TEMPUR PEDIC INTERNATIONAL INC
Form 4
March 21, 2008

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL
OMB Number: 3235-0287
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(Print or Type Responses)

1. Name and Address of Reporting Person *
MASTO CHRISTOPHER A

(Last) (First) (Middle)

C/O FRIEDMAN FLEISCHER & LOWE, ONE MARITIME PLAZA, 22ND FLOOR

(Street)

SAN FRANCISCO, CA 94111

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
TEMPUR PEDIC INTERNATIONAL INC [TPX]

3. Date of Earliest Transaction (Month/Day/Year)
03/20/2008

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

__X__ Director
_____ 10% Owner
_____ Officer (give title below)
_____ Other (specify below)

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	03/20/2008		P		3,029	A	$ 11.775	2,912,255	I	See Footnote (1)
Common Stock	03/20/2008		P		11,330	A	$ 11.78	2,923,585	I	See Footnote (1)
Common Stock	03/20/2008		P		94	A	$ 11.785	2,923,679	I	See Footnote (1)

Common Stock	03/20/2008	P	12,019	A	$ 11.79	2,935,698	I	See Footnote (1)
Common Stock	03/20/2008	P	284	A	$ 11.795	2,935,982 (1)	I	See Footnote (1)
Common Stock	03/20/2008	P	22,089	A	$ 11.8	2,958,071	I	See Footnote (1)
Common Stock	03/20/2008	P	94	A	$ 11.81	2,958,165	I	See Footnote (1)
Common Stock	03/20/2008	P	947	A	$ 11.815	2,959,112	I	See Footnote (1)
Common Stock	03/20/2008	P	1,325	A	$ 11.82	2,960,437	I	See Footnote (1)
Common Stock	03/20/2008	P	6,644	A	$ 11.83	2,967,081	I	See Footnote (1)
Common Stock	03/20/2008	P	379	A	$ 11.835	2,967,460	I	See Footnote (1)
Common Stock	03/20/2008	P	19,932	A	$ 11.84	2,987,392	I	See Footnote