information obtained in the engineering and maintenance departments.

Lifecycle expectations and residual values (scrap factor) were also obtained through surveys at manufacturers and in specialized engineering literature.



**10. RESULT OF APPRAISALS AND SUMMARIES****10.1. Appraisal data**

<b>APPRAISAL DATA</b>	
Requester:	<b>COPEsul Companhia Petroquímica do Sul</b>
Assets owned by:	<b>COPEsul Companhia Petroquímica do Sul</b>
Location of assets:	Copesul Unit - Companhia Petroquímica do Sul Triunfo, located at Rodovia BR 386 - Tabai/Canoas, km 419 - Pólo Petroquímico de Triunfo, Municipality of Triunfo, State of Rio Grande do Sul; Rio Grande Petrochemical Terminal, located in Municipality of Rio Grande, State of Rio Grande do Sul; Osório Unit, located in Municipality of Osório, State of Rio Grande do Sul.
Base date of values:	<b>July 31, 2008</b>
Purpose:	<b>Appraisal for the intent of incorporation</b>
Type of value presented:	<b>Acquisition market value</b>
Economic sector classification:	<b>Secondary sector base industry</b>
Classification according to assets condition:	<b>Installed assets, integrated to the operational and administrative process.</b>
Classification according to the types of assets appraised:	<b>Plots, buildings, improvements to property, installations, machines and equipment.</b>
Argumentation based on: (Standard ABNT NBR 14653-5:2006 Tab-4)	<b>The technical report is classified as Grade I for the sake of argumentation.</b>
Value of plots:	<b>R\$ 91,022,700.00 (ninety-one million, twenty-two thousand and seven hundred reais)</b>
Value of buildings and improvements to real state property:	<b>R\$ 237,889,700.00 (two hundred and thirty-seven million, eight- hundred and eight-nine thousand and seven hundred reais)</b>

Value of machines,  
equipment  
and installations: **R\$ 4,437,190,112.00** (four billion, four hundred and thirty-seven million, one  
hundred and ninety thousand, one hundred and twelve  
reais)

Total appraised value: **R\$ 4,766,102,512.00** (four billion, seven hundred and sixty-six million, one  
hundred and two thousand, five hundred and twelve reais)

## 10.2. Summary per location

Below, the summary by location and asset category is presented. Values are expressed in reais on the base date of July 31, 2008.

Locations	Plots	Buildings and Improvements	Machines, equipment and installations	Total
TRIUNFO UNIT	89,666,700.00	233,086,600.00	4,293,884,393.00	4,616,637,693.00
RIO GRANDE UNIT	-	4,803,100.00	23,339,368.00	28,142,468.00
OSÓRIO UNIT	1,356,000.00	-	119,966,351.00	121,322,351.00
	91,022,700.00	237,889,700.00	4,437,190,112.00	4,766,102,512.00

The total appraised amount is R\$ 4,766,102,512.00 (four billion, seven hundred and sixty-six million, one hundred and two thousand, five-hundred and twelve reais).

## 10.3. Contents of appraisal folders

This appraisal report consists of three folders, distributed as follows:

- **Folder 1 Summary Folder**

This is the folder with the following content: objective, norms, methodology, summary of appraised values, possible limitations, and the report's term of responsibility.

- **Folder 2 APPRAISAL of Plots, Buildings and Improvements**

This folder entails the appraisal of plots, buildings and improvements at the following units:

Industrial unit located at Rodovia BR 386 Tabaí/Canoas, km 419 Triunfo Petrochemical Pole, Municipality of Triunfo, State of Rio Grande do Sul;

Rio Grande Petrochemical Terminal located in the Municipality of Rio Grande, State of Rio Grande do Sul;

Osorio Unit, located in the Municipality of Osorio, State of Rio Grande do Sul.

- **Folder 3 Appraisal of Machines, Equipment and Installations**

Its content comprises photographic documentation, summaries and listings of the appraisal of machines, equipment and industrial installations located at:

Industrial unit located at Rodovia BR 386 Tabaí/Canoas, km 419 Triunfo Petrochemical Pole, Municipality of Triunfo, State of Rio Grande do Sul;

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Rio Grande Petrochemical Terminal located in the Municipality of Rio Grande, State of Rio Grande do Sul;

Osorio Unit, located in the Municipality of Osorio, State of Rio Grande do Sul.

## 11. TERM OF RESPONSABILITY

This report presents the result of the appraisal of assets belonging to Copesul – Companhia Petroquímica do Sul.

Movable and fixed assets were physically inspected and appraised by qualified technical professionals, for the purpose of verifying their physical and operational characteristics and their state of conservation.

This appraisal was drawn up according to the norms of IBAPE – Brazilian Appraisal and Expert Engineering Analysis Institute, ABNT – The Brazilian Association of Technical Norms and IVS – International Valuation Standards.

This expert report is subject to the following conditions of independence, contingencies and limitations:

This appraisal was drawn up for the specific purpose defined in the topic Objective . Its use for any other purpose, or base date other than the one specified, as well as the partial extraction of data rather than as a complete text, does not warrant reliability;

No member of Stima Engenharia Ltda., participant in this project, currently has or in future intends to have any kind of interest in the assets included in this report;

We deem the information obtained from third parties reliable and that it was provided in good faith;

Stima Engenharia Ltda. assumes no responsibility for physical or economic factors that may affect opinions presented in this report, which factors may take place after the base date set forth herein;

This paper and expert report are based on documents, information and blueprints provided by Copesul's technical areas. The appraisers therefore assume no responsibility for any legal or engineering issue, apart from those inherent to their specific role in this case, and as set forth in laws, codes or self-defined regulations;

One should emphasize that all values set forth in this expert report (plots, buildings, improvements, installations, machines and equipment) refer to amounts at cash value. Furthermore, no debt or mortgages that may possibly encumber the appraised assets were taken into consideration. If such facts exist, they were unknown to the appraisers;

This report is based on data collected in physical inspections carried out in July 2008, reflecting the set of assets physically expressed in the accounting accounts for plots, buildings, improvements, installations, machines and equipment and their respective technical and operational characteristics on said date;

In determining the appraised values, investments and expenditures entered into the works in progress account were also taken into consideration, even if the project or investment has yet to be concluded;

This report's base date, i.e., the time on which all value analyses were based, is July 31, 2008;

Acceptance of this report supposes concurrence with the terms set forth in this statement of independence, contingencies and limitations.

São Paulo, August 12, 2008

**Stima Engenharia Ltda.**

CREA-SP 071.708 -8



**REPORT** RJ-375/08-01  
**REFERENCE DATE:** July 31, 2008.  
**REQUESTED BY:** **BRASKEM S.A.**, headquartered at Rua Eteno, 1.561, Camaçari Industrial Complex, in the city of Camaçari, state of Bahia, corporate taxpayer s ID (CNPJ) 42.150.391/0001-70, hereinafter referred to as **BRASKEM**.  
**PURPOSE:** Intangible assets of the following companies:  
    **BRASKEM**, qualified above;  
    **COPEsul - CIA. PETROQUÍMICA DO SUL**, headquartered at Rodovia BR-386, Rodovia Tabai/Canoas, km 419, CON 850 C Básico, Industrial Complex in the city of Passo Raso, state of Rio Grande do Sul, corporate taxpayer s ID (CNPJ) 88.948.492/0001-92, hereinafter referred to as **COPEsul**; and  
    **IPIRANGA PETROQUÍMICA S.A.**, headquartered at III Pólo Petroquímico, s/n, Lote 04, in the city of Triunfo, state of Rio Grande do Sul, corporate taxpayer s ID (CNPJ) 88.939.236/0001-39, hereinafter referred to as **IPQ**.  
**OBJECTIVE:** Identify and establish the fair market value of intangible assets owned by **BRASKEM**, **COPEsul** and **IPQ**, aiming to provide parameters for the merger of petrochemical assets of **IPQ** and **COPEsul** to consolidate **BRASKEM** s petrochemical business.



## EXECUTIVE SUMMARY

APSYS CONSULTORIA EMPRESARIAL Ltda., hereinafter referred to as APSIS, headquartered at Rua São José, n° 90, grupo 1.802, in the city and state of Rio de Janeiro, corporate taxpayer's ID (CNPJ) 27.281.922/0001 -70, was appointed to establish fair market value of the intangible assets of BRASKEM, COPESUL and IPQ, aiming to provide the parameters for the merger of petrochemical assets of IPQ and COPESUL to consolidate BRASKEM's petrochemical business.

## IDENTIFICATION OF MATERIAL INTANGIBLE ASSETS

The following material intangible assets were identified, listed by owner:

**BRASKEM** : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen, Toluene and Ortho-xilene) to the following companies: Oxiteno S.A. Indústria e Comércio, DOW Brasil S.A., Elekeiroz S.A., Acrinor Acrilonitrila do Nordeste S.A., Suzano Petroquímica S.A., Deten Química S.A., Oleoquímica Ind. Com. Prod. Químicos Ltda. and Dow Brasil Nordeste Ltda. TDI (DOW-TDI).

**COPESUL** : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen and C4) to the following companies: Innova S.A., Petroquímica Triunfo S.A., DSM Elastômeros Brasil Ltda. and Oxiteno S.A. Indústria e Comércio.

No material agreements owned by IPQ were identified.

No material intangible assets were identified related to intellectual property (trademarks and patents) owned by the underlying companies, ) *companies* as these are commodity companies (*1<sup>st</sup> and 2<sup>nd</sup> generation* ). The material operating assets for cash generation of these companies are equipment and industrial plant component systems, tangible assets whose market values are broken down in specific reports.

## VALUATION METHODOLOGY

In order to value BRASKEM's and COPESUL's material agreements, first we analyzed material intangible assets contributing to the Net Operating Revenue of each company. Once the material intangible assets were selected (agreements for the supply of essential petrochemicals), the future profitability approach was applied to establish the value of the agreement. (*Valuing Intangible Assets* - Reilly, Schweih's ),

The future profitability methodology is based on the retrospective analysis, scenarios projection and discounted cash flows. The economic -financial modeling begins by defining the macroeconomic, sales, production, cost assumptions and the company's investments or business unit which has been valued.

Sales price projections and the corresponding net margins were estimated according to historical performance and multiannual budgets of each underlying company.

**FINAL AMOUNTS VERIFIED**

Based on studies prepared by APSIS on the reference date as of July 31, 2008, the appraisers found the following fair market values for the material agreements of BRASKEM and COPESUL:

**MARKET VALUE OF AGREEMENTS - BRASKEM (R\$ thousand)**

	discount rate
	(p.a.) 10.0%
<b>OXITENO</b>	<b>201,644</b>
<b>DOW</b>	<b>(2,543)</b>
<b>ELEKEIROZ</b>	<b>(9,758)</b>
<b>ACRINOR</b>	<b>71,980</b>
<b>SUZANO</b>	<b>75,149</b>
<b>DETEN</b>	<b>33,257</b>
<b>OLEOQUÍMICA</b>	<b>1,097</b>
<b>DOW-TDI</b>	<b>92</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>	<b>370,919</b>

**MARKET VALUE OF AGREEMENTS - COPESUL (R\$ thousand)**

	discount rate
	(p.a.) 10.0%
<b>VALUE OF INNOVA AGREEMENT</b>	<b>110,763</b>
<b>VALUE OF PETROQUIMICA TRIUNFO AGREEMENT</b>	<b>62,261</b>
<b>VALUE OF DSM ELASTOMEROS AGREEMENT</b>	<b>12,025</b>
<b>VALUE OF OXITENO AGREEMENT</b>	<b>11,638</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>	<b>196,686</b>

**TABLE OF CONTENTS**

1.INTRODUCTION	6
2.PRINCIPLES AND RESERVATIONS	7
3.LIMITATIONS OF RESPONSIBILITY	8
4.VALUATION METHODOLOGIES	9
5.COMPANIES FEATURES	11
6.INTANGIBLE ASSETS VALUATION	15
7.CONCLUSION	18
8.LIST OF ATTACHMENTS	19

## 1. INTRODUCTION

APSYS CONSULTORIA EMPRESARIAL Ltda. hereinafter referred to as **APSYS**, headquartered at Rua São José, n° 90, grupo 1.802, in the city and state of Rio de Janeiro, corporate taxpayer's ID (CNPJ) 27.281.922/0001 -70, was appointed to establish the market value for the purchase and sale of intangible assets of BRASKEM, COPESUL and IPQ, aiming to providing parameters for the merger of petrochemical assets of IPQ and COPESUL to consolidate BRASKEM's petrochemical business.

When preparing this report, we considered data and information provided by third parties, including documents and oral interviews with the client. Estimates employed in this study are based on documents and information, which include, among others, the following:

- Analysis of financial reports;
- Economic ratios study and projections;
- BRASKEM Group's strategic planning;
- Company's managerial budgets and reports.

APSYS team, which is responsible for the preparation of this study, comprises the following professionals :

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## 2. PRINCIPLES AND RESERVATIONS

This report, subject matter of the following enumerated, calculated and specified study is strictly based on the basic principles outlined below:

Consultants involved in this study do neither have personal relationship nor interest towards the subject, and there is no conflict of interest preventing them from preparing this report.

To the best of the consultants' knowledge, credit, analyses, opinions and conclusions contained in this Report are based on true and precise information, diligences, researches and surveys.

This report includes all restricting conditions required by adopted methodologies, which affect the analyses, opinions and conclusions included in it.

APSYS professionals' fees are under no circumstances subject to the conclusions of this report.

APSYS is fully responsible for the Valuation Engineering, including the implied valuations in the performance of its honorable duties, which are provided for by laws, codes or proper regulations.

In this report, information provided by third parties is deemed as accurate, and their sources have been included in this report.

This report was prepared by APSIS and nobody, other than its own consultants, has worked on analyses nor contributed to the respective conclusions.

For projection purposes, we have assumed the non-existence of any kind of in-court or out-of-court burden or lien involving the companies, except for those included in this report.

This report complies with all specifications and criteria established by USPAP (Uniform Standards of Professional Appraisal Practice), as well as the requirements issued by different authorities, such as: Ministry of Finance, Central Bank of Brazil, Banco do Brasil, CVM or Securities and Exchange Commission of Brazil, SUSEP or Private Insurance Superintendence, RIR or Income Tax Regulation, etc.

IFRS 3 Report, Business Combinations.

IAS 38 Report, Intangible Assets.

### **3. LIMITATIONS OF RESPONSIBILITY**

When preparing this report, APSIS has used information and historic data audited by third parties, as well as non-audited information and projections, provided on a written or oral basis by the company's management or obtained from mentioned sources. APSIS has deemed as true all information and data obtained for this report and assumes no responsibility regarding its accuracy.

The scope of this study includes neither the auditing of financial statements nor the revision of work performed by its auditors.

Our study was developed for the use by proposer and other companies involved in this project, whose purpose was previously outlined. Therefore, this report must not be published, distributed, reproduced, disclosed or used for other purposes rather than those already mentioned, without the prior written approval of APSIS.

We are not liable for eventual losses incurred by the proposer and its shareholders, officers, creditors or other parties resulting from the utilization of data and information provided by the company and included in this report.

Analyses and conclusions contained in this report are based on several assumptions, made on this present date, on future operating projections, such as: prices, volumes, market share, revenues, taxes, CAPEX, operating margins, etc. Thus, future operating income of the company may differ substantially from any forecast or estimate contained herein.

#### 4. VALUATION METHODOLOGIES

The recognition of intangible assets materiality in the business world has grown at a rapid pace, as more and more companies have been traded based on their off-balance sheet assets.

Our intellectual property and intangible assets valuation is not concerned with precisely establishing a specific amount, but to collect the as much data and information as possible about its businesses and its market, which jointly analyzed and modeled may allow to the appraiser to define a probable amount for the subject matter of the study, in light of specific features of circumstances and objectives studied.

All the companies have an assets portfolio, which are subject to the execution and continuance of operations, with a view to generating profits that represent a satisfactory return on capital invested. These assets are divided into three categories:

Monetary assets represented by net current assets, or the difference between current assets (cash, short-term investments, trade accounts receivable, inventories etc.) and current liabilities (suppliers, accounts payable, income tax etc.);

Fixed assets (tangible assets) are assets which may be touched, i.e., they physically exist. These include machinery and equipment, land, vehicles, properties, among others;

Intangible assets and intellectual property intangible assets are those which physically do not exist, but provide rights and privileges to their owners. They are mainly represented by customer portfolio, agreements, customer relationship, franchising etc. The intellectual property generally refers to trademarks and patents, copyrights and know-how. It represents a special classification within intangible assets, as its owner is protected by law against illegal intellectual property exploration by third parties.

All of the asset valuation approaches are based on the replacement principle. This principle assumes that a cautious buyer will not pay a higher value for a property than the acquisition cost of replacing property with same purpose.

Based on replacement principle, three types of approaches may be used to establish the value of an intangible asset are defined. For each valuation, the most appropriate approach must be chosen, however, they must be used jointly, as follows:



Market approach compares the assets under analysis with other similar assets recently sold or which have been tendered;

Cost approach measures the investment required to reproduce a similar asset, showing a capacity identical to the generation of benefits;

Income approach it defines the value of an asset as the present value of future benefits resulting from its property right.

Specifically concerning the valuation of material agreements owned by BRASKEM, IPQ and COPESUL, first, the long-term material agreements were analyzed that contribute to the Net Operating Revenue of each company.

The agreements for the supply of essential petrochemicals have been selected as material for the present valuation and the income approach (cash flow) was applied to establish the value of the agreement (*Valuing Intangible Assets Reilly, Schweih's*).

### **INCOME APPROACH: CASH FLOW**

This methodology defines the profitability of product/service as its operating value, corresponding to the future discounted net cash flow value. This flow is composed of net income after taxes, accrued of non-cash items (amortization and depreciation) and deducting investments in operating assets (working capital, plants, installed capacity etc.). We used in this present report, in simplified form, the projected net margin for each company as a percentage of NOR for each agreement.

The projection period used was the remaining term of each agreement, as detailed in Attachment 1.

### **DISCOUNT RATE**

The discount rate used to calculate the present value of income verified from projected cash flows represents the minimum profitability required by shareholders. The rate used in this present report is the same ACTUAL profitability rate (excluding inflation) defined by BRASKEM Group in the feasibility analysis of companies internal projects (10% p.a.).

## 5. COMPANIES FEATURES

### THE PETROCHEMICAL INDUSTRY

The petrochemical industry that integrates the chemical industry is characterized by using oil byproducts (naphtha) or gas natural as essential raw materials.

After being extracted, oil undergoes a refinement process which produces various byproducts, such as gasoline, diesel fuel, gas and naphtha. Naphtha is the main raw material of the petrochemical and plastic production chain in Brazil, followed by natural gas. Naphtha first undergoes a process called cracking that results in the essential petrochemicals (ethene, propene, butadiene, benzene, solvents and fuels). This production cycle is known as the first generation of the petrochemical chain. From these products, the second generation companies produce polymers and copolymers, including thermoplastic resins, which will be used as raw materials by the plastic manufacturing industry that composes the third petrochemical generation. Resins, generally as small grains or as powder, are employed by third generation companies to manufacture packages, toys, automotive components, home appliances, parts for the electric -electronics industry and home builders, among several other applications.

Essential petrochemicals are raw materials destined to four large production chains:

Thermoplastic resins chain: produced from ethene and propene by second generation industries and are sold to plastic manufacturers.

Elastomers chain: sold to rubber manufacturers.

Solvents chain: comprises the paint, footwear, furniture, agribusiness industries and other sectors that process essential petrochemicals to produce solvents, labels and others.

Fuels chain: comprises fuel distributors and others.

BRASKEM was incorporated in August 2002, when the Odebrecht and Mariani groups integrated their petrochemical assets with Copene Petroquímica do Nordeste S.A., the former petrochemical raw materials hub of Camaçari complex, in the state of Bahia, which they have controlled since 2001. These two groups joined their petrochemical companies creating BRASKEM, the first integrated petrochemical company of Brazil, i.e., combining first and second generation operations of the plastic production chain into a single company.

With 18 plants located in the states of Alagoas, Bahia, São Paulo and Rio Grande do Sul, and a total production of 5.7 million tonnes, among resins, essential and intermediate petrochemicals, BRASKEM generates nearly 3,000 direct jobs and 5,000 indirect jobs. In the essential petrochemicals industry, BRASKEM produces ethene, propene, benzene, caprolactam and DMT, besides gasoline and LPG. In the thermoplastic resins segment, where BRASKEM is leader in Latin America, it produces polyethylene, polypropylene, PVC and PET, among others.

The Company also maintains the Innovation & Technology Center of BRASKEM (CTI) for the development of products, processes and applications in partnership with clients. With a total of 19 laboratories and seven pilot plants, CTI is composed of units in 3 cities: Camaçari (BA), São Paulo (SP) and Triunfo (RS). The company also maintains cooperation agreements with universities and research institutions in Brazil and overseas.

Currently, BRASKEM is controlled by Odebrecht group, which owns a direct and indirect interest in the company, in addition to owning control of Norquisa, a holding company that also integrates BRASKEM's controlling group. Petroquisa (petrochemical arm of Petrobras) Petros pension funds (of Petrobras) and Previ (Banco do Brasil) are also shareholders of the company. BRASKEM shares are listed at the Stock Exchanges of São Paulo (Bovespa), New York and Madrid.

BRASKEM's net revenues in 2007 increased 11% when compared to the previous year, amounting to R\$18.8 billion, corresponding to US\$9.7 billion. This performance is a result of higher volumes sold in the domestic market (up by 8% in the volume of resins, ethene and propene) and 12% export growth, reaching 24% of net revenues or US\$2.3 billion. Export revenues reflect higher international market prices and a better valuation of products thanks to direct sales to clients.

IPQ is located in Triunfo Industrial Complex (RS), it has five industrial plants, which in addition to Linear High Density Polyethylene (LHDPE), of which is the largest producer of Latin America, they produce Linear Low Density Polyethylene (LLDPE), Linear Medium Density Polyethylene (LMDPE) and Polypropylene (PP). The expansion of production capacity of Companhia Petroquímica do Sul (COPEL), due to installation of a new furnace at the production unit 2, contributed to IPQ have an additional supply of approximately 12 thousand tonnes/year of ethene and 9.2 thousand tonnes/year of propene.

In addition, the installed capacity increased 30 thousand tonnes/year to a total capacity of 180 thousand tonne/year. Nevertheless, this capacity was not fully utilized in 2006. Even so, as a result of these increases and optimizations in operating and production processes, IPQ in 2006 attained its largest global production, as shown in the chart below:

Product	Volume produced (thousand tonne/year)		
	2006	2005	Change (%)
LHDPE	382.6	347.1	10.2 %
LHDPE /LMDPE/LLDPE	109.1	95.7	14.0 %
PP	146.3	131.0	11.7 %
<b>Total</b>	<b>638.0</b>	<b>573.8</b>	<b>11.2%</b>

As a result of greater supply of thermoplastic resins in the Brazilian market, IPQ ramped up its exports by 15.44% in relation to the previous year. In 2006, revenues generated by exports reached a total of R\$77.22 million, accounting for a 1.3% increase.

The company maintained its market share in Latin America, mainly in Argentina and Chile and now has three additional distribution channels in the Andean Pact region.

Referring to domestic market share, IPQ grew 12.33% for PP and showed a slight decrease to 39.77% for LHDPE. Year-to-date, volumes sold increased in relation to 2005, 7.8% for LHDPE and 14.66% for PP.

COPEsul is a first generation company (also known as raw materials hub) located in Southern Industrial Complex, in the city of Triunfo, state of Rio Grande do Sul, which mainly processes naphtha, in addition to condensate and Liquefied Petroleum Gas (LPG) to generate basic products (ethane, propene, butadiene, benzene, solvents and fuels) that feed 2<sup>nd</sup> generation industries of the petrochemical chain.

COPEsul has an installed capacity to process 3.7 million tonnes/year of naphtha, with flexibility to use LPG and/or light condensate. Naphtha is an oil-derived liquid hydrocarbon, very similar to gasoline. Petrobras/Alberto Pasqualini Refinery (Refap), in the city of Canoas (state of Rio Grande do Sul), is the exclusive naphtha supplier for COPEsul carried by means of underground pipelines to the Southern Industrial Complex.

As Refap does not have sufficient production capacity, a portion of naphtha reaches the state via Petrobras Maritime Terminal on the north coast. The tanking park of COPEsul adjacent to Petrobras/Tedut, in the city of Osório, has capacity for 170,000 cubic meters and ensures the maintenance of strategic inventories. The transfer of naphtha to Refap also takes place via underground pipelines.

With naphtha and condensed gas, COPEsul produces 3.2 million annual tonnes of Aromatics and Olefins, such as ethene, propene, butadiene, benzene, toluene and other solvents, gasoline and other fuels (see capacity produced by product in the chart below) . It also produces and supplies to other companies of the Complex, utilities such as treated water (drinkable, demineralized and service water), steam, hydrogen and maintenance services.

The chart below summarizes the production capacity by product, the process of which may be better viewed in the specific report RJ-0117/07 -8:

**Production Capacity by Product (in thousand of tonne/year)**

Benzene	265
Butadiene	105
Butene 1	40
Aromatic C9	76
Ethene	1,200
Gasoline	177
LPG	24
MTBE	115
Diesel Oil	--
BTE Petrochemical Oil	169
Propane	16
Propene	581
Light Aliphatic Solvent	--
Toluene	91
Mixed-xylenes	66

## 6. INTANGIBLE ASSETS VALUATION

### INTANGIBLE ASSETS

Pursuant to *IAS 03*, an intangible asset must be recognized separately from goodwill, if it derives from a legal agreement or it can be separated from other company's assets and negotiated individually. One category of BRASKEM Group's intangible assets was identified for the purposes of this report, classified in these criteria: long-term agreements for the supply of essential petrochemicals.

The economic-financial modeling was conducted so as to demonstrate the capacity of each agreement in generating net profitability within a given timeframe, basically using the information already mentioned.

The projections were made taking into account the period of each agreement, under full operating and administrative conditions, with the following assumptions:

The fiscal year under consideration was from August 1 to July 31;

The flow was projected in constant currency and the present value calculated with actual discount rate (excluding inflation);

The valuation of these intangible assets based on the methodology outlined in chapter 4 is broken down in attachment 1.

## VALUE OF MATERIAL AGREEMENTS

The following material intangible assets were identified, listed below by owner:

**BRASKEM** : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen, Toluene and Ortho-xilene) to the companies Oxiteno S.A. Indústria e Comércio, DOW Brasil S.A., Elekeiroz S.A., Acrinor Acrilonitrila do Nordeste S.A., Suzano Petroquímica S.A., Deten Química S.A., Oleoquímica Ind. Com. Prod. Químicos Ltda. and Dow Brasil Nordeste Ltda. TDI (DOW-TDI).

**COPEsul** : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen and C4) to the companies Innova S.A., Petroquímica Triunfo S.A., DSM Elastômeros Brasil Ltda. and Oxiteno S.A. Indústria e Comércio.

No material agreements owned by IPQ were identified.

No material intangible assets were identified related to intellectual property (trademarks and patents) owned by the underlying companies, ) *companies* as these are commodity companies (*1<sup>st</sup> and 2<sup>nd</sup> generation* . The material operating assets for cash generation of these companies are equipment and industrial plants component systems, tangible assets whose market values are broken down in specific reports.

**FINAL AMOUNTS VERIFIED**

Based on studies prepared by APSIS, on the reference date as of July 31, 2008, the appraisers conclude the following fair market values for BRASKEM's and COPESUL's material agreements:

**MARKET VALUE OF AGREEMENTS - BRASKEM (R\$ thousand)**

	discount rate (p.a.)	10.0%
<b>OXITENO</b>		<b>201,644</b>
<b>DOW</b>		<b>(2,543)</b>
<b>ELEKEIROZ</b>		<b>(9,758)</b>
<b>ACRINOR</b>		<b>71,980</b>
<b>SUZANO</b>		<b>75,149</b>
<b>DETEN</b>		<b>33,257</b>
<b>OLEOQUÍMICA</b>		<b>1,097</b>
<b>DOW-TDI</b>		<b>92</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>		<b>370,919</b>

**MARKET VALUE OF AGREEMENTS - COPESUL (R\$ thousand)**

	discount rate (p.a.)	10.0%
<b>INNOVA</b>		<b>110,763</b>
<b>TRIUNFO</b>		<b>62,261</b>
<b>DSM ELASTOMEROS</b>		<b>12,025</b>
<b>OXITENO</b>		<b>11,638</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>		<b>196,686</b>



## 7. CONCLUSION

Based on studies prepared by APSIS, on the reference date as of July 31, 2008, the fair market values for the intangible assets of each company are the following:

**BRASKEM** material agreements: R\$ 371 million

**COPEsul** material agreements: R\$ 197 million

**IPQ** no material intangible assets were identified.

Having concluded the Report RJ-0375/08 -01, composed of nineteen (19) pages and two (2) attachments and made in two (2) original counterparts, APSIS Consultoria Empresarial Ltda., CREA/RJ 82.2.00620 -1 and CORECON/RJ RF/2.052 -4, a company specialized in assets valuation, legally represented by its undersigned directors, is available for any further explanation.

Rio de Janeiro, August 22, 2008.

**8. LIST OF ATTACHMENTS**

1. VALUATION CALCULATIONS AND SUPPORTING DOCUMENTATION

2. GLOSSARY AND APSIS PROFILE

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**ATTACHMENT 1**

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<b>BRASKEM - ETHENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,219</b>	<b>2,073</b>	<b>2,130</b>	<b>2,275</b>	<b>2,495</b>	<b>2,861</b>	<b>3,175</b>	<b>3,290</b>	<b>3,356</b>	<b>3,423</b>	<b>3,423</b>	<b>3,423</b>
<b>VOLUMES (t)</b>												
OXITENO	190,000	200,000	210,000	220,000	230,000	235,000	235,000	235,000	235,000	235,000	235,000	235,000
<b>ETHENE TOTAL VOLUME CONTRACTED</b>	<b>190,000</b>	<b>200,000</b>	<b>210,000</b>	<b>220,000</b>	<b>230,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>
<b>ETHENE CONTRACTED NOR (R\$ thousand)</b>	<b>421,608</b>	<b>414,621</b>	<b>447,250</b>	<b>500,514</b>	<b>573,807</b>	<b>672,229</b>	<b>746,025</b>	<b>773,178</b>	<b>788,642</b>	<b>804,415</b>	<b>804,415</b>	<b>804,415</b>
OXITENO	421,608	414,621	447,250	500,514	573,807	672,229	746,025	773,178	788,642	804,415	804,415	804,415
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>
<b>ETHENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>3,068</b>	<b>(11,734)</b>	<b>(12,339)</b>	<b>(5,255)</b>	<b>36,792</b>	<b>84,103</b>	<b>124,441</b>	<b>33,922</b>	<b>34,600</b>	<b>35,292</b>	<b>35,292</b>	<b>35,292</b>
OXITENO	3,068	(11,734)	(12,339)	(5,255)	36,792	84,103	124,441	33,922	34,600	35,292	35,292	35,292

<b>BRASKEM - PROPENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,059</b>	<b>2,125</b>	<b>2,153</b>	<b>2,358</b>	<b>2,505</b>	<b>2,900</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>
<b>VOLUMES (t)</b>												
DOW	35,000	35,000	35,000	35,000	35,000							
ELEKEIROZ	80,535	80,535	80,535	80,535								
ACRINOR	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000
SUZANO	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500
<b>PROPENE TOTAL VOLUME CONTRACTED</b>	<b>298,035</b>	<b>298,035</b>	<b>298,035</b>	<b>298,035</b>	<b>217,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>
<b>PROPENE CONTRACTED NOR (R\$ thousand)</b>	<b>613,711</b>	<b>633,216</b>	<b>641,558</b>	<b>702,681</b>	<b>544,801</b>	<b>529,301</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>
DOW	72,072	74,362	75,342	82,520	87,669	-	-	-	-	-	-	-
ELEKEIROZ	165,837	171,108	173,362	189,878	-	-	-	-	-	-	-	-
ACRINOR	175,031	180,594	182,973	200,406	212,911	246,524	278,626	278,626	278,626	278,626	278,626	278,626
SUZANO	200,771	207,152	209,881	229,877	244,221	282,777	319,601	319,601	319,601	319,601	319,601	319,601
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>
<b>PROPENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>4,466</b>	<b>(17,921)</b>	<b>(17,700)</b>	<b>(6,879)</b>	<b>30,716</b>	<b>66,221</b>	<b>99,787</b>	<b>26,246</b>	<b>26,246</b>	<b>26,246</b>	<b>26,246</b>	<b>26,246</b>
DOW	524	(2,105)	(2,079)	(866)	1,405	-	-	-	-	-	-	-
ELEKEIROZ	1,207	(4,843)	(4,783)	(1,495)	-	-	-	-	-	-	-	-
ACRINOR	1,274	(5,111)	(5,048)	(2,104)	13,652	30,843	46,476	12,224	12,224	12,224	12,224	12,224
SUZANO	1,461	(5,863)	(5,790)	(2,413)	15,659	35,378	53,311	14,022	14,022	14,022	14,022	14,022

<b>BRASKEM - BENZENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>NET PRICE (R\$ / t)</b>	<b>1,909</b>	<b>1,859</b>	<b>1,878</b>	<b>2,017</b>	<b>2,147</b>	<b>2,337</b>	<b>2,551</b>	<b>2,551</b>
<b>VOLUMES (t)</b>								
DETEN	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550
<b>BENZENE TOTAL VOLUME CONTRACTED</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>
<b>BENZENE CONTRACTED NOR (R\$ thousand)</b>	<b>161,398</b>	<b>157,211</b>	<b>158,795</b>	<b>170,557</b>	<b>181,561</b>	<b>197,618</b>	<b>215,671</b>	<b>215,671</b>
DETEN	161,398	157,211	158,795	170,557	181,561	197,618	215,671	215,671
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>
<b>BENZENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>1,174</b>	<b>(4,449)</b>	<b>(4,381)</b>	<b>(1,791)</b>	<b>11,642</b>	<b>24,724</b>	<b>35,975</b>	<b>1,577</b>
DETEN	1,174	(4,449)	(4,381)	(1,791)	11,642	24,724	35,975	1,577

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<b>BRASKEM - HYDROGEN PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>NET PRICE(R\$ / t)</b>	<b>2,712</b>	<b>2,772</b>	<b>2,844</b>	<b>2,916</b>	<b>3,016</b>	<b>3,160</b>	<b>3,318</b>	<b>3,318</b>	<b>3,318</b>	<b>3,318</b>
<b>VOLUMES (t)</b>										
OLEOQUÍMICA	1,360	1,360	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
<b>HYDROGEN TOTAL VOLUME CONTRACTED</b>	<b>1,360</b>	<b>1,360</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>
<b>HYDROGEN CONTRACTED NOR (R\$ thousand)</b>	<b>3,689</b>	<b>3,770</b>	<b>4,778</b>	<b>4,899</b>	<b>5,068</b>	<b>5,309</b>	<b>5,574</b>	<b>5,574</b>	<b>5,574</b>	<b>5,574</b>
OLEOQUÍMICA	3,689	3,770	4,778	4,899	5,068	5,309	5,574	5,574	5,574	5,574
<i>Project net margin(% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>
<b>HYDROGEN CONTRACTED NET INCOME (R\$ thousand)</b>	<b>26.8</b>	<b>-106.7</b>	<b>-131.8</b>	<b>-51.4</b>	<b>324.9</b>	<b>664.2</b>	<b>929.8</b>	<b>244.6</b>	<b>244.6</b>	<b>61.1</b>
OLEOQUÍMICA	26.8	-106.7	-131.8	-51.4	324.9	664.2	929.8	244.6	244.6	61.1

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<b>BRASKEM - ORTOXILENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>NET PRICE(R\$ / t)</b>	<b>1,888</b>	<b>1,810</b>	<b>1,892</b>	<b>2,023</b>
<b>VOLUMES (t)</b>				
ELEKEIROZ	28,000	28,000	28,000	28,000
<b>ORTOXILENE TOTAL VOLUME CONTRACTED</b>	<b>28,000</b>	<b>28,000</b>	<b>28,000</b>	<b>28,000</b>
<b>CONTRACTED NOR C4 (R\$ thousand)</b>	<b>52,869</b>	<b>50,687</b>	<b>52,964</b>	<b>56,636</b>
ELEKEIROZ	52,869	50,687	52,964	56,636
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>
<b>ORTOXILENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>385</b>	<b>(1,435)</b>	<b>(1,461)</b>	<b>(446)</b>
ELEKEIROZ	385	(1,435)	(1,461)	(446)

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<b>BRASKEM - AGREEMENTS PROJECTIONS</b>													
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<i>Projected net margin (% NOR)</i>	1.7%	-2.8%	-2.8%	-1.0%	6.4%	12.5%	16.7%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
<b>CONTRACTED NET INCOME</b>													
<b>(R\$ thousand)</b>	<b>9,518</b>	<b>(37,105)</b>	<b>(37,474)</b>	<b>(15,018)</b>	<b>83,406</b>	<b>175,713</b>	<b>261,133</b>	<b>61,989</b>	<b>61,090</b>	<b>61,599</b>	<b>61,538</b>	<b>61,538</b>	<b>48,685</b>
OXITENO	3,068	(11,734)	(12,339)	(5,255)	36,792	84,103	124,441	33,922	34,600	35,292	35,292	35,292	35,292
DOW	524	(2,105)	(2,079)	(866)	1,405	-	-	-	-	-	-	-	-
ELEKEIROZ	1,591	(6,277)	(6,244)	(1,941)	-	-	-	-	-	-	-	-	-
ACRINOR	1,274	(5,111)	(5,048)	(2,104)	13,652	30,843	46,476	12,224	12,224	12,224	12,224	12,224	12,224
SUZANO	1,461	(5,863)	(5,790)	(2,413)	15,659	35,378	53,311	14,022	14,022	14,022	14,022	14,022	1,168
DETEN	1,174	(4,449)	(4,381)	(1,791)	11,642	24,724	35,975	1,577	-	-	-	-	-
OLEOQUÍMICA	27	(107)	(132)	(51)	325	664	930	245	245	61	-	-	-
DOW-TDI	399	(1,460)	(1,461)	(596)	3,930	-	-	-	-	-	-	-	-

**MARKET VALUE OF AGREEMENTS - BRASKEM (R\$ thousand)**

	discount rate (p.a.)	10.0%
OXITENO		201,644
DOW		(2,543)
ELEKEIROZ		(9,758)
ACRINOR		71,980
SUZANO		75,149
DETEN		33,257
OLEOQUÍMICA		1,097
DOW-TDI		92
<b>TOTAL AMOUNT OF AGREEMENTS</b>		<b>370,919</b>

<b>COPEsul - ETHENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>
<b>VOLUMES (t)</b>											
<b>INNOVA</b>	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600
<b>PETROQUÍMICA</b>											
<b>TRIUNFO</b>	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000
<b>DSM</b>											
<b>ELASTÔMEROS</b>	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380
<b>ETHENE TOTAL VOLUME CONTRACTED</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>37,980</b>	<b>37,980</b>
<b>ETHENE CONTRACTED NOR (R\$ thousand)</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>97,808</b>	<b>97,808</b>
<b>INNOVA</b>	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803
<b>PETROQUÍMICA</b>											
<b>TRIUNFO</b>	162,240	162,240	162,240	162,240	162,240	162,240	162,240	162,240	162,240	-	-
<b>DSM</b>											
<b>ELASTÔMEROS</b>	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>ETHENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>8,194</b>	<b>16,013</b>	<b>14,492</b>	<b>14,905</b>	<b>17,753</b>	<b>25,615</b>	<b>29,302</b>	<b>19,678</b>	<b>19,678</b>	<b>7,401</b>	<b>7,401</b>
<b>INNOVA</b>	2,483	4,852	4,391	4,517	5,380	7,762	8,880	5,963	5,963	5,963	5,963
<b>PETROQUÍMICA</b>											
<b>TRIUNFO</b>	5,112	9,990	9,041	9,299	11,076	15,981	18,281	12,277	12,277	-	-
<b>DSM</b>											
<b>ELASTÔMEROS</b>	599	1,170	1,059	1,089	1,297	1,872	2,142	1,438	1,438	1,438	1,438

<b>COPEsul - PROPENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>
<b>VOLUMES (t)</b>											
DSM ELASTÔMEROS	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810
<b>PROPENE TOTAL VOLUME CONTRACTED</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>
<b>PROPENE CONTRACTED NOR (R\$ thousand)</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>
DSM ELASTÔMEROS	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>PROPENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>263</b>	<b>514</b>	<b>465</b>	<b>479</b>	<b>570</b>	<b>823</b>	<b>941</b>	<b>632</b>	<b>632</b>	<b>632</b>	<b>632</b>
DSM ELASTÔMEROS	263	514	465	479	570	823	941	632	632	632	632

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<b>COPEsul - BENZENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>
<b>VOLUMES (t)</b>											
<b>INNOVA</b>	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550
<b>BENEZE TOTAL VOLUME CONTRACTED</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>
<b>BENZENE CONTRACTED NOR (R\$ thousand)</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>
<b>INNOVA</b>	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>BENZENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>5,459</b>	<b>10,667</b>	<b>9,654</b>	<b>9,930</b>	<b>11,827</b>	<b>17,065</b>	<b>19,521</b>	<b>13,109</b>	<b>13,109</b>	<b>13,109</b>	<b>13,109</b>
<b>INNOVA</b>	5,459	10,667	9,654	9,930	11,827	17,065	19,521	13,109	13,109	13,109	13,109

<b>COPEsul - HYDROGEN PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>
<b>VOLUMES (t)</b>											
DSM ELASTÔMEROS	2	2	2	2	2	2	2	2	2	2	2
<b>HYDROGEN TOTAL VOLUME CONTRACTED</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>HYDROGEN CONTRACTED NOR (R\$ thousand)</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
DSM ELASTÔMEROS	6	6	6	6	6	6	6	6	6	6	6
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>HYDROGEN CONTRACTED NET INCOME (R\$ thousand)</b>	<b>0.2</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.6</b>	<b>0.7</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
DSM ELASTÔMEROS	0.2	0.4	0.3	0.3	0.4	0.6	0.7	0.4	0.4	0.4	0.4

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**COPEsul -  
ETHENE**

<b>PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
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<b>NET PRICE (R\$ / t)</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>
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<b>VOLUMES (t)</b>														
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<b>OXITENO</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>
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<b>TOTAL VOLUME CONTRACTED C4</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>
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<b>CONTRACTED NOR C4 (R\$ thousand)</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>
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<b>OXITENO</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>
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<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
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<b>CONTRACTED NET INCOME C4 (R\$ thousand)</b>	<b>631</b>	<b>1,233</b>	<b>1,116</b>	<b>1,148</b>	<b>1,368</b>	<b>1,973</b>	<b>2,257</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>
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<b>OXITENO</b>	<b>631</b>	<b>1,233</b>	<b>1,116</b>	<b>1,148</b>	<b>1,368</b>	<b>1,973</b>	<b>2,257</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>
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<b>AGREEMENTS PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
	<b>5/12 twelfth</b>													
<i>Projected net margin (% NOR)</i>	7.6%	6.2%	5.6%	5.7%	6.8%	9.9%	11.3%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%

<b>CONTRACTED NET INCOME (R\$ thousand)</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
INNOVA	7,942	15,520	14,046	14,447	17,207	24,827	28,401	19,072	19,072	19,072	19,072	-	-	-
PETROQUÍMICA TRIUNFO	5,112	9,990	9,041	9,299	11,076	15,981	18,281	12,277	12,277	-	-	-	-	-
DSM														
ELASTÔMEROS	862	1,685	1,525	1,568	1,868	2,695	3,083	2,071	2,071	2,071	2,071	-	-	-
OXITENO	631	1,233	1,116	1,148	1,368	1,973	2,257	1,516	1,516	1,516	1,516	1,516	1,516	1,516

**MARKET VALUE OF AGREEMENTS (R\$ thousand)**

	discount rate (p.a.)	<b>COPEsul</b> 10.0%
<b>VALUE OF INNOVA AGREEMENT</b>		<b>110,763</b>
<b>VALUE OF PETROQUÍMICA TRIUNFO AGREEMENT</b>		<b>62,261</b>
<b>VALUE OF DSM ELASTOMEROS AGREEMENT</b>		<b>12,025</b>
<b>VALUE OF OXITENO AGREEMENT</b>		<b>11,638</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>		<b>196,686</b>



**ATTACHMENT 2**

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## GLOSSARY

**ASSETS APPROACH** valuation methodology in which all assets and liabilities (including unregistered ones) have their value adjusted according to their market values.

**BETA** measurement of a stock systematic risk, price trend of a certain stock to be related to changes in a certain index.

**BUSINESS RISK** uncertainty level for realizing future returns expected for the business, which do not result from financial leverage.

**CAPITAL STRUCTURE** breakdown of the capital invested in a company, including own capital (equity) and third-parties capital (indebtedness).

**CAPITALIZATION** conversion of a simple period of economic benefits into value.

**CAPITALIZATION RATE** any divisor used for converting economic benefits into value in a simple period.

**CAPM** Capital Asset Pricing Model - model in which the cost of capital for any stock or group of stocks is equivalent to the risk-free rate added to a risk premium, provided by the systematic risk of the stock or group of stocks under analysis.

**CASH FLOW** cash generated by an asset, group of assets or company during a certain period of time. Usually, such term is complemented by a qualification, depending on the context (operating, non-operating, etc)

**COMPANY** commercial, industrial, service or investment entity performing an economic entity.

**CONSTRUCTION EQUIVALENT AREA** constructed area on which the corresponding construction unit cost equivalence is applied, as provided by the principles of NB-140 of ABNT (Brazilian Association of Technical Rules).

**CONTROL** power to direct the company strategic, politic and administrative management.

**CONTROLLING PREMIUM** value or percentage of a controlling stocks pro rata value over the non-controlling stocks pro rata value, which reflect the controlling power.

**COST OF CAPITAL** expected return rate required by the market for attracting funds for a determined investment.

**CURRENT VALUE** It is the value for replacing an existing asset for a new one, depreciated according its physical conditions.

**DISCOUNT FOR LACK OF CONTROL** value or percentage deducted from the 100%-pro rata value of a company value, which reflects the lack of part or whole control.

**DISCOUNT FOR LACK OF LIQUIDITY** value or percentage deducted from the 100% pro rata value of a company value, which reflects the lack of liquidity.

**DISCOUNT RATE** any divisor used for converting a future economic benefit flow into present value.

**EBITDA** - Earnings Before Interest, Taxes, Depreciation and Amortization.

**ECONOMIC BENEFIT** benefits such as revenues, net income, net cash flow, etc.

**ELECTRIC DAMAGE VALUE** It is an estimation of the cost for repairing or replacing the parts of an asset in case of electric damage. Values are scheduled in percentages of the Replacing

Value and were calculated through equipment's manual analysis and the repairing maintenance expertise of APSIS technicians.

**FAIR MARKET VALUE** value for which a certain asset change its ownership between a potential seller and a potential buyer, when both parties are aware of relevant facts and none of them are under pressure to make the deal.

**GOODWILL** intangible asset referring to name, reputation, client portfolio, loyalty, localization and other similar items that cannot be identified separately.

**HOMOGENIZED AREA** usable, private or constructed area with mathematical treatments for valuation purposes, according to criteria set forth by APSIS, based on the real state market.

**INCOME APPROACH** valuation methodology by converting to present value expected economic benefits.

**INSURANCE MAXIMUM VALUE** It is the maximum value of an asset for which it is advisable to insure it. Such criterion establishes that the asset which depreciation is higher than 50% should have a Insurance Maximum Value equivalent to twice the Current Value; and, an asset which depreciation is lower than 50%, should have a Insurance Maximum Value equivalent to the Replacing Value.

**INSURANCE VALUE** It is the value for which the Insurance Company assumes the risks, and it is not applied on land and foundations, except in special cases.

**INTANGIBLE ASSETS** non-physical assets such as brands, patents, rights, contracts, industrial secrets that provide the owner with rights and values.

**INTERNAL RETURN RATE** discount rate in which the present value of the future cash flow is equivalent to the investment cost.

**INVESTED CAPITAL** sum of own capital and third-parties capital invested in a company. Third-parties capital is usually related to debts with short and long term interests to be specified in the valuation context.

**INVESTED CAPITAL CASH FLOW** cash flow generated by the company to be reverted to financiers (interests and amortizations) and shareholders (dividends) after operating costs and expenses and capital expenditures.

**INVESTMENT VALUE** value for a particular investor, based on particular interests for a certain asset such as synergy with other companies of an investor, different perceptions of risk and future performances, etc.

**ISSUE DATE** date on which the valuation report is ended, when valuation conclusions are presented to the client.

**LEVERAGED BETA** beta value reflecting the indebtedness in the capital structure.

**LIQUIDATION VALUE** It is the value of a sale on sale in the market, out of its original productive process. In other words, it is the value that would be verified in case the asset was deactivated and put up for sale separately, considering costs of disassembly or demolition (in case of real estate), storage and transportation.

**LIQUIDITY** capacity to rapidly convert a certain asset into cash or into a debt payment.

**MARKET APPROACH** valuation methodology, which utilizes multiples that result from the sale price of similar assets.

**MARKET NET EQUITY** see assets approach.

MULTIPLE market value of a company, stock or invested capital, divided by a company's measurement (revenues, income, client volume, etc.).

**NON-OPERATING ASSETS** assets that are not directly related to the company operating activity (whether they generate revenue or not) and that may be sold without affecting its operation.

**OPERATING ASSETS** assets that are necessary for the company operation.

**PERPETUITY VALUE** value at the end of the projective period to be added to the cash flow.

**PRESENT VALUE** value of a future economic benefit on a specific date, calculated by the application of a discount rate.

**PRIVATE AREA** usable area including building elements (such as walls, columns, et c) and elevators hall (in some cases).

**REFERENCE DATE** specific date (day, month and year) to apply the valuation.

**RESIDUAL VALUE** It is the value of a new or old asset projected for a certain date, limited to the date on which such asset turns into scrap, considering that during such period of time, the asset will be operating.

**REPLACING VALUE (FOR A NEW ASSET)** value based on the price (usually at market current prices) or replacing an asset for a new equal or similar one.

**SCRAP VALUE** It is the asset value at the end of its useful life, considering its disassembly or demolition value (in case of real estate), storage and transportation.

**SUPPORTING DOCUMENTATION** discount rate is a return rate used to convert into present value a payable or receivable amount.

**TANGIBLE ASSETS** physical assets such as lands, constructions, machines and equipment, furniture and appliances, etc.

**USEFUL AREA** usable area of a real estate, measures by the internal face of its walls.

**USEFUL LIFE** period of time during which an asset may generate economic benefits

**VALUATION** act or process through which the value of a company, stock interest or other asset is determined.

**VALUATION METHODOLOGY** the approaches used for preparing valuing calculations in order to indicate the value of a company, stock interest or other asset.

**VALUE** price denominated in monetary quantity.

**WACC (Weighted Average Cost of Capital)** model in which the cost of capital is determined by the weighted average of the value.



(A free translation of the original in Portuguese)

**Ipiranga Petroquímica S.A.**  
**Appraisal Report on the Stockholders Equity**  
**Adjusted "Pro Forma"**  
**By the Inventories and Fixed Assets Appreciation**  
**at July 31, 2008**

---



(A free translation of the original in Portuguese)

**Appraisal Report on the Stockholders' Equity Adjusted "Pro Forma"  
By the Inventories and Fixed Assets Appreciation  
at July 31, 2008 of Ipiranga Petroquímica S.A.**

1 PricewaterhouseCoopers Auditores Independentes, professional partnership established in the capital of the state of São Paulo, located at Av. Francisco Matarazzo, 1400, (Torre Torino, Floors 9, 10, 13, 14, 15, 16 and 17 - Agua Branca), primary registered with the Regional Accounting Council (CRC) of the State of São Paulo under No. 2SP000160/O-5, with a branch registered in the city of Porto Alegre, state of Rio Grande do Sul, located at Rua Mostardeiro, 800, (Floors 8 and 9 - Moinho dos Ventos), ZIP 90430-000, registered secondarily with the Regional Accounting Council (CRC) of the State of Rio Grande do Sul under No. 2SP000160/O-5 FRS, and enrolled in the National Corporate Taxpayers Register (CNPJ/MF) under No. 61,562,112/0006-35, with its partnership deed registered at the 4th Registry Office of Deeds and Documents of São Paulo, SP, on September 17, 1956, and subsequent amendments registered at the 2nd Registry Office of Deeds and Documents of São Paulo, SP, with the last amendment dated June 29, 2008, having been registered in microfilm under No. 96,041, on July 30, 2008, represented by its undersigned partner, Mr. Gilberto Bagaiolo Contador, Brazilian, married, accountant, holder of Identity Card No. 4,546,598-8-SSP/SP, enrolled in the Individual Taxpayers Register (CPF) under No. 861,271,368-49 and with the Regional Accounting Council of the State of Rio Grande do Sul (CRC) under No. 1RS069038/O-0, with office located in the same address of the grantor partnership, was appointed as expert by Ipiranga Petroquímica S.A. ( Company ), to proceed with an appraisal prepared based on the stockholders' equity at July 31, 2008 in accordance with Brazilian Corporate Law, Law 6.404/76 Article 264, adjusted "pro forma" by the result of the inventories valuation at realizable value and by the appreciation of fixed assets. The result of this appraisal work support the incorporation process of COPESUL - Companhia Petroquímica do Sul by Ipiranga Petroquímica S.A., is presented below.

Ipiranga Petroquímica S.A.

2 The appraisal of the stockholders' equity mentioned above was made in conjunction with the audit of the balance sheet of the Company at July 31, 2008. This balance sheet was prepared under the responsibility of the Company's management, with the specific purpose of supporting the incorporation of COPE SUL - Companhia Petroquímica do Sul by Ipiranga Petroquímica S.A.

3 We conducted our audit in accordance with approved Brazilian auditing standards, including NPA - 14 Appraisal Reports Issued by Independent Auditor at September 14, 2007, issued by the Institute of Independent Auditors of Brazil (IBRACON), which require that we perform the audit to obtain reasonable assurance about whether the financial statements are fairly presented in all material respects. Accordingly, our work included, among other procedures: (a) planning our audit taking into consideration the significance of balances, the volume of transactions and the accounting and internal control systems of the Company, (b) examining, on a test basis, evidence and records supporting the amounts and the financial information disclosed; and (c) assessing the accounting practices used and significant estimates made by management.

4 The portions added to the stockholders' equity of Ipiranga Petroquímica S.A, at July 31, 2008, arise from assumptions made and amounts calculated by management, for purposes of the statement and calculation of the related "pro forma" adjustment amounts by the result of the valuation of its inventories at realizable values and by the appreciation of fixed assets, considering the following aspects:

(a) The inventories include adjustments arising from the "pro forma" asset appreciation, considering the related realizable values, as follows:

(i) Finished Products: presented at realizable value, calculated based on the average sales price to third parties based on the invoices issued by the Company in up to 15 days prior to July 31, 2008, deducted from freight expenses, variable selling expenses and taxes on sales. For the cases in which no sales occurred in the mentioned period, the invoices issued up to 90 days prior to July 31, 2008, were used for the calculation of the realizable value. Finished products that did not present invoicing in the previously mentioned periods, were maintained at the average book cost.

(ii) Work in process: stated at production cost.

(iii) Raw Materials and Inputs: stated at average purchase cost.

Ipiranga Petroquímica S.A.

(iv) Warehouse materials and others: stated at the average purchase cost, less provision for obsolescence recorded in books.

(b) The fixed assets of Ipiranga Petroquímica S.A. considers the "pro forma" recognition of this asset appraisal at July 31, 2008, totaling R\$ 785,660,014.04 calculated exclusively based on an appraisal report issued by the independent experts Stima Engenharia Ltda. (Attachment II), which, net of fixed assets book value, reflects the "pro forma" adjustment of R\$ 261,575,054.62.

(c) Deferred income tax and social contribution on the appreciation of fixed assets and on the appreciation of inventories valuation of Ipiranga Petroquímica S.A., were calculated in accordance with the effective legislation.

(d) The portion added to the investment of Ipiranga Petroquímica S.A., at July 31, 2008, reflects the "pro forma" adjustment resulting from the inventories valuation at realizable value and from the fixed and intangible assets appreciation of the subsidiary COPESUL - Companhia Petroquímica do Sul, taking into consideration Ipiranga Petroquímica S.A. holding in the mentioned subsidiary. The other subsidiary and associated companies were not object of these evaluations for "pro forma" adjustments purpose, based on materiality assumptions adopted by management.

5 In order to verify management evaluation of the amounts determined in the terms described in paragraphs 4(a), 4(c) and 4(d) above, we applied the same audit procedures mentioned in paragraph 3 above.

6 Based on our work, we conclude that the amount of the assets, rights and obligations which form the stockholders equity adjusted at market price of Ipiranga Petroquímica S.A., at July 31, 2008, summarized in Attachment I, is R\$ 3,163,127,502.53. The book value of stockholders equity, as shown in Attachment I, is recorded in books, in accordance with accounting practices adopted in Brazil. The market value of fixed assets, which was the basis for the adjustment of stockholders equity, as stated in Attachment I, in the amount of R\$ 261,575,054.62, as presented in Attachment I, was determined in accordance with the technical assumptions used by the independent expert, described in his appraisal report in Attachment II, and the inventories realizable value was determined in accordance with management assumptions, as described in paragraph 4(a) above.

Ipiranga Petroquímica S.A.

7 This appraisal report is subject to the approval at the same Stockholders Meeting that will approve the incorporation process of the subsidiary COPESUL \_ Companhia Petroquímica do Sul by the Company, pursuant to the terms effective in Brazilian corporate legislation and related regulatory standards.

8 In conformity with the standards of NPA 14 of September 24, 2007 - Appraisal Reports issued by an Independent Auditor, issued by the Institute of Independent Auditors -IBRACON and with the Brazilian Securities Commission (CVM) Instruction 319 of December 3, 1999, we confirm that:

(i) in accordance with the professional standards established by the Federal Accounting Council through Resolution 821/1997, we are not aware of any conflicts of interest, whether direct or indirect, or any other circumstance which otherwise represents a conflict of interest in relation to the service above, and

(ii) we are not aware of any action by the majority stockholder or the company's management intended to influence, restrain, impair or practice any actions which have or might have compromised access to, use of or awareness of information, assets, documents or work methodologies that are material to the quality of this report.

Porto Alegre, August 22, 2008

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5 "F" RS

Gilberto Bagaiolo Contador  
Contador CRC 1RS069038/O-0

**Attachment I to the appraisal report on stockholders equity adjusted "pro forma"  
By the inventories and fixed assets appreciation of August 22, 2008**

**Ipiranga Petroquímica S.A.**

**Summarized "Pro Forma" Balance Sheet at July 31, 2008**

**In reais**

<b>Assets</b>	<b>Corporate legislation</b>	<b>"pro forma adjustment arising from appreciation</b>	<b>pro forma adjusted balances</b>	<b>Liabilities stockholders equity</b>	<b>Corporate legislation</b>	<b>"pro forma adjustment arising from appreciation</b>
Current assets				Current liabilities	143,607,476.82	
Cash and cash equivalents	2,648,404.74		2,648,404.74			
Trade accounts receivable	338,521,962.13		338,521,962.13	Non current liabilities		
Inventories	288,732,626.82	51,866,876.03	340,599,502.85	Long term liabilities		
Taxes recoverable	302,681,102.11		302,681,102.11	Suppliers	3,316,400.47	
Advances to suppliers and other	422,199.70		422,199.70	Financing Related companies	507,578,400.00	
Other	7,527,067.23		7,527,067.23		592,478,797.59	
				Taxes and contributions payable	5,690,458.40	88,005,444.36
	940,533,362.73	51,866,876.03	992,400,238.76	Deferred income tax	43,014,000.00	
				Other accounts payable	19,391,442.27	
Non current assets						
	195,265,202.80		195,265,202.80		1,171,469,498.73	88,005,444.36

Long term  
receivables

Permanent  
assets

				Stockholders equity			
Investments In subsidiaries	17,351,117.61		17,351,117.61	Capital	652,137,045.84		
Investments In associated companies	978,401,730.09	1,528,532,622.60	2,506,934,352.69	Capital reserves	374,629.84		
Other investments	1,020,900.00		1,020,900.00	Revaluation reserves	53,574.21		
Property and equipment	524,084,959.42	261,575,054.62	785,660,014.04	Revenue reserves	756,593,143.75	1,753,969,108.89	2
Intangible assets	63,100,290.97		63,100,290.97				
Deferred charges	4,477,805.57		4,477,805.57		1,409,158,393.64	1,753,969,108.89	3
	1,588,436,803.66	1,790,107,677.22	3,378,544,480.88				
	2,724,235,369.19	1,841,974,553.25	4,566,209,922.44		2,724,235,369.19	1,841,974,553.25	4

\* \* \*

This Attachment is an integral and inseparable part of the appraisal report on stockholders' equity adjusted pro forma" by the inventories and fixed assets appreciation of Ipiranga Petroquímica S.A., issued by PricewaterhouseCoopers Auditores Independentes, at August 22, 2008.

**Appraisal Report Folder 1**

July 2008

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## INDEX

<b>1.</b>	<b>INTRODUCTION</b>	<b>4</b>
<b>2.</b>	<b>OBJECTIVE</b>	<b>4</b>
<b>3.</b>	<b>OVERALL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS</b>	<b>4</b>
<b>4.</b>	<b>OVERALL APPRAISAL CONCEPT</b>	<b>5</b>
4.1.	APPRAISAL	5
4.2.	ASSET	5
4.3.	TANGIBLE OR INTANGIBLE ASSET	5
4.4.	PRICE AND MARKET VALUE	5
4.5.	COST	6
<b>5.</b>	<b>STANDARDS OBSERVED IN THE APPRAISALS</b>	<b>6</b>
<b>6.</b>	<b>OVERALL METHODOLOGY USED IN APPRAISING ASSTES</b>	<b>6</b>
6.1.	METHODS TO APPRAISE THE VALUE OF AN ASSET, ITS OUTCOMES AND RIGHTS	7
6.1.1.	<i>Market data direct comparative method</i>	7
6.1.2.	<i>Involution method</i>	7
6.1.3.	<i>Evolution method</i>	7
6.1.4.	<i>Income capitalization method</i>	7
6.2.	METHODS TO IDENTIFY THE COST OF AN ASSET	7
6.2.1.	<i>Direct cost comparison method</i>	7
6.2.2.	<i>Cost quantification method</i>	7
<b>7.</b>	<b>METODOLOGIA FOR APPRAISING URBAN PLOTS</b>	<b>8</b>
7.1.	PLOTS AND TRACTS - DEFINITIONS	8
7.2.	CHARACTERIZATION OF PLOTS	8
7.3.	MARKET DATA COMPARATIVE METHOD	9
7.4.	COST METHOD	10
<b>8.</b>	<b>METHODOLOGIA FOR APPRAISING BUILDINGS</b>	<b>10</b>
8.1.	UNIT VALUES	10
8.2.	METHODOLOGIA	10
<b>9.</b>	<b>METHODOLOGIA FOR APPRAISING MACHINES, EQUIPMENT AND INSTALLATIONS</b>	<b>11</b>
9.1.	APPRAISAL DEFINITIONS	11
9.1.1.	<i>Equity value</i>	11
9.1.2.	<i>Valor residual</i>	11
9.1.3.	<i>Accomplishment advantage factor</i>	12
9.1.4.	<i>Economic life and lifecycle</i>	12
9.1.5.	<i>Commercial value</i>	12

Ipiranga Petroqu mica S/A

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9.1.6. <i>At cost value</i>	12
9.1.7. <i>Depreciated value</i>	12
9.2. APPRAISAL METHOD	12
9.2.1 <i>Inspection</i>	12
9.2.2 <i>Verification of conservation and maintenance status</i>	13
9.2.3 <i>Data collection</i>	13
9.2.4 <i>Market situation</i>	14
9.3. OVERALL CRITERION ADOPTED	14
9.4. SPECIFIC CRITERIA	14
<b>10. RESULT OF APPRAISALS AND SUMMARIES</b>	<b>16</b>
10.1. APPRAISAL DATA	16
10.2. CONTENTS OF APPRAISAL FOLDERS	16
<b>11. TERM OF RESPONSIBILITY</b>	<b>17</b>

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## 1. INTRODUCTION

Stima Engenharia Ltda., a company registered in CREA-SP under no. 071.708 -8, with headquarters at Av. Fagundes Filho, no. 141, conjunto 55/56, 5° andar, São Paulo - SP, enrolled in the National Corporate Taxpayer Registry - CNPJ under no. 06.932.665/0001 -10, having been appointed to perform as market value appraiser on the base date of July 31, 2008, for the fixed assets of the company Ipiranga Petroquímica S/A, headquartered at BR-386 - Rodovia Tabaré - Canoas, km 419 - III Petrochemical Pole of Triunfo, Lot 04, Municipality of Triunfo, RS, State of Rio Grande do Sul, enrolled in the National Corporate Taxpayer Registry - CNPJ under no. 88.939.236/0001 -39, herein below presents the result of its endeavors, which shall be used for the purpose of incorporation.

## 2. OBJECTIVE

The objective of this report is to define the market value of assets belonging to the company Ipiranga Petroquímica S/A, for the above referred purpose.

The appraisal results herein presented refer to the following types of assets: plots, buildings, property improvements, installations, machines and equipment. This folder is intended to outline and comment on the overall concepts, norms and methods applied in the appraisals of these assets.

The values set forth in this appraisal are calculated for the base date of July 31, 2008, the same date on which the inspections, calculations, quotations and market surveys of the assets the object of this appraisal were carried out.

This report was prepared in accordance with the provisions set forth in article 8 of Law 6.404/76 and the amendments of Law 11.638/07.

## 3. OVERALL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS

This report is subject to the following conditions of independence, contingencies and limitations:

- a) Inspections were performed of all industrial units belonging to the Company. The more relevant assets from the point of view of value were photographed and the images presented in the items on photographic documentation. Typical assets of the installations (cables, piping, valves, instruments, automation systems and others) were randomly inspected pursuant to commonly accepted practice;
- b) Installation assets (cables, piping, valves, instruments, automation systems and others) not inspected individually, were appraised by means of information obtained from the Company's accounting and engineering areas, and assumed to be accurate;
- c) Replacement values were obtained through price surveys conducted at manufacturers and suppliers of such assets. Whenever such quotations could not be obtained, one resorted to calculation methods of the values based on average capacity standards used by companies in the petrochemical or chemical industries for budgeting their projects;

d) Typical installation assets (cables, piping, valves, instruments, automation systems and others) were valued through cost composition calculations, by multiplying unit prices by the quantitative parameters supplied by the Company;

e) To appraise real estate property (plots, buildings, and property improvements) we resorted to information supplied by the administration and engineering areas. Whenever information diverged, we assumed the information supplied by the Engineering Department in documents and blueprints was accurate.

#### **4. OVERALL APPRAISAL CONCEPT**

To better understand the methods, criteria and terminology used in this appraisal report, below we list some of the terms as they are defined by technical appraisal norms.

##### **4.1. Appraisal**

Appraisal consists of the technical analysis performed by an Appraisal Engineer, to identify the value of an asset, its costs, outcomes and rights, as well as to establish feasibility indicators for its economic utilization, for a certain purpose, situation and date.

##### **4.2. Asset**

An asset is something of value, susceptible to being used, or that may be an object entitling to a right, which is a part of equity.

##### **4.3. Tangible or intangible asset**

A tangible asset is such that is well identified in material terms (example: real estate property, equipment, raw materials). An intangible asset is such that is not identifiable in material terms (example: goodwill, brands and patents).

##### **4.4. Price and market value**

Price is the amount for which one effects, or intends to effect, a transaction involving an asset, outcome or right associated therewith.

According to NBR 14653-1 Appraisals of Assets Part 1 Overall Procedures ABNT Brazilian Association of Technical Norms, market value is the most probable amount for which one would voluntarily and consciously negotiate an asset, on a reference date, pursuant to prevailing market conditions.

According to IVS International Valuation Standards, market value is the estimated amount, on an appraisal date, for which one would voluntarily negotiate an asset between a buyer and a seller in a free and legitimate transaction, in which each party acts based on knowledge, prudence and without duress.

#### 4.5. Cost

Cost is the sum of direct and indirect expenses necessary for production, maintenance or acquisition of an asset, on any given date and under any given circumstance.

#### 5. STANDARDS OBSERVED IN THE APPRAISALS

The standards used in the preparation of this report are listed below. According to the ABNT standards - Brazilian Technical Standards Association, the values of this report at the minimum fall into the basis and accuracy as grade I.

Standards observed in the issue of this report are:

NBR 14653-1 Appraisals of Assets Part 1 Overall Procedures ABNT Brazilian Association of Technical Norms

NBR 14653-2 - Appraisals of Assets Part 2 Urban Real Estate - ABNT Brazilian Association of Technical Norms

NBR 12721 Appraisals of Unit Costs and Preparation of Construction Budget for the Incorporation of Condominium Buildings - ABNT Brazilian Association of Technical Norms

NBR 14653-5 Appraisals of Assets Part 5: Machines, Equipment, Installations and industrial assets in general - ABNT Brazilian Association of Technical Norms

Urban Real Estate Appraisal Norm of IBAPE-SP Brazilian Appraisal and Expert Engineering Analysis Institute of São Paulo Year 2005 version 2

International Valuation Standards (IVS) IVS 1: Market Value Basis of Valuation; IVS 2: Valuation Bases Other Than Market Value and IVS 3: Valuation Reporting

International Valuation Standards (IVS) Guidance Note no. 3 Valuation of Plant and Equipment Orientation Notes No. 3 Appraisal of Industrial Plants and Equipment.

#### 6. OVERALL METHODOLOGY USED IN APPRAISING ASSETS

The applicable methodology is basically a function of the nature of the asset under Appraisal, the purpose of the Appraisal and the availability, quality and quantity of the information collected in the market. One's choice must be justified, with the objective of portraying market behavior using models that rationally lend support to the credibility of the calculated value.

## **6.1. Methods to appraise the value of an asset, its outcomes and rights**

As set forth in NBR-14653 of ABNT, the methods to appraise the value of an asset, its outcomes and rights, are the following:

### **6.1.1. Market data direct comparative method**

By this method, an asset's market value is determined by means of technical criteria applied to attributes of comparable elements that comprise a given sample.

### **6.1.2. Involution method**

This is the method that determines an asset's market value based on its efficient usage, in turn based on a technical-economic feasibility study, by means of a hypothetical compatible undertaking with the same characteristics as those of such asset and under the conditions of the market it belongs to, while taking into account feasible scenarios for executing and marketing such product.

### **6.1.3. Evolution method**

This is the method that identifies an asset by the sum of values of its components. If the intent is to determine an asset's market value, then the commercialization factor must be considered.

### **6.1.4. Income capitalization method**

This is the method that determines the value of an asset, based on the current capitalization of its expected net income, while considering feasible scenarios.

## **6.2. Methods to identify the cost of an asset**

As set forth in norm NBR-14653 of ABNT, the methods to determine the cost of an asset are the following:

### **6.2.1. Direct cost comparison method**

This method determines an asset's cost by means of technical criteria applied to attributes of comparable elements that comprise a given sample.

### **6.2.2. Cost quantification method**

This method determines the cost of an asset and its parts through synthetic or analytical budgets based on the quantity of service rendered and the respective direct and indirect costs.

## **7. METODOLOGY FOR APPRAISING URBAN PLOTS**

### **7.1. Plots and tracts - Definitions**

Urban real estate property is such as located within an urban perimeter as defined by law. Plots are portions of land resulting from the dividing up of urban areas.

The dividing up of land extensions into plots ( loteamento ) is a subdivision of a tract of land intended for buildings, with the opening of new roads, public spaces or the extension, modification or expansion of existing roads.

An tract suited for urbanization is a large plot of land appropriate for receiving urban infrastructure works, aimed at its efficient usage, by dividing it up, separating it from a larger land extension, or for implementing an undertaking.

### **7.2. Characterization of plots**

Real estate is an asset comprising a plot and possible improvements incorporated thereto. It can be classified as urban or rural, based on its location, use or purpose.

A plot's classification, according to its use, occurs based on the following factors:

Physical characteristics of the plot, such as location, situation, topography, etc.;

Actual use of similar plots located in the same region;

Usage limitations of a given plot (restrictions or bondage) imposed by competent authorities;

A real estate property's use results from it being economically the most suited from the perspective of its own and surrounding characteristics, subject to compliance with legal limitations.

The characterization of the region where any real estate property is located is essential for the analysis of its value and its appraisal. That is why the following data is collected:

Overall aspects: analysis of economic, political and social conditions, whenever relevant for the market, including atypical former uses or associated stigmas;

Physical aspects: topographic conditions, predominant type of soil, environmental conditions;

Location: situation in the urban context, showing the main influence poles;

Soil usage and occupation: comparison of the current occupation with laws on dividing up and use of a municipality's soil, to then conclude about change trends in the short and medium term;

Urban infrastructure: road system, collective transportation, solid waste collection, drinking water, electric power, telephone, cable networks for data transmission, communication and television, sanitary sewage, rain water and channeled gas;

Current activities: trade, industry and services;

Community equipment: safety, education, health, culture and leisure.

The characterization of plots occurs based on the following data:

Location: situation in the region and as related to public roads, with indications as to limits and boundaries;

Current and intended use in comparison with legislation in force;

Physical aspects: dimensions, form, topography, surface, soil, for comparison with available documentation;

Available urban infrastructure;

Physical and legal restrictions applicable to use.

In accordance with the ABNT NBR 14653-1 text, as related to methodology selection:

The selected methodology must be compatible with the nature of the selected asset, the purpose of the Appraisal and the available market data. To define market value, whenever possible one should prefer the market data direct comparative method.

To obtain a plot's unit value at each site to be Appraised, a market survey of offers or actual sales is always conducted with respect to plots similar to the one under analysis.

In view of the unit price thus determined in market surveys, while applying the above referred to criteria, a plot's final value is calculated.

### **7.3. Market data comparative method**

This method consists of determining a plot's value by direct comparison with other similar ones, by comparing their sales prices, considering common and/or similar characteristics, while concurring that those that generate the same amount of income should have the same value or should be in a proportionate linear relation.

In the search for plots, emphasis was placed on the sale of other fractions, whose locations and characteristics are compatible with those of the asset to be Appraised. The values obtained were adjusted using coefficients to correct form, size and location.

Areas in the Triunfo Petrochemical Pole are negotiated by Copesul Company, which holds title to the pole's plots with and without infrastructure. Plot transactions in the region are rare; however the Company has a reference value that is used when submitting offers. To appraise plots of the industrial area we used said referential unit value.





#### **7.4. Cost method**

This method consists of determining the value of improvements and improvements to real estate property by drawing up summarized or detailed budgets of all items comprising the final value of any appraised real estate property. The main costs that make up the works are: Primary (material and labor) and Secondary (administrative, profit, building, project, taxes, services and financial costs). The criterion used in this evaluation to determine plot market values was the Market Data Comparative Method .

### **8. METHODOLOGY FOR APPRAISING BUILDINGS**

For performing the appraisal of buildings and improvements to real estate property, the following aspects need to be well understood:

Constructive, qualitative, quantitative and technological aspects, compared with the available documentation;

Architectural, landscape and functional aspects, including environmental comfort;

Adjustment of any given building with respect to a region's recommended uses;

Occupational conditions.

Buildings were appraised using the reproduction cost method, based on Civil Construction Unit Costs , i.e., always up-to-date unit values, supported by a variety of publications and price surveys on materials and services.

Costs resulting from such studies take into consideration all determinant market price factors. Consequently, there is no room for any add-ons, whether due to the accomplishment advantage factor or to reflect a commercialization factor .

#### **8.1. Unit values**

Unit values are updated by using computers, resulting in a registry of innumerable budgets and costs, and covering a broad variety of services and materials supplied for civil construction works.

Such costs, reflected to this report's base date, are used in composing costs of each construction phase and of each building to be appraised.

#### **8.2. Methodology**

The building appraisal services are rendered in several phases, which can be summarized as follows: Data and blueprint collection, and of other constructive details of each building.

During and after inspection of buildings, the comparison of blueprints and other documents provided, containing each building's actual situation.

Determination of the volume of services and materials for each constructive phase (such as earthmoving, building of the framework, finishing, special installations, etc) of each building.

By resorting to computers, the volumes determined are listed along with the cost of each on the base date of the appraisal reports, thus resulting in the replacement cost of each constructive phase and for the building as a whole.

Use of a depreciation factor in each construction phase (when applicable), in accordance with the apparent age and the (probable) remaining life of a building.

By remaining life of assets, one should understand the expected remaining physical life of assets, which is the scope of this report, determined according to technical parameters for applying said depreciation factor pursuant to Brazilian Appraisal Norms, while using the following items as parameters for determining the depreciation factor:

Apparent age of assets;

Apparent state of assets;

Conservation state of assets;

Reform and maintenance plan (preventive and corrective) performed for assets;

Operation modus of assets;

Obsolescence phase of assets.

## **9. METHODOLOGY FOR APPRAISING MACHINES, EQUIPMENT AND INSTALLATIONS**

### **9.1. Appraisal definitions**

In order to describe the methodologies used in the appraisal process of assets set forth in this report, one must mention some important definitions for better understanding.

#### **9.1.1. Equity value**

This is the amount that corresponds to the total assets held by an individual or corporate person.

#### **9.1.2. Valor residual**

This is the amount that corresponds to any given asset at the end of its life.

9.1.3. Accomplishment advantage factor

This is the difference between market value of an asset and the cost of redoing it, whenever such difference is positive.

9.1.4. Economic life and lifecycle

Economic life is the operational time span of an asset, whereas its lifecycle is its functional time span.

9.1.5. Commercial value

This is the value currently given an asset in commercial transactions under normal market conditions or to an asset identical or similar to the one under Appraisal.

9.1.6. At cost value

This is the price actually paid for an asset or good, plus direct expenses necessary to become the holder of such asset or good, such as packaging, taxes, freight, legal expenses (deeds, etc.), which directly encumber the price paid or reimbursement therefore.

9.1.7. Depreciated value

This is the value of an asset or good after deducting all amounts relative to physical depreciation, use and obsolescence.

**9.2. Appraisal method**

The phases in which to appraise machines, equipment and installations are informed below, in the different sections that comprise this report.

9.2.1. Inspection

Inspection is indispensable for executing the appraisal work. Exceptionally, when access to the Appraised asset is not possible, one may admit resorting to a paradigm situation, provided agreed upon by the parties and set forth in the report.

The inspection is aimed at knowing and characterizing the appraised asset and its suitability for its market segment, resulting in conditions to orient data collecting.

During inspections, the appraiser goes about collecting technical data, on physical characteristics and on an asset's use, along with other relevant factors to define value.

Upon performing an inspection, the appraiser takes notes on an appraised asset's characteristics, surveys technical data, while analyzing aspects related to its state of conservation and maintenance.

### 9.2.2. Verification of conservation and maintenance status

The analysis of the state of conservation and maintenance is one of the most important factors to reach a judicious conclusion concerning the value of an Appraised asset. For better understanding, the definition of these two variables is:

**Conservation:** The act or effect of safeguarding from damage, decay, loss and other risks, through thorough verification, its use and conditions of use and the preservation of technical and functional characteristics of a building, its installations and equipment.

**Maintenance:** The set of activities to be undertaken to conserve, maintain or recover the functional capacity of an asset and its constituent parts, while in no way affecting its operational capacity or lifecycle.

In our day and age, maintenance can be divided in preventive, corrective and predictive. Preventive maintenance, the more common, seeks to avoid the occurrence of errors in an asset's functioning, through constant testing and cleaning of its components, contributing to keeping the machines and the environment in perfect functional conditions, offering maximum efficiency in performing its activities.

Predictive maintenance, based on data on an asset's wear and decay, seeks to estimate the life of its components. The state of machinery must frequently be monitored, to allow for parts' replacement at the right moment, avoiding unexpected downtime.

Finally, corrective maintenance occurs when defects and errors, caused by an asset's use and age, are detected through preventive maintenance, and may result in unexpected expenses if not corrected.

The difference between maintenance and repair. Maintenance, in its several modalities, ultimately seeks to keep an asset functioning. Even in corrective maintenance, defects and errors must be corrected even if due to their nature they do not result in an asset breaking down, because otherwise at any given moment they may cause the Company severe damage.

### 9.2.3. Data collection

During the inspection phase, the collection of data on the characteristics of each asset is performed, examining blueprints, documents, projects in short everything that may clarify relevant aspects for the Appraisal.

In the data collection phase the following tasks are performed:

Market surveys seeking data on attributes resembling those of the asset under Appraisal in the closest manner possible;

Identification of information sources, whereas, whenever possible, information shall always be certified to increase reliability of researched data;

Identification of relevant characteristics of collected market data;

Search for market data, preferably with the same characteristics of the Appraised asset (same age, capacity, etc.)

#### 9.2.4. Market situation

Upon the collection of market data on offers one seeks to obtain information on time of exposure to the market and, in the case of transactions being effected, the payment modality adopted and the date on which they occurred.

### 9.3. Overall criterion adopted

The valorization of machines, equipment and installations was effected by the reproduction or replacement cost method.

Overall criteria used in appraising machines, equipment and all other movable assets followed the standard used in most movable asset appraisal work, i.e., they were based on setting a new value for a replacement asset by surveying manufacturers, suppliers, representatives, etc.

Establishing an asset's going market value occurred by observing its state of maintenance, conservation and characterization of its technical obsolescence.

An asset's new replacement value can be summarized as being the sum of all its acquisition price items, along with all taxes, fees, transportation costs to the construction site, as well as the cost of materials for installation work, the respective labor, also as concerning special or normal finishing, such as ordinary or special paint, thermal isolation, etc.

Depreciation: until now the focus has been on value based on the probable reproduction or replacement cost, without reference to depreciation resulting from age, use and obsolescence. Depreciation can be defined as inevitable loss of value of a factory, equipment and materials over time, caused by chemical action or corrosion, physical action (decay, decrepitude, abrasion, normal wear, deferred maintenance or repairs), inadequateness and obsolescence.

The depreciation coefficient is what adjusts an asset's market value. By applying depreciation due to replacement price (or cost), one comes up with the market value.

### 9.4. Specific criteria

Installation assets (cables, piping, valves, instruments, automation systems and others) were valued by calculating the cost composition, multiplying unit prices by the quantities informed by the Company.



In composing costs, we used factors for the following costs: labor, engineering, management, installations and assembly. Such factors were obtained in surveys conducted at manufacturers and in the engineering and project departments, as well as from specialized engineering literature.

In it not being possible to obtain an asset's value from a manufacturer, we resorted to unit values based on nominal or installed capacity, informed by manufacturers of similar equipment for the sake of project calculations.

The age assumed for each appraised asset was a function of the acquisition data (as registered in the equity control registry) and the information obtained in the engineering and maintenance departments.

Lifecycle expectations and residual values (scrap factor) were also obtained through surveys at manufacturers and in specialized engineering literature.

**10. RESULT OF APPRAISALS AND SUMMARIES****10.1. Appraisal data**

APPRAISAL DATA	
Requester:	<b>Ipiranga Petroquímica S/A</b>
Assets owned by:	<b>Ipiranga Petroquímica S/A</b>
Location of assets:	<b>Assets the object of appraisal belong to the industrial unit located at Rodovia BR 386 Tabai-Canoas, km 419 IIPetrochemical Pole of Triunfo, Lot 04, Municipality of Triunfo, RS</b>
Base date of values:	<b>July 31, 2008</b>
Purpose:	<b>Appraisal for the intent of incorporation</b>
Type of value presented:	<b>Acquisition market value</b>
Economic sector classification:	<b>Secondary sector base industry</b>
Classification according to assets condition:	<b>Installed assets, integrated to the operational and administrative process.</b>
Classification according to the types of assets appraised:	<b>Plots, buildings, improvements to property, installations, machines and equipment.</b>
Argumentation based on: (norm ABNT NBR 14653-5:2006 Tab-4)	<b>The technical report is classified as GRADE I for the sake of argumentation.</b>
Value of the plots:	<b>R\$ 9,072,000.00 (nine million, seventy-two thousand reais)</b>
Value of buildings and improvements to real estate property:	<b>R\$ 91,565,770.00 (ninety-one million, five hundred and sixty-five thousand, seven hundred and seventy reais)</b>
Value of machines, equipment and installations:	<b>R\$ 619,366,154.00 (six hundred and nineteen million, three hundred and sixty-six thousand, one hundred and fifty-four reais)</b>
<b>Total Appraised value:</b>	<b>R\$ 720,003,924.00 (seven hundred and twenty million, three thousand, nine hundred and twenty-four reais)</b>



**10.2. Contents of appraisal folders**

This appraisal report consists of three folders, distributed as follows:

### **Folder 1 Summary Folder**

This is the folder with the following content: objective, norms, methodology, summary of appraised values, possible limitations, and the report's term of responsibility.

### **Folder 2 Appraisal of Plots, Buildings and Improvements**

This folder entails the appraisal of plots, buildings and improvements located at Rodovia BR 386 Tabaí - Canoas, km 419 III Petrochemical Pole of Triunfo, Lot 04, Municipality of Triunfo, State of Rio Grande do Sul;

### **Folder 3 Appraisal of Machines, Equipment and Installations**

Its content comprises photographic documentation, summaries and listings of the appraisal of machines, equipment and industrial installations located at Rodovia BR 386 Tabáí - Canoas, km 419 III Petrochemical Pole of Triunfo, Lot 04, Municipality of Triunfo, State of Rio Grande do Sul.

## **11. TERM OF RESPONSIBILITY**

This report presents the result of the appraisal of assets belonging to Ipiranga Petroquímica S/A

Movable and fixed assets were physically inspected and appraised by qualified technical professionals, for the purpose of verifying their physical and operational characteristics and their state of conservation.

This appraisal was drawn up according to the norms of IBAPE - Brazilian Appraisal and Expert Engineering Analysis Institute, ABNT - The Brazilian Association of Technical Norms and IVS - International Valuation Standards.

This expert report is subject to the following conditions of independence, contingencies and limitations:

This appraisal was drawn up for the specific purpose defined in the topic Objective . Its use for any other purpose, or base date other than the one specified, as well as the partial extraction of data rather than as a complete text, does not warrant reliability;

No member of Stima Engenharia Ltda., participant in this project, currently has or in future intends to have any kind of interest in the assets included in this report;

We deem the information obtained from third parties reliable and that it was provided in good faith;

Stima Engenharia Ltda. assumes no responsibility for physical or economic factors that may affect opinions presented in this report, which factors may take place after the base date set forth herein;

This paper and expert report are based on documents, information and blueprints provided by Ipiranga's technical areas. The appraisers therefore assume no responsibility for any legal or engineering issue, apart from those inherent to their specific role in this case, and as set forth in laws, codes or self-defined regulations;

One should emphasize that all values set forth in this expert report (plots, buildings, improvements, installations, machines and equipment) refer to amounts at cash value. Furthermore, no debt or mortgages that may possibly encumber the appraised assets were taken into consideration. If such facts exist, they were unknown to the appraisers;

This report is based on data collected in physical inspections carried out in the period from July 28 to August 1, 2008, reflecting the set of assets physically expressed in the accounting accounts for plots, buildings, improvements, installations, machines and equipment and their respective technical and operational characteristics on said date;

In determining the appraised values, investments and expenditures entered into the works in progress account were also taken into consideration, even if the project or investment has yet to be concluded;

This report's base date, i.e., the time on which all value analyses were based, is July 31, 2008;

Acceptance of this report supposes concurrence with the terms set forth in this statement of independence, contingencies and limitations.

São Paulo, August 12, 2008

**Stima Engenharia Ltda.**  
CREA-SP 071.708 -8

(A free translation of the original in Portuguese)

**Ipiranga Química S.A.  
Appraisal Report on Stockholders' Equity  
Adjusted "pro forma" by the Inventories and  
Fixed Assets Appreciation at July 31, 2008 of  
Ipiranga Química S.A.**

---

(A free translation of the original in Portuguese)

**Appraisal Report on Stockholders' Equity Adjusted "pro forma" by  
the Inventories and Fixed Assets Appreciation  
At July 31, 2008 of Ipiranga Química S.A.**

**Ipiranga Química S.A.**

1 PricewaterhouseCoopers Auditores Independentes, professional partnership established in the capital of the state of São Paulo, located at Av. Francisco Matarazzo, 1400, (Torre Torrino, Floors 9, 10, 13, 14, 15, 16 and 17) registered with the Regional Accounting Council (CRC) of the State of São Paulo under No. 2SP000160/O-5 and enrolled in the National Corporate Taxpayers Register under No. 61,562,112/0006-35, with its partnership deed registered at the 4th Registry Office of Deeds and Documents of São Paulo, SP, on September 17, 1956, and subsequent amendments registered at the 2nd Registry Office of Deeds and Documents of São Paulo, SP, the last amendment, dated June 29, 2008, having been registered in microfilm under No. 96,041, on July 30, 2008, represented by its undersigned partner, Mr. Tadeu Cendón Ferreira, Brazilian, married, accountant, holder of Identity Card No. M.1.523.766 SSP/MG, enrolled in the Individual Taxpayers Register (CPF) under No. 530,920,666-34 and with the Regional Accounting Council of the State of São Paulo (CRC) under No. CRC 1SP188352/O-5, with Office located in the same address of the grantor partnership was appointed as expert by Ipiranga Química S.A. (the Company) to proceed with an appraisal prepared based on the stockholders' equity at July 31, 2008 in accordance with Brazilian Corporate Law, Law 6.404/76 Article 264, adjusted "pro forma" by the result of the inventories valuation at realizable value and by the appreciation of fixed assets. The result of this appraisal work, exclusively to support the split-off process followed by the incorporation of the split-off portion of Ipiranga Petroquímica S.A. into the parent company Braskem S.A, is presented below.

Ipiranga Química S.A.

2 The appraisal of the stockholders' equity mentioned above was made in conjunction with the audit of the balance sheet of the Company at July 31, 2008. This balance sheet was prepared under the responsibility of the Company's management, with the specific purpose of supporting the split-off process followed by the incorporation of the split-off portion of Ipiranga Química S.A. into the parent company Braskem S.A.

3 We conducted our audit in accordance with approved Brazilian auditing standards, including NPA - 14 Appraisal Reports Issued by Independent Auditor, issued by the Institute of Independent Auditors of Brazil (IBRACON), which require that we perform the audit to obtain reasonable assurance about whether the financial statements are fairly presented in all material respects. Accordingly, our work included, among other procedures: (a) planning our audit taking into consideration the significance of balances, the volume of transactions and the accounting and internal control systems of the Company, (b) examining, on a test basis, evidence and records supporting the amounts and the financial information disclosed; and (c) assessing the accounting practices used and significant estimates made by management.

4 The portions added to the stockholders' equity of Ipiranga Química S.A., at July 31, 2008, arise from assumptions made and amounts calculated by management, for purposes of the statement and calculation of the related "pro forma" adjustment amounts by the result of the valuation of its inventories at realizable values and by the appreciation of fixed and intangible assets, considering the following aspects:

(a) The inventories include adjustments arising from the "pro forma" asset appreciation, considering the related realizable values, as follows:

(i) Finished Products: presented at realizable value, calculated based on the average Sales price to third parties based on the invoices issued by the Company in up to 15 days prior to July 31, 2008, deducted from freight expenses, variable selling expenses and taxes on sales. For the cases in which no sales occurred in the mentioned period, the invoices issued up to 90 days prior to July 31, 2008, were used for the calculation of the realizable value. Finished products that did not present invoicing in the previously mentioned period, were maintained at the average book cost.

Ipiranga Química S.A.

(ii) Work in process: stated at production cost.

(iii) Raw Materials and Inputs: stated at average purchase cost.

(iv) Warehouse materials and others: stated at the average purchase cost, less provision for obsolescence recorded in books.

(b) The fixed assets of Ipiranga Química S.A., considers the "pro forma" recognition of this asset appreciation at July 31, 2008, totaling R\$ 61,620,670.46 , calculated exclusively based on appraisal report issued by the independent experts Stima Engenharia Ltda. (Attachment II), which, net of fixed assets book value, reflects the "pro forma" adjustment of R\$ 15,320,052.55.

(c) Deferred income tax and social contribution on the appreciation of fixed assets and on the appreciation of inventories valuation of Ipiranga Química S.A., were calculated in accordance with the effective legislation.

(d) The portion added to the investment of Ipiranga Química S.A., at July 31, 2008, reflects the "pro forma" adjustment resulting from the inventories valuation at realizable values and from the fixed assets appreciation of its direct subsidiary Ipiranga Petroquímica S.A., and the reflex of the pro forma adjustment resulting from the inventories valuation at realizable values and from the fixed and intangible assets appreciation of its indirect subsidiary COPESUL - Companhia Petroquímica do Sul, taking into consideration the direct and indirect holding of Ipiranga Química S.A. in the mentioned subsidiaries. The other subsidiaries were not object of our evaluations for "pro forma" adjustments purpose, based on materiality assumptions adopted by management.

5 In order to verify management evaluation of the amounts determined in the terms described in paragraphs 4(a), 4(c) and 4(d) above, we applied the same audit procedures mentioned in paragraph 3 above.

Ipiranga Química S.A.

6 Based on our work, we conclude that the amount of the assets, rights and obligations which form the stockholders equity adjusted at market prices of Ipiranga Química, in accordance with the Company's balance sheet at July 31, 2008, summarized in the Attachment, is R\$ 2,463,416,438.57, and is recorded in the books of account in conformity with accounting practices adopted in Brazil. The market value of fixed assets that was the basis for adjusting stockholders' equity, as stated in Attachment I, in the amount of R\$ 15,320,052.55 was determined in accordance with the technical assumptions used by the independent experts, described in their appraisal report, presented in Attachment II, and the inventories realizable value was determined in accordance with management assumptions, as described in paragraph 4(a) above

7 In conformity with the standards of NPA 14 of September 24, 2007 - Appraisal Reports issued by an Independent Auditor, issued by the Institute of Independent Auditors -IBRACON and with the Brazilian Securities Commission (CVM) Instruction 319 of December 3, 1999, we confirm that:

(i) in accordance with the professional standards established by the Federal Accounting Council through Resolution 821/1997, we are not aware of any conflicts of interest, whether direct or indirect, or any other circumstance which otherwise represents a conflict of interest in relation to the service above, and

(ii) we are not aware of any action by the majority stockholder or the company's management intended to influence, restrain, impair or practice any actions which have or might have compromised access to, use of or awareness of information, assets, documents or work methodologies that are material to the quality of this report.

São Paulo, August 29, 2008

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5

Tadeu Cendón Ferreira  
Contador CRC 1SP188352/O-5



**Attachment to the Appraisal Report on Stockholders Equity Adjusted "pro forma" by the Inventories and Fixed Assets Appreciation at August 29, 2008**

**Ipiranga Química S.A.**

**Summarized "Pro forma" Balance Sheet at July 31, 2008**

**In reais**

<b>Assets</b>	<b>Corporate legislation</b>	<b>pro forma adjustment arising from appreciation</b>	<b>pro forma adjusted balance</b>	<b>Liabilities stockholders equity</b>	<b>Corporate legislation</b>	<b>pro forma adjustments arising from appreciation</b>
Current assets				Current liabilities	103,354,919.36	
Cash and banks	8,897,555.80		8,897,555.80	Non Current liabilities		
Financial investments	17,030,710.07			Long term liabilities		
Trade accounts receivable	81,493,233.12		81,493,233.12	Taxes and contributions payable		8,359,817.93
Inventories	58,877,734.67	9,267,647.23	68,145,381.90	Financing Related companies	2,871,751.97	
Taxes recoverable	9,970,670.37		9,970,670.37	Provision for retirement benefit		
Other	2,111,063.55		2,111,063.55	Other accounts payable	1,762,000.00	
	178,380,967.58	9,267,647.23	187,648,614.81		94,436.26	
Non Current assets						
Long term receivables	13,465,732.07		13,465,732.07		37,351,368.41	8,359,817.93

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Permanent  
assets

				Stockholders			
Investments	1,076,708,572.20	1,266,583,030.05	2,343,291,602.25	equity			
Property							
and							
equipment	46,300,617.91	15,320,052.55	61,620,670.46	Capital	390,372,268.17		
Intangible				Revenue			
assets	1,012,979.16		1,012,979.16	reserve	790,233,258.49	1,282,810,911.91	2
Deferred							
charges	5,442,945.51		5,442,945.51				
						1,180,605,526.66	1,282,810,911.91
	1,129,465,114.78	1,281,903,082.60	2,411,368,197.38				
	1,321,311,814.43	1,291,170,729.84	2,612,482,544.27			1,321,311,814.43	1,291,170,729.84

\* \* \*

This Attachment is an integral and inseparable part of the Appraisal Report of the stockholders' equity adjusted "pro forma" by the inventories and fixed assets appreciation of Ipiranga Química S.A., issued by PricewaterhouseCoopers Auditores Independentes, at August 29, 2008.

**Appraisal Report Folder 1**

Prepared by:

**July 2008**

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## INDEX

<b>1. INTRODUCTION</b>	<b>4</b>
<b>2. OBJECTIVE</b>	<b>4</b>
<b>3. OVERALL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS</b>	<b>4</b>
<b>4. OVERALL APPRAISAL CONCEPT</b>	<b>5</b>
4.1. APPRAISAL	5
4.2. ASSET	5
4.3. TANGIBLE OR INTANGIBLE ASSET	5
4.4. PRICE AND MARKET VALUE	5
4.5. COST	6
<b>5. STANDARDS COMPLIED WITH IN THE APPRAISALS</b>	<b>6</b>
<b>6. OVERALL METHODOLOGY USED IN APPRAISING ASSTES</b>	<b>6</b>
6.1. METHODS TO APPRAISE THE VALUE OF AN ASSET, ITS OUTCOMES AND RIGHTS	6
6.1.1. <i>Market data direct comparative method</i>	7
6.1.2. <i>Involution method</i>	7
6.1.3. <i>Evolution method</i>	7
6.1.4. <i>Income capitalization method</i>	7
6.2. METHODS TO IDENTIFY THE COST OF AN ASSET	7
6.2.1. <i>Direct cost comparison method</i>	7
6.2.2. <i>Cost quantification method</i>	7
<b>7. METODOLOGY FOR APPRAISING URBAN PLOTS</b>	<b>7</b>
7.1. PLOTS AND TRACTS DEFINITIONS	7
7.2. CHARACTERIZATION OF PLOTS	8
7.3. MARKET DATA COMPARATIVE METHOD	9
7.4. COST METHOD	9
<b>8. METHODOLOGY FOR APPRAISING BUILDINGS</b>	<b>10</b>
8.1. UNIT VALUES	10
8.2. METHODOLOGY	10
<b>9. METHODOLOGY FOR APPRAISING MACHINES, EQUIPMENT AND INSTALLATIONS</b>	<b>11</b>
9.1. APPRAISAL DEFINITIONS	11
9.1.1. <i>Equity value</i>	11
9.1.2. <i>Valor residual</i>	11
9.1.3. <i>Accomplishment advantage factor</i>	11
9.1.4. <i>Economic life and lifecycle</i>	11
9.1.5. <i>Commercial value</i>	12

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9.1.6. <i>At cost value</i>	12
9.1.7. <i>Depreciated value</i>	12
9.2. APPRAISAL METHOD	12
9.2.1. <i>Inspection</i>	12
9.2.2. <i>Verification of conservation and maintenance status</i>	12
9.2.3. <i>Data collection</i>	13
9.2.4. <i>Market situation</i>	14
9.3. OVERALL CRITERION ADOPTED	14
9.4. SPECIFIC CRITERIA	14
<b>10. RESULT OF APPRAISALS AND SUMMARIES</b>	<b>16</b>
10.1. APPRAISAL DATA	16
10.2. SUMMARY PER DC	17
10.3. SUMMARY BY ASSET CATEGORY	17
10.4. CONTENTS OF APPRAISAL FOLDERS	18
<b>11. TERM OF RESPONSABILITY</b>	<b>19</b>

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## 1. INTRODUCTION

Stima Engenharia Ltda. company registered in CREA-SP with the no 071.708 -8, with a headquarters at Avenida Fagundes Filho, nº 141, conjunto 55/56, 5º andar, São Paulo SP, registered in the National Companies Register CNPJ under the nº 06.932.665/0001 -10, having been designated to function as a market value evaluator, in the database 31 July 2008, of the fixed real estate assets of the company Ipiranga Química S/A, with a headquarters at Avenida Angélica, nº 2346, São Paulo SP, registered in the National Companies Register CNPJ under the nº 62.227.509/0001 -29, present below the result of their works that will be used for the purposes incorporation.

## 2. OBJECTIVE

The objective of this work is to establish the market value of the assets belonging to Ipiranga Química S/A, for the purpose described above.

The results of the evaluation of the following types of assets are presented here: lots, buildings, improvements, installations, machines and equipment and have as a purpose to comment on the overall concepts, standards and methods used in the evaluation of these assets.

The values expressed in this evaluation are calculated for the base date of 31 July 2008, the same date on which were done the inspections, calculations, quotations and market research for the assets object of this evaluation.

This report was prepared in accordance with the devices set out in article 8 of Law 6404/76 and the alterations of Law 11.638/07.

## 3. OVERALL CONSIDERATIONS, CONTINGENCIES AND LIMITATIONS

This report is subject to the following conditions of independence, contingencies and limitations:

- a) Inspections were performed of all industrial units belonging to the Company. The more relevant assets from the point of view of value were photographed and the images presented in the items on photographic documentation. Typical assets of the installations (cables, piping, valves, instruments, automation systems and others) were randomly inspected pursuant to commonly accepted practice;
- b) Installation assets (cables, piping, valves, instruments, automation systems and others) not inspected individually, were appraised by means of information obtained from the Company's accounting and engineering areas, and assumed to be accurate;
- c) Replacement values were obtained through price surveys conducted at manufacturers and suppliers of such assets. Whenever such quotations could not be obtained, one resorted to calculation methods of the values based on average capacity standards used by companies in the petrochemical or chemical industries for budgeting their projects;

d) Typical installation assets (cables, piping, valves, instruments, automation systems and others) were valued through cost composition calculations, by multiplying unit prices by the quantitative parameters supplied by the Company;

e) To appraise real estate property (plots, buildings, and property improvements) we resorted to information supplied by the administration and engineering areas. Whenever information diverged, we assumed the information supplied by the Engineering Department in documents and blueprints was accurate.

#### **4. OVERALL APPRAISAL CONCEPT**

To better understand the methods, criteria and terminology used in this appraisal report, below we list some of the terms as they are defined by technical appraisal norms.

##### **4.1. Appraisal**

Appraisal consists of the technical analysis performed by an Appraisal Engineer, to identify the value of an asset, its costs, outcomes and rights, as well as to establish feasibility indicators for its economic utilization, for a certain purpose, situation and date.

##### **4.2. Asset**

An asset is something of value, susceptible to being used, or that may be an object entitling to a right, which is a part of equity.

##### **4.3. Tangible or intangible asset**

A tangible asset is such that is well identified in material terms (example: real estate property, equipment, raw materials). An intangible asset is such that is not identifiable in material terms (example: goodwill, brands and patents).

##### **4.4. Price and market value**

Price is the amount for which one effects, or intends to effect, a transaction involving an asset, outcome or right associated therewith.

According to NBR 14653-1 Appraisals of Assets Part 1 Overall Procedures ABNT Brazilian Association of Technical Norms, market value is the most probable amount for which one would voluntarily and consciously negotiate an asset, on a reference date, pursuant to prevailing market conditions.

According to IVS International Valuation Standards, market value is the estimated amount, on an appraisal date, for which one would voluntarily negotiate an asset between a buyer and a seller in a free and legitimate transaction, in which each party acts based on knowledge, prudence and without duress.

#### **4.5. Cost**

Cost is the sum of direct and indirect expenses necessary for production, maintenance or acquisition of an asset, on any given date and under any given circumstance.

#### **5. STANDARDS COMPLIED WITH IN THE APPRAISALS**

The standards applied in drawing up this report are listed below. According to the norms of the ABNT – Brazilian Association of Technical Standards, the values in this report are at least compatible with respect to the essential aspects and precision parameters of Grade I.

The norms applied in this report are:

NBR 14653-1 Appraisals of Assets Part 1 Overall Procedures ABNT – Brazilian Association of Technical Norms

NBR 14653-2 - Appraisals of Assets Part 2 Urban Real Estate - ABNT – Brazilian Association of Technical Norms

NBR 12721 Appraisals of Unit Costs and Preparation of Construction Budget for the Incorporation of Condominium Buildings - ABNT – Brazilian Association of Technical Norms

NBR 14653-5 Appraisals of Assets Part 5: Machines, Equipment, Installations and industrial assets in general - ABNT – Brazilian Association of Technical Norms

Urban Real Estate Appraisal Norm of IBAPE-SP – Brazilian Appraisal and Expert Engineering Analysis Institute of São Paulo – Year 2005 version 2

International Valuation Standards (IVS) – IVS 1: Market Value Basis of Valuation; IVS 2: Valuation Bases Other Than Market Value and IVS 3: Valuation Reporting

International Valuation Standards (IVS) – Guidance Note no. 3 – Valuation of Plant and Equipment – Orientation Notes No. 3 – Appraisal of Industrial Plants and Equipment.

#### **6. OVERALL METHODOLOGY USED IN APPRAISING ASSETS**

The applicable methodology is basically a function of the nature of the asset under Appraisal, the purpose of the Appraisal and the availability, quality and quantity of the information collected in the market. One's choice must be justified, with the objective of portraying market behavior using models that rationally lend support to the credibility of the calculated value.

##### **6.1. Methods to appraise the value of an asset, its outcomes and rights**

As set forth in NBR-14653 of ABNT, the methods to appraise the value of an asset, its outcomes and rights, are the following:



#### 6.1.1. Market data direct comparative method

By this method, an asset's market value is determined by means of technical criteria applied to attributes of comparable elements that comprise a given sample.

#### 6.1.2. Involution method

This is the method that determines an asset's market value based on its efficient usage, in turn based on a technical-economic feasibility study, by means of a hypothetical compatible undertaking with the same characteristics as those of such asset and under the conditions of the market it belongs to, while taking into account feasible scenarios for executing and marketing such product.

#### 6.1.3. Evolution method

This is the method that identifies an asset by the sum of values of its components. If the intent is to determine an asset's market value, then the commercialization factor must be considered.

#### 6.1.4. Income capitalization method

This is the method that determines the value of an asset, based on the current capitalization of its expected net income, while considering feasible scenarios.

### **6.2. Methods to identify the cost of an asset**

As set forth in norm NBR-14653 of ABNT, the methods to determine the cost of an asset are the following:

#### 6.2.1. Direct cost comparison method

This method determines an asset's cost by means of technical criteria applied to attributes of comparable elements that comprise a given sample.

#### 6.2.2. Cost quantification method

This method determines the cost of an asset and its parts through synthetic or analytical budgets based on the quantity of service rendered and the respective direct and indirect costs.

## **7. METODOLOGY FOR APPRAISING URBAN PLOTS**

### **7.1. Plots and tracts - Definitions**

Urban real estate property is such as located within an urban perimeter as defined by law. Plots are portions of land resulting from the dividing up of urban areas.

The dividing up of land extensions into plots ( loteamento ) is a subdivision of a tract of land intended for buildings, with the opening of new roads, public spaces or the extension, modification or expansion of existing roads.

An tract suited for urbanization is a large plot of land appropriate for receiving urban infrastructure works, aimed at its efficient usage, by dividing it up, separating it from a larger land extension, or for implementing an undertaking.

## **7.2. Characterization of plots**

Real estate is an asset comprising a plot and possible improvements incorporated thereto. It can be classified as urban or rural, based on its location, use or purpose.

A plot s classification, according to its use, occurs based on the following factors:

Physical characteristics of the plot, such as location, situation, topography, etc.;

Actual use of similar plots located in the same region;

Usage limitations of a given plot (restrictions or bondage) imposed by competent authorities;

A real estate property s use results from it being economically the most suited from the perspective of its own and surrounding characteristics, subject to compliance with legal limitations.

The characterization of the region where any real estate property is located is essential for the analysis of its value and its appraisal. That is why the following data is collected:

Overall aspects: analysis of economic, political and social conditions, whenever relevant for the market, including atypical former uses or associated stigmas;

Physical aspects: topographic conditions, predominant type of soil, environmental conditions;

Location: situation in the urban context, showing the main influence poles;

Soil usage and occupation: comparison of the current occupation with laws on dividing up and use of a municipality s soil, to then conclude about change trends in the short and medium term;

Urban infrastructure: road system, collective transportation, solid waste collection, drinking water, electric power, telephone, cable networks for data transmission, communication and television, sanitary sewage, rain water and channeled gas;

Current activities: trade, industry and services;

Community equipment: safety, education, health, culture and leisure.

The characterization of plots occurs based on the following data:

Location: situation in the region and as related to public roads, with indications as to limits and boundaries;

Current and intended use in comparison with legislation in force;

Physical aspects: dimensions, form, topography, surface, soil, for comparison with available documentation;

Available urban infrastructure;

Physical and legal restrictions applicable to use.

In accordance with the ABNT NBR 14653-1 text, as related to methodology selection:

The selected methodology must be compatible with the nature of the selected asset, the purpose of the Appraisal and the available market data. To define market value, whenever possible one should prefer the market data direct comparative method.

To obtain a plot's unit value at each site to be Appraised, a market survey of offers or actual sales is always conducted with respect to plots similar to the one under analysis.

In view of the unit price thus determined in market surveys, while applying the above referred to criteria, a plot's final value is calculated.

### **7.3. Market data comparative method**

This method consists of determining a plot's value by direct comparison with other similar ones, by comparing their sales prices, considering common and/or similar characteristics, while concurring that those that generate the same amount of income should have the same value or should be in a proportionate linear relation.

In the search for plots, emphasis was placed on the sale of other fractions, whose locations and characteristics are compatible with those of the asset to be Appraised. The values obtained were adjusted using coefficients to correct form, size and location.

Areas in the Triunfo Petrochemical Pole are negotiated by Ipiranga itself, which holds title to the pole's plots with and without infrastructure. Plot transactions in the region are rare; however the Company has a reference value that is used when submitting offers. To appraise plots of the industrial area we used said referential unit value.

### **7.4. Cost method**

This method consists of determining the value of improvements and improvements to real estate property by drawing up summarized or detailed budgets of all items comprising the final value of any appraised real estate property. The main costs that make up the works are: Primary (material and labor) and Secondary (administrative, profit, building, project, taxes, services and financial costs). The criterion used in this evaluation to determine plot market values was the Market Data Comparative Method .

## **METHODOLOGY FOR APPRAISING BUILDINGS**

For performing the appraisal of buildings and improvements to real estate property, the following aspects need to be well understood:

Constructive, qualitative, quantitative and technological aspects, compared with the available documentation;

Architectural, landscape and functional aspects, including environmental comfort;

Adjustment of any given building with respect to a region's recommended uses;

Occupational conditions.

Buildings were appraised using the reproduction cost method, based on Civil Construction Unit Costs, i.e., always up-to-date unit values, supported by a variety of publications and price surveys on materials and services.

Costs resulting from such studies take into consideration all determinant market price factors. Consequently, there is no room for any add-ons, whether due to the accomplishment advantage factor or to reflect a commercialization factor.

### **8.1. Unit values**

Unit values are updated by using computers, resulting in a registry of innumerable budgets and costs, and covering a broad variety of services and materials supplied for civil construction works.

Such costs, reflected to this report's base date, are used in composing costs of each construction phase and of each building to be appraised.

### **8.2. Methodology**

The building appraisal services are rendered in several phases, which can be summarized as follows: Data and blueprint collection, and of other constructive details of each building.

During and after inspection of buildings, the comparison of blueprints and other documents provided, containing each building's actual situation.

Determination of the volume of services and materials for each constructive phase (such as earthmoving, building of the framework, finishing, special installations, etc) of each building.

By resorting to computers, the volumes determined are listed along with the cost of each on the base date of the appraisal reports, thus resulting in the replacement cost of each constructive phase and for the building as a whole.

Use of a depreciation factor in each construction phase (when applicable), in accordance with the apparent age and the (probable) remaining life of a building.

By remaining life of assets, one should understand the expected remaining physical life of assets, which is the scope of this report, determined according to technical parameters for applying said depreciation factor pursuant to Brazilian Appraisal Norms, while using the following items as parameters for determining the depreciation factor:

Apparent age of assets;

Apparent state of assets;

Conservation state of assets;

Reform and maintenance plan (preventive and corrective) performed for assets;

Operation modus of assets;

Obsolescence phase of assets.

## **9. METHODOLOGY FOR APPRAISING MACHINES, EQUIPMENT AND INSTALLATIONS**

### **9.1. Appraisal definitions**

In order to describe the methodologies used in the appraisal process of assets set forth in this report, one must mention some important definitions for better understanding.

#### 9.1.1. Equity value

This is the amount that corresponds to the total assets held by an individual or corporate person.

#### 9.1.2. Valor residual

This is the amount that corresponds to any given asset at the end of its life.

#### 9.1.3. Accomplishment advantage factor

This is the difference between market value of an asset and the cost of redoing it, whenever such difference is positive.

#### 9.1.4. Economic life and lifecycle

Economic life is the operational time span of an asset, whereas its lifecycle is its functional time span.

#### 9.1.5. Commercial value

This is the value currently given an asset in commercial transactions under normal market conditions or to an asset identical or similar to the one under Appraisal.

#### 9.1.6. At cost value

This is the price actually paid for an asset or good, plus direct expenses necessary to become the holder of such asset or good, such as packaging, taxes, freight, legal expenses (deeds, etc.), which directly encumber the price paid or reimbursement therefore.

#### 9.1.7. Depreciated value

This is the value of an asset or good after deducting all amounts relative to physical depreciation, use and obsolescence.

### **9.2. Appraisal method**

The phases in which to appraise machines, equipment and installations are informed below, in the different sections that comprise this report.

#### 9.2.1. Inspection

Inspection is indispensable for executing the appraisal work. Exceptionally, when access to the Appraised asset is not possible, one may admit resorting to a paradigm situation, provided agreed upon by the parties and set forth in the report.

The inspection is aimed at knowing and characterizing the appraised asset and its suitability for its market segment, resulting in conditions to orient data collecting.

During inspections, the appraiser goes about collecting technical data, on physical characteristics and on an asset's use, along with other relevant factors to define value.

Upon performing an inspection, the appraiser takes notes on an appraised asset's characteristics, surveys technical data, while analyzing aspects related to its state of conservation and maintenance.

#### 9.2.2. Verification of conservation and maintenance status

The analysis of the state of conservation and maintenance is one of the most important factors to reach a judicious conclusion concerning the value of an Appraised asset. For better understanding, the definition of these two variables is:

Conservation: The act or effect of safeguarding from damage, decay, loss and other risks, through thorough verification, its use and conditions of use and the preservation of technical and functional characteristics of a building, its installations and equipment.

**Maintenance:** The set of activities to be undertaken to conserve, maintain or recover the functional capacity of an asset and its constituent parts, while in no way affecting its operational capacity or lifecycle.

In our day and age, maintenance can be divided in preventive, corrective and predictive. Preventive maintenance, the more common, seeks to avoid the occurrence of errors in an asset's functioning, through constant testing and cleaning of its components, contributing to keeping the machines and the environment in perfect functional conditions, offering maximum efficiency in performing its activities.

Predictive maintenance, based on data on an asset's wear and decay, seeks to estimate the life of its components. The state of machinery must frequently be monitored, to allow for parts' replacement at the right moment, avoiding unexpected downtime.

Finally, corrective maintenance occurs when defects and errors, caused by an asset's use and age, are detected through preventive maintenance, and may result in unexpected expenses if not corrected.

The difference between maintenance and repair. Maintenance, in its several modalities, ultimately seeks to keep an asset functioning. Even in corrective maintenance, defects and errors must be corrected even if due to their nature they do not result in an asset breaking down, because otherwise at any given moment they may cause the Company severe damage.

### 9.2.3. Data collection

During the inspection phase, the collection of data on the characteristics of each asset is performed, examining blueprints, documents, projects in short everything that may clarify relevant aspects for the Appraisal.

In the data collection phase the following tasks are performed:

- Market surveys seeking data on attributes resembling those of the asset under Appraisal in the closest manner possible;

- Identification of information sources, whereas, whenever possible, information shall always be certified to increase reliability of researched data;

- Identification of relevant characteristics of collected market data;

- Search for market data, preferably with the same characteristics of the Appraised asset (same age, capacity, etc.)

#### 9.2.4. Market situation

Upon the collection of market data on offers one seeks to obtain information on time of exposure to the market and, in the case of transactions being effected, the payment modality adopted and the date on which they occurred.

### 9.3. Overall criterion adopted

The valorization of machines, equipment and installations was effected by the reproduction or replacement cost method.

Overall criteria used in appraising machines, equipment and all other movable assets followed the standard used in most movable asset appraisal work, i.e., they were based on setting a new value for a replacement asset by surveying manufacturers, suppliers, representatives, etc.

Establishing an asset's going market value occurred by observing its state of maintenance, conservation and characterization of its technical obsolescence.

An asset's new replacement value can be summarized as being the sum of all its acquisition price items, along with all taxes, fees, transportation costs to the construction site, as well as the cost of materials for installation work, the respective labor, also as concerning special or normal finishing, such as ordinary or special paint, thermal isolation, etc.

Depreciation: until now the focus has been on value based on the probable reproduction or replacement cost, without reference to depreciation resulting from age, use and obsolescence. Depreciation can be defined as inevitable loss of value of a factory, equipment and materials over time, caused by chemical action or corrosion, physical action (decay, decrepitude, abrasion, normal wear, deferred maintenance or repairs), inadequateness and obsolescence.

The depreciation coefficient is what adjusts an asset's market value. By applying depreciation due to replacement price (or cost), one comes up with the market value.

### 9.4. Specific criteria

Installation assets (cables, piping, valves, instruments, automation systems and others) were valued by calculating the cost composition, multiplying unit prices by the quantities informed by the Company.

In composing costs, we used factors for the following costs: labor, engineering, management, installations and assembly. Such factors were obtained in surveys conducted at manufacturers and in the engineering and project departments, as well as from specialized engineering literature.

In it not being possible to obtain an asset's value from a manufacturer, we resorted to unit values based on nominal or installed capacity, informed by manufacturers of similar equipment for the sake of project calculations.



The age assumed for each appraised asset was a function of the acquisition data (as registered in the equity control registry) and the information obtained in the engineering and maintenance departments.

Lifecycle expectations and residual values (scrap factor) were also obtained through surveys at manufacturers and in specialized engineering literature.

**10. RESULT OF APPRAISALS AND SUMMARIES****10.1. Appraisal data**

<b>Appraisal summary</b>	
Requester:	<b>Ipiranga Química S/A</b>
Assets the property of:	<b>Ipiranga Química S/A</b>
Base Localization date for of the the values assets:	<b>The assets object of the evaluation are situated in the following Storage and Distribution Centers the property of Ipiranga Química S/A: DC Canoas, located at Rua Carlos Fagundes de Melo, nº 695, Parte Canoas RS DC Guarulhos, located at Avenida Ladslau Kardos, nº 250, Jardim Aracília, Guarulhos SP DC Duque de Caxias, located at Rua Luiz de Camões, 26 Parte Campos Elíseos, Duque de Caxias RJ</b>
Purpose:	<b>July 31, 2008</b>
Type of value shown:	<b>Evaluation for incorporation purposes.</b>
Classification as to the economic sector:	<b>Market value for purchase</b>
Classification according to the situation of the assets:	<b>Secondary Sector base industry</b>
Classification of the types of assets evaluated:	<b>Assets installed, integrated to the operational and administrative process.</b>
Grade basis: (according to ABNT NBR 14653- 5:2006 Tab-4)	<b>Lots, buildings, improvements, installations, machines and equipment.</b>
Values of the lots:	<b>The report is classified as GRADE I as to its basis</b>
Values of the buildings and improvements:	<b>R\$ 10,285,000.00 (ten million, two hundred and eighty five thousand reais)</b>
Values of the machines, equipment and installations:	<b>R\$ 33,936,400.00 (thirty three million, nine hundred and thirty six thousand and four hundred reais)</b>
Total value Evaluated:	<b>R\$ 25,680,482.00 (twenty five million, six hundred and eighty thousand, four hundred and eighty two reais)</b>
Assets the property of:	<b>R\$ 69,901,882.00 (sixty nine million, nine hundred and one thousand, four hundred and eighty two reais)</b>

**10.2. Summary per DC****Summary of DC GUARULHOS**

Lots	8,316,000.00	8,316,000.00
Buildings and improvements	27,518,000.00	24,561,700.00
Machines and equipment	17,978,318.00	15,217,164.00
Installations	6,438,930.00	5,666,259.00

<b>Total value DC GUARULHOS</b>	<b>60,251,248.00</b>	<b>53,761,123.00</b>
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**Summary of DC CANOAS**

Lots	549,000.00	549,000.00
Buildings and improvements	4,637,600.00	3,431,500.00
Machines and equipment	2,465,835.00	2,117,405.00
Installations	887,701.00	594,759.00

<b>Total value DC CANOAS</b>	<b>8,540,136.00</b>	<b>6,692,664.00</b>
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**Summary of DC DUQUE DE CAXIAS**

Lots	1,420,000.00	1,420,000.00
Buildings and improvements	8,032,100.00	5,943,200.00
Machines and equipment	2,527,677.00	1,428,903.00
Installations	898,620.00	655,992.00

<b>Total value DC DUQUE DE CAXIAS</b>	<b>12,878,397.00</b>	<b>9,448,095.00</b>
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**Grand total: 81,669,781.00 69,901,882.00**

**10.3. Summary by asset category**

Account description		Current Value	
		New Value R\$	R\$
Lots	Guarulhos	8,316,000.00	8,316,000.00
Lots	Canoas	549,000.00	549,000.00
Lots	Duque de Caxias	1,420,000.00	1,420,000.00
<b>Total Value of Lots</b>		<b>10,285,000.00</b>	<b>10,285,000.00</b>
Buildings and Improvements	Guarulhos	27,518,000.00	24,561,700.00
Buildings and Improvements	Canoas	4,637,600.00	3,431,500.00
Buildings and Improvements	Duque de Caxias	8,032,100.00	5,943,200.00

Total Value of Buildings and Improvements	40,187,700.00	33,936,400.00
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Machines and Equipment	Guarulhos	17,978,318.00	15,217,164.00
Machines and Equipment	Canoas	2,465,835.00	2,117,405.00
Machines and Equipment	Duque de Caxias	2,527,677.00	1,428,903.00

Total Value of Machines and Equipment	22,971,830.00	18,763,472.00
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17

Account description		New Value R\$	Current Value R\$
Installations	Guarulhos	6,438,930.00	5,666,259.00
Installations	Canoas	887,701.00	594,759.00
Installations	Duque de Caxias	898,620.00	655,992.00
<b>Total Value of Installations</b>		<b>8,225,251.00</b>	<b>6,917,010.00</b>
<b>Grand Total:</b>		<b>81,669,781.00</b>	<b>69,901,882.00</b>

#### 10.4. Contents of appraisal folders

This appraisal report consists of three folders, distributed as follows:

##### **Folder 1 Summary Folder**

This is the folder with the following content: objective, norms, methodology, summary of appraised values, possible limitations, and the report's term of responsibility.

##### **Folder 2 Appraisal of Plots, Buildings and Improvements**

This folder entails the appraisal of lots, buildings and improvements at the following units:

DC Guarulhos located at Avenida Ladslau Kardos, n° 250, Bairro Jardim Aracília, Guarulhos SP.

DC Canoas located at Rua Carlos Fagundes de Mello, n° 695 - Parte - Bairro São José, Canoas RS.

DC Caxias located at Rua Luiz de Camões, 26 Parte, Campos Elíseos, Duque de Caxias RJ.

##### **Folder 3 Appraisal of Machines, Equipment and Installations**

Its content comprises photographic documentation, summaries and listings of the appraisal of machines, equipment and industrial installations located at:

DC Guarulhos located at Avenida Ladslau Kardos, n° 250, Bairro Jardim Aracília, Guarulhos SP.

DC Canoas located at Rua Carlos Fagundes de Mello, n° 695 - Parte - Bairro São José, Canoas RS.

DC Caxias located at Rua Luiz de Camões, 26 Parte, Campos Elíseos, Duque de Caxias RJ.

## 11. TERM OF RESPONSABILITY

This report presents the result of the evaluation of the assets belonging to Ipiranga Química S/A.

The fixed and current assets were inspected physically and evaluated by qualified technical professionals, seeking to check their physical and operational characteristics and their states of preservation.

This evaluation was prepared according to the standards of IBAPE – Brazilian Institute for Evaluations and Engineering reports, the ABNT – Brazilian Technical Standards Association and IVS – International Valuation Standards.

This report is subject to the following conditions of independence, contingencies and limitations:

This evaluation was prepared with the specific purpose defined in the topic Objective . Its use for any other purpose, or date base different from that specified, as well as the partial extraction of data without the full text will not show reliability;

None of the members of Stima Engenharia Ltda., participants in this work, have currently or plan to have in the future interest of any kind in the assets included in this report;

We consider that the information obtained from third parties is reliable and was supplied in good faith;

Stima Engenharia Ltda. Does not assume any responsibilities for physical or economic factors that may affect the opinions presented in this report, that occur after the date base established here;

The current work and evaluation report are based on documents and plans supplied by the technical areas of Braskem. The evaluators, therefore, do not assume any responsibility for legal or engineering materials, outside those implicit in the exercise of their specific functions in this case, established under laws, codes or own regulations;

It should be noted that all the values stated in this report (lots, buildings, improvements, installations, machines and equipment) refer to cash values. There was also not considered any debts or mortgages that perchance onerate the evaluated assets. The existence of such facts, if there are any, was not brought to the knowledge of the evaluators;

The report is based on data collected in physical inspections and on information supplied by those interested and reflects the set of assets physically existing in the accounts for lots, buildings, improvements, installations, machines and equipment and their respective technical and operational characteristics as at the base date of the report;

Also considered in the values evaluated are the investments and expenses recorded in the accounts for work in progress, even if the project or investment had not yet been concluded;

The date base of the current work, or that is, the time at which are based all the analyses of the values is 31 July 2008;

Acceptance of this report presupposes agreement with the terms of this declaration of independence, contingencies and limitations.

São Paulo, 15 August 2008.

**Stima Engenharia Ltda.**  
CREA-SP 071.708 -8

(A free translation of the original in Portuguese)

**Petroquímica Paulínia S.A.**  
**Appraisal Report on the Stockholders**  
**Equity at July 31, 2008**  
**for the Purpose of Incorporation**

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(A free translation of the original in Portuguese)

**Appraisal Report on the Stockholders' Equity at July 31, 2008 for the Purpose of Incorporation**

**Petroquímica Paulínia S.A.**

PricewaterhouseCoopers Auditores Independentes, professional partnership established in the capital of the state of São Paulo, located at Av. Francisco Matarazzo, 1400, (Torre Torrino, Floors 9, 10, 13, 14, 15, 16 and 17 - Agua Branca), primary registered with the Regional Accounting Council (CRC) of the State of São Paulo under No. 2SP000160/O-5, and enrolled in the National Corporate Taxpayers' Register (CNPJ/MF) under No. 61,562,112/0004-73, with its partnership deed registered at the 4th Registry Office of Deeds and Documents of São Paulo, SP, on September 17, 1956, and subsequent amendments registered at the 2nd Registry Office of Deeds and Documents of São Paulo, SP, with the last amendment dated June 29, 2008, having been registered in microfilm under No. 96,041, on July 30, 2008, represented by its undersigned partner, Mr. Felipe Edmond Ayoub, Brazilian, married, accountant, holder of Identity Card No. 15,895,085-SSP/SP, enrolled in the Individual Taxpayers Register (CPF) under No. 125,046,418-85 and with the Regional Accounting Council of the State of São Paulo (CRC) under No. 1SP187402/O-4, with office located in the same address of the grantor partnership, was appointed as expert by Petroquímica Paulínia S.A. to proceed with an appraisal prepared based on the book value of the stockholders' equity at July 31, 2008, in accordance with Brazilian Corporate Law, Law 6,404/76, § 1, Article 8, with the objective to support the incorporation process of Petroquímica Paulínia S.A. into Braskem S.A.

The appraisal of the stockholders' equity mentioned above was made in conjunction with the audit of the balance sheet of Petroquímica Paulínia S.A. at July 31, 2008. This balance sheet was prepared under the responsibility of the Company's management, with the specific purpose of supporting the incorporation of Petroquímica Paulínia S.A. into Braskem S.A.

Petroquímica Paulínia S.A.

We conducted our audit in accordance with approved Brazilian auditing standards which require that we perform the audit to obtain reasonable assurance about whether the financial statements are fairly presented in all material respects. Accordingly, our work included, among other procedures: (a) planning our audit taking into consideration the significance of balances, the volume of transactions and the accounting and internal control systems of the Company, (b) examining, on a test basis, evidence and records supporting the amounts and the financial information disclosed; and (c) assessing the accounting practices used and significant estimates made by management.

Based on our work, we conclude that the amount of the assets, rights and obligations which form the stockholders equity of Petroquímica Paulínia S.A., in accordance with the Company's balance sheet at July 31, 2008, shown in the Attachment, is R\$ 280,000,000.00, and is recorded in the books of account in conformity with accounting practices adopted in Brazil.

In conformity with the standards of NPA 14 of September 24, 2007 - Appraisal Reports issued by an Independent Auditor, issued by the Institute of Independent Auditors - IBRACON and with the Brazilian Securities Commission (CVM) Instruction 319 of December 3, 1999, we confirm that:

(a) in accordance with the professional standards established by the Federal Accounting Council through Resolution 821/1997, we are not aware of any conflicts of interest, whether direct or indirect, or any other circumstance which otherwise represents a conflict of interest in relation to the service above, and

(b) we are not aware of any action by the majority stockholder or the company's management intended to influence, restrain, impair or practice any actions which have or might have compromised access to, use of or awareness of information, assets, documents or work methodologies that are material to the quality of this report.

São Paulo, August 25, 2008

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5

Felipe Edmond Ayoub  
Contador CRC 1SP187402/O-4

**Attachment to the Appraisal Report on the Stockholders' Equity at August 25, 2008****Summarized Balance Sheet at July 31, 2008**

in Thousand of Reais

**Assets**

Current assets	174,184
Long term receivables	30,585
Permanent assets	777,397
<b>Total assets</b>	<b>982,166</b>

**Liabilities and stockholders' equity**

Current liabilities	105,264
Long term liabilities	596,902
Stockholders' equity:	
Paid up capital	280,000
<b>Total liabilities and stockholders' equity</b>	<b>982,166</b>

This Attachment is an integral and inseparable part of the Appraisal Report of the Stockholders' equity of Petroquímica Paulínia S.A., prepared based on the book value of the stockholders' equity at July 31, 2008, and issued by PricewaterhouseCoopers Auditores Independentes, at August 25, 2008.

**REPORT**

**RJ-0375/08**  
**1/2 COPIES**

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**REPORT** RJ-375/08 -01  
**REFERENCE DATE:** July 31, 2008.  
**REQUESTED BY:** **BRASKEM S.A.**, headquartered at Rua Eteno, 1.561, Camaçari Industrial Complex, in the city of Camaçari, state of Bahia, corporate taxpayer s ID (CNPJ) 42.150.391/0001 -70, hereinafter referred to as **BRASKEM**.

**PURPOSE:** Intangible assets of the following companies:

**BRASKEM**, qualified above;

**COPEsul - CIA. PETROQUÍMICA DO** headquartered at Rodovia BR-386, Rodovia Tabai/Canoas, km 419, CON 850 C Básico, Industrial Complex in the city of Passo Raso, state of Rio Grande do Sul, corporate taxpayer s ID (CNPJ) 88.948.492/0001 -92, hereinafter referred to as **COPEsul** ; and

**IPIRANGA PETROQUÍMICA S.A.**, headquartered at III Pólo Petroquímico, s/n, Lote 04, in the city of Triunfo, state of Rio Grande do Sul, corporate taxpayer s ID (CNPJ) 88.939.236/0001 -39, hereinafter referred to as **IPQ**.

**OBJECTIVE:** Identify and establish the fair market value of intangible assets owned by **BRASKEM**, **COPEsul** and **IPQ**, aiming to provide parameters for the merger of petrochemical assets of **IPQ** and **COPEsul** to consolidate **BRASKEM** s petrochemical business.

## EXECUTIVE SUMMARY

APSYS CONSULTORIA EMPRESARIAL Ltda., hereinafter referred to as APSIS, headquartered at Rua São José, nº 90, grupo 1.802, in the city and state of Rio de Janeiro, corporate taxpayer's ID (CNPJ) 27.281.922/0001 -70, was appointed to establish fair market value of the intangible assets of BRASKEM, COPEL and IPQ, aiming to provide the parameters for the merger of petrochemical assets of IPQ and COPEL to consolidate BRASKEM's petrochemical business.

## IDENTIFICATION OF MATERIAL INTANGIBLE ASSETS

The following material intangible assets were identified, listed by owner:

### **BRASKEM : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL**

PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen, Toluene and Ortho-xilene) to the following companies: Oxiteno S.A. Indústria e Comércio, DOW Brasil S.A., Elekeiroz S.A., Acrinor Acrilonitrila do Nordeste S.A., Suzano Petroquímica S.A., Deten Química S.A., Oleoquímica Ind. Com. Prod. Químicos Ltda. and Dow Brasil Nordeste Ltda. TDI (DOW-TDI).

**COPEL : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS** (Ethene, Propene, Benzene, Hydrogen and C4) to the following companies: Innova S.A., Petroquímica Triunfo S.A., DSM Elastômeros Brasil Ltda. and Oxiteno S.A. Indústria e Comércio.

No material agreements owned by IPQ were identified.

No material intangible assets were identified related to intellectual property (trademarks and patents) owned by the underlying companies, ) *companies* as these are commodity companies (*1<sup>st</sup> and 2<sup>nd</sup> generation* . The material operating assets for cash generation of these companies are equipment and industrial plant component systems, tangible assets whose market values are broken down in specific reports.

## VALUATION METHODOLOGY

In order to value BRASKEM's and COPESUL's material agreements, first we analyzed material intangible assets contributing to the Net Operating Revenue of each company. Once the material intangible assets were selected (agreements for the supply of essential petrochemicals), the future profitability approach was applied to establish the value of the agreement. (*Valuing Intangible Assets* - Reilly, Schweih's ),

The future profitability methodology is based on the retrospective analysis, scenarios projection and discounted cash flows. The economic -financial modeling begins by defining the macroeconomic, sales, production, cost assumptions and the company's investments or business unit which has been valued.

Sales price projections and the corresponding net margins were estimated according to historical performance and multiannual budgets of each underlying company.

**FINAL AMOUNTS VERIFIED**

Based on studies prepared by APSIS on the reference date as of July 31, 2008, the appraisers found the following fair market values for the material agreements of BRASKEM and COPESUL:

**MARKET VALUE OF AGREEMENTS - BRASKEM (R\$ thousand)**

	discount rate (p.a.)
	10.0%
<b>OXITENO</b>	<b>201,644</b>
<b>DOW</b>	<b>(2,543)</b>
<b>ELEKEIROZ</b>	<b>(9,758)</b>
<b>ACRINOR</b>	<b>71,980</b>
<b>SUZANO</b>	<b>75,149</b>
<b>DETEN</b>	<b>33,257</b>
<b>OLEOQUÍMICA</b>	<b>1,097</b>
<b>DOW-TDI</b>	<b>92</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>	<b>370,919</b>

**MARKET VALUE OF AGREEMENTS - COPESUL (R\$ thousand)**

	discount rate (p.a.)
	10.0%
<b>VALUE OF INNOVA AGREEMENT</b>	<b>110,763</b>
<b>VALUE OF PETROQUIMICA TRIUNFO AGREEMENT</b>	<b>62,261</b>
<b>VALUE OF DSM ELASTOMEROS AGREEMENT</b>	<b>12,025</b>
<b>VALUE OF OXITENO AGREEMENT</b>	<b>11,638</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>	<b>196,686</b>



**TABLE OF CONTENTS**

1. INTRODUCTION	6
2. PRINCIPLES AND RESERVATIONS	7
3. LIMITATIONS OF RESPONSIBILITY	8
4. VALUATION METHODOLOGIES	9
5. COMPANIES FEATURES	11
6. INTANGIBLE ASSETS VALUATION	15
7. CONCLUSION	18
8. LIST OF ATTACHMENTS	19

## 1. INTRODUCTION

APSYS CONSULTORIA EMPRESARIAL Ltda. hereinafter referred to as **APSYS**, headquartered at Rua São José, n° 90, grupo 1.802, in the city and state of Rio de Janeiro, corporate taxpayer's ID (CNPJ) 27.281.922/0001 -70, was appointed to establish the market value for the purchase and sale of intangible assets of BRASKEM, COPEL and IPQ, aiming to providing parameters for the merger of petrochemical assets of IPQ and COPEL to consolidate BRASKEM's petrochemical business.

When preparing this report, we considered data and information provided by third parties, including documents and oral interviews with the client. Estimates employed in this study are based on documents and information, which include, among others, the following:

- Analysis of financial reports;
- Economic ratios study and projections;
- BRASKEM Group's strategic planning;
- Company's managerial budgets and reports.

APSYS team, which is responsible for the preparation of this study, comprises the following professionals :

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## 2. PRINCIPLES AND RESERVATIONS

This report, subject matter of the following enumerated, calculated and specified study is strictly based on the basic principles outlined below:

Consultants involved in this study do neither have personal relationship nor interest towards the subject, and there is no conflict of interest preventing them from preparing this report.

To the best of the consultants' knowledge, credit, analyses, opinions and conclusions contained in this Report are based on true and precise information, diligences, researches and surveys.

This report includes all restricting conditions required by adopted methodologies, which affect the analyses, opinions and conclusions included in it.

APSYS professionals' fees are under no circumstances subject to the conclusions of this report.

APSYS is fully responsible for the Valuation Engineering, including the implied valuations in the performance of its honorable duties, which are provided for by laws, codes or proper regulations.

In this report, information provided by third parties is deemed as accurate, and their sources have been included in this report.

This report was prepared by APSIS and nobody, other than its own consultants, has worked on analyses nor contributed to the respective conclusions.

For projection purposes, we have assumed the non-existence of any kind of in-court or out-of-court burden or lien involving the companies, except for those included in this report.

This report complies with all specifications and criteria established by USPAP (Uniform Standards of Professional Appraisal Practice), as well as the requirements issued by different authorities, such as: Ministry of Finance, Central Bank of Brazil, Banco do Brasil, CVM or Securities and Exchange Commission of Brazil, SUSEP or Private Insurance Superintendence, RIR or Income Tax Regulation, etc.

IFRS 3 Report, Business Combinations.

IAS 38 Report, Intangible Assets.

### **3. LIMITATIONS OF RESPONSIBILITY**

When preparing this report, APSIS has used information and historic data audited by third parties, as well as non-audited information and projections, provided on a written or oral basis by the company's management or obtained from mentioned sources. APSIS has deemed as true all information and data obtained for this report and assumes no responsibility regarding its accuracy.

The scope of this study includes neither the auditing of financial statements nor the revision of work performed by its auditors.

Our study was developed for the use by proposer and other companies involved in this project, whose purpose was previously outlined. Therefore, this report must not be published, distributed, reproduced, disclosed or used for other purposes rather than those already mentioned, without the prior written approval of APSIS.

We are not liable for eventual losses incurred by the proposer and its shareholders, officers, creditors or other parties resulting from the utilization of data and information provided by the company and included in this report.

Analyses and conclusions contained in this report are based on several assumptions, made on this present date, on future operating projections, such as: prices, volumes, market share, revenues, taxes, CAPEX, operating margins, etc. Thus, future operating income of the company may differ substantially from any forecast or estimate contained herein.

#### 4. VALUATION METHODOLOGIES

The recognition of intangible assets materiality in the business world has grown at a rapid pace, as more and more companies have been traded based on their off-balance sheet assets.

Our intellectual property and intangible assets valuation is not concerned with precisely establishing a specific amount, but to collect the as much data and information as possible about its businesses and its market, which jointly analyzed and modeled may allow to the appraiser to define a probable amount for the subject matter of the study, in light of specific features of circumstances and objectives studied.

All the companies have an assets portfolio, which are subject to the execution and continuance of operations, with a view to generating profits that represent a satisfactory return on capital invested. These assets are divided into three categories:

Monetary assets represented by net current assets, or the difference between current assets (cash, short-term investments, trade accounts receivable, inventories etc.) and current liabilities (suppliers, accounts payable, income tax etc.);

Fixed assets (tangible assets) are assets which may be touched, i.e., they physically exist. These include machinery and equipment, land, vehicles, properties, among others;

Intangible assets and intellectual property intangible assets are those which physically do not exist, but provide rights and privileges to their owners. They are mainly represented by customer portfolio, agreements, customer relationship, franchising etc. The intellectual property generally refers to trademarks and patents, copyrights and know-how. It represents a special classification within intangible assets, as its owner is protected by law against illegal intellectual property exploration by third parties.

All of the asset valuation approaches are based on the replacement principle. This principle assumes that a cautious buyer will not pay a higher value for a property than the acquisition cost of replacing property with same purpose.

Based on replacement principle, three types of approaches may be used to establish the value of an intangible asset are defined. For each valuation, the most appropriate approach must be chosen, however, they must be used jointly, as follows:

Market approach compares the assets under analysis with other similar assets recently sold or which have been tendered;

Cost approach measures the investment required to reproduce a similar asset, showing a capacity identical to the generation of benefits;

Income approach it defines the value of an asset as the present value of future benefits resulting from its property right.

Specifically concerning the valuation of material agreements owned by BRASKEM, IPQ and COPESUL, first, the long-term material agreements were analyzed that contribute to the Net Operating Revenue of each company.

The agreements for the supply of essential petrochemicals have been selected as material for the present valuation and the income approach (cash flow) was applied to establish the value of the agreement (*Valuing Intangible Assets Reilly, Schweih's*).

### **INCOME APPROACH: CASH FLOW**

This methodology defines the profitability of product/service as its operating value, corresponding to the future discounted net cash flow value. This flow is composed of net income after taxes, accrued of non-cash items (amortization and depreciation) and deducting investments in operating assets (working capital, plants, installed capacity etc.). We used in this present report, in simplified form, the projected net margin for each company as a percentage of NOR for each agreement.

The projection period used was the remaining term of each agreement, as detailed in Attachment 1.

### **DISCOUNT RATE**

The discount rate used to calculate the present value of income verified from projected cash flows represents the minimum profitability required by shareholders. The rate used in this present report is the same ACTUAL profitability rate (excluding inflation) defined by BRASKEM Group in the feasibility analysis of companies internal projects (10% p.a.).

## 5. COMPANIES FEATURES

### THE PETROCHEMICAL INDUSTRY

The petrochemical industry that integrates the chemical industry is characterized by using oil byproducts (naphtha) or gas natural as essential raw materials.

After being extracted, oil undergoes a refinement process which produces various byproducts, such as gasoline, diesel fuel, gas and naphtha. Naphtha is the main raw material of the petrochemical and plastic production chain in Brazil, followed by natural gas. Naphtha first undergoes a process called cracking that results in the essential petrochemicals (ethene, propene, butadiene, benzene, solvents and fuels). This production cycle is known as the first generation of the petrochemical chain. From these products, the second generation companies produce polymers and copolymers, including thermoplastic resins, which will be used as raw materials by the plastic manufacturing industry that composes the third petrochemical generation. Resins, generally as small grains or as powder, are employed by third generation companies to manufacture packages, toys, automotive components, home appliances, parts for the electric -electronics industry and home builders, among several other applications.

Essential petrochemicals are raw materials destined to four large production chains:

Thermoplastic resins chain: produced from ethene and propene by second generation industries and are sold to plastic manufacturers.

Elastomers chain: sold to rubber manufacturers.

Solvents chain: comprises the paint, footwear, furniture, agribusiness industries and other sectors that process essential petrochemicals to produce solvents, labels and others.

Fuels chain: comprises fuel distributors and others.



BRASKEM was incorporated in August 2002, when the Odebrecht and Mariani groups integrated their petrochemical assets with Copene Petroquímica do Nordeste S.A., the former petrochemical raw materials hub of Camaçari complex, in the state of Bahia, which they have controlled since 2001. These two groups joined their petrochemical companies creating BRASKEM, the first integrated petrochemical company of Brazil, i.e., combining first and second generation operations of the plastic production chain into a single company.

With 18 plants located in the states of Alagoas, Bahia, São Paulo and Rio Grande do Sul, and a total production of 5.7 million tonnes, among resins, essential and intermediate petrochemicals, BRASKEM generates nearly 3,000 direct jobs and 5,000 indirect jobs. In the essential petrochemicals industry, BRASKEM produces ethene, propene, benzene, caprolactam and DMT, besides gasoline and LPG. In the thermoplastic resins segment, where BRASKEM is leader in Latin America, it produces polyethylene, polypropylene, PVC and PET, among others.

The Company also maintains the Innovation & Techonology Center of BRASKEM (CTI) for the development of products, processes and applications in partnership with clients. With a total of 19 laboratories and seven pilot plants, CTI is composed of units in 3 cities: Camaçari (BA), São Paulo (SP) and Triunfo (RS). The company also maintains cooperation agreements with universities and research institutions in Brazil and overseas.

Currently, BRASKEM is controlled by Odebrecht group, which owns a direct and indirect interest in the company, in addition to owning control of Norquisa, a holding company that also integrates BRASKEM's controlling group. Petroquisa (petrochemical arm of Petrobras) Petros pension funds (of Petrobras) and Previ (Banco do Brasil) are also shareholders of the company. BRASKEM shares are listed at the Stock Exchanges of São Paulo (Bovespa), New York and Madrid.

BRASKEM's net revenues in 2007 increased 11% when compared to the previous year, amounting to R\$18.8 billion, corresponding to US\$9.7 billion. This performance is a result of higher volumes sold in the domestic market (up by 8% in the volume of resins, ethene and propene) and 12% export growth, reaching 24% of net revenues or US\$2.3 billion. Export revenues reflect higher international market prices and a better valuation of products thanks to direct sales to clients.

IPQ is located in Triunfo Industrial Complex (RS), it has five industrial plants, which in addition to Linear High Density Polyethylene (LHDPE), of which is the largest producer of Latin America, they produce Linear Low Density Polyethylene (LLDPE), Linear Medium Density Polyethylene (LMDPE) and Polypropylene (PP). The expansion of production capacity of Companhia Petroquímica do Sul (COPE SUL), due to installation of a new furnace at the production unit 2, contributed to IPQ have an additional supply of approximately 12 thousand tonnes/year of ethene and 9.2 thousand tonnes/year of propene.

In addition, the installed capacity increased 30 thousand tonnes/year to a total capacity of 180 thousand tonne/year. Nevertheless, this capacity was not fully utilized in 2006. Even so, as a result of these increases and optimizations in operating and production processes, IPQ in 2006 attained its largest global production, as shown in the chart below:

Product	Volume produced (thousand tonne/year)		
	2006	2005	Change (%)
LHDPE	382.6	347.1	10.2 %
LHDPE /LMDPE/LLDPE	109.1	95.7	14.0 %
PP	146.3	131.0	11.7 %
<b>Total</b>	<b>638.0</b>	<b>573.8</b>	<b>11.2%</b>

As a result of greater supply of thermoplastic resins in the Brazilian market, IPQ ramped up its exports by 15.44% in relation to the previous year. In 2006, revenues generated by exports reached a total of R\$77.22 million, accounting for a 1.3% increase.

The company maintained its market share in Latin America, mainly in Argentina and Chile and now has three additional distribution channels in the Andean Pact region.

Referring to domestic market share, IPQ grew 12.33% for PP and showed a slight decrease to 39.77% for LHDPE. Year-to-date, volumes sold increased in relation to 2005, 7.8% for LHDPE and 14.66% for PP.

COPEsul is a first generation company (also known as raw materials hub) located in Southern Industrial Complex, in the city of Triunfo, state of Rio Grande do Sul, which mainly processes naphtha, in addition to condensate and Liquefied Petroleum Gas (LPG) to generate basic products (ethane, propene, butadiene, benzene, solvents and fuels) that feed 2<sup>nd</sup> generation industries of the petrochemical chain.

COPEsul has an installed capacity to process 3.7 million tonnes/year of naphtha, with flexibility to use LPG and/or light condensate. Naphtha is an oil-derived liquid hydrocarbon, very similar to gasoline. Petrobras/Alberto Pasqualini Refinery (Refap), in the city of Canoas (state of Rio Grande do Sul), is the exclusive naphtha supplier for COPEsul carried by means of underground pipelines to the Southern Industrial Complex.

As Refap does not have sufficient production capacity, a portion of naphtha reaches the state via Petrobras Maritime Terminal on the north coast. The tanking park of COPEsul adjacent to Petrobras/Tedut, in the city of Osório, has capacity for 170,000 cubic meters and ensures the maintenance of strategic inventories. The transfer of naphtha to Refap also takes place via underground pipelines.

With naphtha and condensed gas, COPEsul produces 3.2 million annual tonnes of Aromatics and Olefins, such as ethene, propene, butadiene, benzene, toluene and other solvents, gasoline and other fuels (see capacity produced by product in the chart below) . It also produces and supplies to other companies of the Complex, utilities such as treated water (drinkable, demineralized and service water), steam, hydrogen and maintenance services.

The chart below summarizes the production capacity by product, the process of which may be better viewed in the specific report RJ-0117/07 -8:

**Production Capacity by Product (in thousand of tonne/year)**

Benzene	265
Butadiene	105
Butene 1	40
Aromatic C9	76
Ethene	1,200
Gasoline	177
LPG	24
MTBE	115
Diesel Oil	--
BTE Petrochemical Oil	169
Propane	16
Propene	581
Light Aliphatic Solvent	--
Toluene	91
Mixed-xylenes	66

## 6. INTANGIBLE ASSETS VALUATION

### INTANGIBLE ASSETS

Pursuant to *IAS 03*, an intangible asset must be recognized separately from goodwill, if it derives from a legal agreement or it can be separated from other company's assets and negotiated individually. One category of BRASKEM Group's intangible assets was identified for the purposes of this report, classified in these criteria: long-term agreements for the supply of essential petrochemicals.

The economic-financial modeling was conducted so as to demonstrate the capacity of each agreement in generating net profitability within a given timeframe, basically using the information already mentioned.

The projections were made taking into account the period of each agreement, under full operating and administrative conditions, with the following assumptions:

The fiscal year under consideration was from August 1 to July 31;

The flow was projected in constant currency and the present value calculated with actual discount rate (excluding inflation);

The valuation of these intangible assets based on the methodology outlined in chapter 4 is broken down in attachment 1.

## VALUE OF MATERIAL AGREEMENTS

The following material intangible assets were identified, listed below by owner:

**BRASKEM** : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen, Toluene and Ortho-xilene) to the companies Oxiteno S.A. Indústria e Comércio, DOW Brasil S.A., Elekeiroz S.A., Acrinor Acrilonitrila do Nordeste S.A., Suzano Petroquímica S.A., Deten Química S.A., Oleoquímica Ind. Com. Prod. Químicos Ltda. and Dow Brasil Nordeste Ltda. TDI (DOW-TDI).

**COPEsul** : LONG-TERM AGREEMENTS FOR THE SUPPLY OF ESSENTIAL PETROCHEMICALS (Ethene, Propene, Benzene, Hydrogen and C4) to the companies Innova S.A., Petroquímica Triunfo S.A., DSM Elastômeros Brasil Ltda. and Oxiteno S.A. Indústria e Comércio.

No material agreements owned by IPQ were identified.

No material intangible assets were identified related to intellectual property (trademarks and patents) owned by the underlying companies, ) *companies* as these are commodity companies (*1<sup>st</sup> and 2<sup>nd</sup> generation* . The material operating assets for cash generation of these companies are equipment and industrial plants component systems, tangible assets whose market values are broken down in specific reports.

**FINAL AMOUNTS VERIFIED**

Based on studies prepared by APSIS, on the reference date as of July 31, 2008, the appraisers conclude the following fair market values for BRASKEM's and COPESUL's material agreements:

**MARKET VALUE OF AGREEMENTS - BRASKEM (R\$ thousand)**

	discount rate (p.a.)
	10.0%
<b>OXITENO</b>	<b>201,644</b>
<b>DOW</b>	<b>(2,543)</b>
<b>ELEKEIROZ</b>	<b>(9,758)</b>
<b>ACRINOR</b>	<b>71,980</b>
<b>SUZANO</b>	<b>75,149</b>
<b>DETEN</b>	<b>33,257</b>
<b>OLEOQUÍMICA</b>	<b>1,097</b>
<b>DOW-TDI</b>	<b>92</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>	<b>370,919</b>

**MARKET VALUE OF AGREEMENTS - COPESUL (R\$ thousand)**

	discount rate (p.a.)
	10.0%
<b>INNOVA</b>	<b>110,763</b>
<b>TRIUNFO</b>	<b>62,261</b>
<b>DSM ELASTOMEROS</b>	<b>12,025</b>
<b>OXITENO</b>	<b>11,638</b>
<b>TOTAL AMOUNT OF AGREEMENTS</b>	<b>196,686</b>

## 7. CONCLUSION

Based on studies prepared by APSIS, on the reference date as of July 31, 2008, the fair market values for the intangible assets of each company are the following:

**BRASKEM** material agreements: R\$ 371 million

**COPEsul** material agreements: R\$ 197 million

**IPQ** no material intangible assets were identified.

Having concluded the Report RJ-0375/08 -01, composed of nineteen (19) pages and two (2) attachments and made in two (2) original counterparts, APSIS Consultoria Empresarial Ltda., CREA/RJ 82.2.00620 -1 and CORECON/RJ RF/2.052 -4, a company specialized in assets valuation, legally represented by its undersigned directors, is available for any further explanation.

Rio de Janeiro, August 22, 2008.

**8. LIST OF ATTACHMENTS**

1. VALUATION CALCULATIONS AND SUPPORTING DOCUMENTATION

2. GLOSSARY AND APSIS PROFILE

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**ATTACHMENT 1**

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<b>BRASKEM - ETHENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,219</b>	<b>2,073</b>	<b>2,130</b>	<b>2,275</b>	<b>2,495</b>	<b>2,861</b>	<b>3,175</b>	<b>3,290</b>	<b>3,356</b>	<b>3,423</b>	<b>3,4</b>
<b>VOLUMES (t)</b>											
OXITENO	190,000	200,000	210,000	220,000	230,000	235,000	235,000	235,000	235,000	235,000	235,0
<b>ETHENE TOTAL VOLUME CONTRACTED</b>	<b>190,000</b>	<b>200,000</b>	<b>210,000</b>	<b>220,000</b>	<b>230,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,000</b>	<b>235,0</b>
<b>ETHENE CONTRACTED NOR (R\$ thousand)</b>	<b>421,608</b>	<b>414,621</b>	<b>447,250</b>	<b>500,514</b>	<b>573,807</b>	<b>672,229</b>	<b>746,025</b>	<b>773,178</b>	<b>788,642</b>	<b>804,415</b>	<b>804,4</b>
OXITENO	421,608	414,621	447,250	500,514	573,807	672,229	746,025	773,178	788,642	804,415	804,4
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>
<b>ETHENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>3,068</b>	<b>(11,734)</b>	<b>(12,339)</b>	<b>(5,255)</b>	<b>36,792</b>	<b>84,103</b>	<b>124,441</b>	<b>33,922</b>	<b>34,600</b>	<b>35,292</b>	<b>35,2</b>
OXITENO	3,068	(11,734)	(12,339)	(5,255)	36,792	84,103	124,441	33,922	34,600	35,292	35,2

<b>BRASKEM - PROPENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,059</b>	<b>2,125</b>	<b>2,153</b>	<b>2,358</b>	<b>2,505</b>	<b>2,900</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>	<b>3,278</b>
<b>VOLUMES (t)</b>											
DOW	35,000	35,000	35,000	35,000	35,000						
ELEKEIROZ	80,535	80,535	80,535	80,535							
ACRINOR	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000
SUZANO	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500	97,500
<b>PROPENE TOTAL VOLUME CONTRACTED</b>	<b>298,035</b>	<b>298,035</b>	<b>298,035</b>	<b>298,035</b>	<b>217,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>	<b>182,500</b>
<b>PROPENE CONTRACTED NOR (R\$ thousand)</b>	<b>613,711</b>	<b>633,216</b>	<b>641,558</b>	<b>702,681</b>	<b>544,801</b>	<b>529,301</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>	<b>598,227</b>
DOW	72,072	74,362	75,342	82,520	87,669	-	-	-	-	-	-
ELEKEIROZ	165,837	171,108	173,362	189,878	-	-	-	-	-	-	-
ACRINOR	175,031	180,594	182,973	200,406	212,911	246,524	278,626	278,626	278,626	278,626	278,626
SUZANO	200,771	207,152	209,881	229,877	244,221	282,777	319,601	319,601	319,601	319,601	319,601
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>
<b>PROPENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>4,466</b>	<b>(17,921)</b>	<b>(17,700)</b>	<b>(6,879)</b>	<b>30,716</b>	<b>66,221</b>	<b>99,787</b>	<b>26,246</b>	<b>26,246</b>	<b>26,246</b>	<b>26,246</b>
DOW	524	(2,105)	(2,079)	(866)	1,405	-	-	-	-	-	-
ELEKEIROZ	1,207	(4,843)	(4,783)	(1,495)	-	-	-	-	-	-	-
ACRINOR	1,274	(5,111)	(5,048)	(2,104)	13,652	30,843	46,476	12,224	12,224	12,224	12,224
SUZANO	1,461	(5,863)	(5,790)	(2,413)	15,659	35,378	53,311	14,022	14,022	14,022	14,022

<b>BRASKEM - BENZENE PROJECTIONS</b>		<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>NET PRICE (R\$ / t)</b>		<b>1,909</b>	<b>1,859</b>	<b>1,878</b>	<b>2,017</b>	<b>2,147</b>	<b>2,337</b>	<b>2,551</b>	<b>2,551</b>
<b>VOLUMES (t)</b>									
	DETEN	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550
<b>BENZENE TOTAL VOLUME CONTRACTED</b>		<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>
<b>BENZENE CONTRACTED NOR (R\$ thousand)</b>		<b>161,398</b>	<b>157,211</b>	<b>158,795</b>	<b>170,557</b>	<b>181,561</b>	<b>197,618</b>	<b>215,671</b>	<b>215,671</b>
	DETEN	161,398	157,211	158,795	170,557	181,561	197,618	215,671	215,671
<i>Projected net margin (% NOR)</i>		<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>
<b>BENZENE CONTRACTED NET INCOME (R\$ thousand)</b>		<b>1,174</b>	<b>(4,449)</b>	<b>(4,381)</b>	<b>(1,791)</b>	<b>11,642</b>	<b>24,724</b>	<b>35,975</b>	<b>1,577</b>
	DETEN	1,174	(4,449)	(4,381)	(1,791)	11,642	24,724	35,975	1,577

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<b>BRASKEM - HYDROGEN PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>NET PRICE(R\$ / t)</b>	<b>2,712</b>	<b>2,772</b>	<b>2,844</b>	<b>2,916</b>	<b>3,016</b>	<b>3,160</b>	<b>3,318</b>	<b>3,318</b>	<b>3,318</b>	<b>3,318</b>
<b>VOLUMES (t)</b>										
OLEOQUÍMICA	1,360	1,360	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
<b>HYDROGEN TOTAL VOLUME CONTRACTED</b>	<b>1,360</b>	<b>1,360</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>	<b>1,680</b>
<b>HYDROGEN CONTRACTED NOR (R\$ thousand)</b>	<b>3,689</b>	<b>3,770</b>	<b>4,778</b>	<b>4,899</b>	<b>5,068</b>	<b>5,309</b>	<b>5,574</b>	<b>5,574</b>	<b>5,574</b>	<b>5,574</b>
OLEOQUÍMICA	3,689	3,770	4,778	4,899	5,068	5,309	5,574	5,574	5,574	5,574
<i>Project net margin(% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>	<i>12.5%</i>	<i>16.7%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>4.4%</i>
<b>HYDROGEN CONTRACTED NET INCOME (R\$ thousand)</b>	<b>26.8</b>	<b>-106.7</b>	<b>-131.8</b>	<b>-51.4</b>	<b>324.9</b>	<b>664.2</b>	<b>929.8</b>	<b>244.6</b>	<b>244.6</b>	<b>61.1</b>
OLEOQUÍMICA	26.8	-106.7	-131.8	-51.4	324.9	664.2	929.8	244.6	244.6	61.1

<b>BRASKEM - TOLUENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>NET PRICE (R\$ / t)</b>	<b>1,613</b>	<b>1,517</b>	<b>1,557</b>	<b>1,671</b>	<b>1,803</b>
<b>VOLUMES (t)</b>					
DOW-TDI	34,000	34,000	34,000	34,000	34,000
<b>TOLUENE TOTAL VOLUME CONTRACTED</b>	<b>34,000</b>	<b>34,000</b>	<b>34,000</b>	<b>34,000</b>	<b>34,000</b>
<b>TOLUENE CONTRACTED NOR (R\$ thousand)</b>	<b>54,849</b>	<b>51,580</b>	<b>52,938</b>	<b>56,816</b>	<b>61,298</b>
DOW-TDI	54,849	51,580	52,938	56,816	61,298
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>	<i>6.4%</i>
<b>TOLUENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>399.1</b>	<b>-1,459.8</b>	<b>-1,460.5</b>	<b>-596.5</b>	<b>3,930.4</b>
DOW-TDI	399.1	-1,459.8	-1,460.5	-596.5	3,930.4

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<b>BRASKEM - ORTOXILENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>NET PRICE(R\$ / t)</b>	<b>1,888</b>	<b>1,810</b>	<b>1,892</b>	<b>2,023</b>
<b>VOLUMES (t)</b>				
ELEKEIROZ	28,000	28,000	28,000	28,000
<b>ORTOXILENE TOTAL VOLUME CONTRACTED</b>	<b>28,000</b>	<b>28,000</b>	<b>28,000</b>	<b>28,000</b>
<b>CONTRACTED NOR C4 (R\$ thousand)</b>	<b>52,869</b>	<b>50,687</b>	<b>52,964</b>	<b>56,636</b>
ELEKEIROZ	52,869	50,687	52,964	56,636
<i>Projected net margin (% NOR)</i>	<i>1.7%</i>	<i>-2.8%</i>	<i>-2.8%</i>	<i>-1.0%</i>
<b>ORTOXILENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>385</b>	<b>(1,435)</b>	<b>(1,461)</b>	<b>(446)</b>
ELEKEIROZ	385	(1,435)	(1,461)	(446)

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<b>BRASKEM - AGREEMENTS PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<i>Projected net margin (% NOR)</i>	1.7%	-2.8%	-2.8%	-1.0%	6.4%	12.5%	16.7%	4.4%	4.4%	4.4%	4.4%	4.4%
<b>CONTRACTED NET INCOME (R\$ thousand)</b>	<b>9,518</b>	<b>(37,105)</b>	<b>(37,474)</b>	<b>(15,018)</b>	<b>83,406</b>	<b>175,713</b>	<b>261,133</b>	<b>61,989</b>	<b>61,090</b>	<b>61,599</b>	<b>61,538</b>	<b>61,538</b>
OXITENO	3,068	(11,734)	(12,339)	(5,255)	36,792	84,103	124,441	33,922	34,600	35,292	35,292	35,292
DOW	524	(2,105)	(2,079)	(866)	1,405	-	-	-	-	-	-	-
ELEKEIROZ	1,591	(6,277)	(6,244)	(1,941)	-	-	-	-	-	-	-	-
ACRINOR	1,274	(5,111)	(5,048)	(2,104)	13,652	30,843	46,476	12,224	12,224	12,224	12,224	12,224
SUZANO	1,461	(5,863)	(5,790)	(2,413)	15,659	35,378	53,311	14,022	14,022	14,022	14,022	14,022
DETEN	1,174	(4,449)	(4,381)	(1,791)	11,642	24,724	35,975	1,577	-	-	-	-
OLEOQUÍMICA	27	(107)	(132)	(51)	325	664	930	245	245	61	-	-
DOW-TDI	399	(1,460)	(1,461)	(596)	3,930	-	-	-	-	-	-	-

**MARKET VALUE OF AGREEMENTS - BRASKEM  
(R\$ thousand)**

	discount rate (p.a.)	10.0%
OXITENO		201,644
DOW		(2,543)
ELEKEIROZ		(9,758)
ACRINOR		71,980
SUZANO		75,149
DETEN		33,257
OLEOQUÍMICA		1,097
DOW-TDI		92
<b>TOTAL AMOUNT OF AGREEMENTS</b>		<b>370,919</b>



COPEsul

<b>COPEsul - ETHENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>	<b>2,575</b>
<b>VOLUMES (t)</b>											
INNOVA	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600
PETROQUÍMICA											
TRIUNFO	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000		
DSM											
ELASTÔMEROS	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380	7,380
<b>ETHENE TOTAL VOLUME CONTRACTED</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>100,980</b>	<b>37,980</b>	<b>37,980</b>
<b>ETHENE CONTRACTED NOR (R\$ thousand)</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>260,048</b>	<b>97,808</b>	<b>97,808</b>
INNOVA	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803	78,803
PETROQUÍMICA											
TRIUNFO	162,240	162,240	162,240	162,240	162,240	162,240	162,240	162,240	162,240	-	-
DSM											
ELASTÔMEROS	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005	19,005
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>ETHENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>8,194</b>	<b>16,013</b>	<b>14,492</b>	<b>14,905</b>	<b>17,753</b>	<b>25,615</b>	<b>29,302</b>	<b>19,678</b>	<b>19,678</b>	<b>7,401</b>	<b>7,401</b>
INNOVA	2,483	4,852	4,391	4,517	5,380	7,762	8,880	5,963	5,963	5,963	5,963
PETROQUÍMICA											
TRIUNFO	5,112	9,990	9,041	9,299	11,076	15,981	18,281	12,277	12,277	-	-
DSM											
ELASTÔMEROS	599	1,170	1,059	1,089	1,297	1,872	2,142	1,438	1,438	1,438	1,438



<b>COPEsul - PROPENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>	<b>2,192</b>
<b>VOLUMES (t)</b>											
DSM ELASTÔMEROS	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810
<b>PROPENE TOTAL VOLUME CONTRACTED</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>	<b>3,810</b>
<b>PROPENE CONTRACTED NOR (R\$ thousand)</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>	<b>8,352</b>
DSM ELASTÔMEROS	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352	8,352
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>PROPENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>263</b>	<b>514</b>	<b>465</b>	<b>479</b>	<b>570</b>	<b>823</b>	<b>941</b>	<b>632</b>	<b>632</b>	<b>632</b>	<b>632</b>
DSM ELASTÔMEROS	263	514	465	479	570	823	941	632	632	632	632

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<b>COPEsul - BENZENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>	<b>2,049</b>
<b>VOLUMES (t)</b>											
<b>INNOVA</b>	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550	84,550
<b>BENEZE TOTAL VOLUME CONTRACTED</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>	<b>84,550</b>
<b>BENZENE CONTRACTED NOR (R\$ thousand)</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>	<b>173,243</b>
<b>INNOVA</b>	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243	173,243
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>BENZENE CONTRACTED NET INCOME (R\$ thousand)</b>	<b>5,459</b>	<b>10,667</b>	<b>9,654</b>	<b>9,930</b>	<b>11,827</b>	<b>17,065</b>	<b>19,521</b>	<b>13,109</b>	<b>13,109</b>	<b>13,109</b>	<b>13,109</b>
<b>INNOVA</b>	5,459	10,667	9,654	9,930	11,827	17,065	19,521	13,109	13,109	13,109	13,109

<b>COPEL - HYDROGEN PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>NET PRICE (R\$ / t)</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>	<b>2,899</b>
<b>VOLUMES (t)</b>											
DSM ELASTÔMEROS	2	2	2	2	2	2	2	2	2	2	2
<b>HYDROGEN TOTAL VOLUME CONTRACTED</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>HYDROGEN CONTRACTED NOR (R\$ thousand)</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
DSM ELASTÔMEROS	6	6	6	6	6	6	6	6	6	6	6
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>HYDROGEN CONTRACTED NET INCOME (R\$ thousand)</b>	<b>0.2</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.6</b>	<b>0.7</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
DSM ELASTÔMEROS	0.2	0.4	0.3	0.3	0.4	0.6	0.7	0.4	0.4	0.4	0.4

<b>COPEsul - ETHENE PROJECTIONS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>NET PRICE (R\$ / t)</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>	<b>1,252</b>
<b>VOLUMES (t)</b>												
OXITENO	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
<b>TOTAL VOLUME CONTRACTED C4</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>	<b>16,000</b>
<b>CONTRACTED NOR C4 (R\$ thousand)</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>	<b>20,032</b>
OXITENO	20,032	20,032	20,032	20,032	20,032	20,032	20,032	20,032	20,032	20,032	20,032	20,032
<i>Projected net margin (% NOR)</i>	<i>7.6%</i>	<i>6.2%</i>	<i>5.6%</i>	<i>5.7%</i>	<i>6.8%</i>	<i>9.9%</i>	<i>11.3%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.6%</i>
<b>CONTRACTED NET INCOME C4 (R\$ thousand)</b>	<b>631</b>	<b>1,233</b>	<b>1,116</b>	<b>1,148</b>	<b>1,368</b>	<b>1,973</b>	<b>2,257</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>	<b>1,516</b>
OXITENO	631	1,233	1,116	1,148	1,368	1,973	2,257	1,516	1,516	1,516	1,516	1,516

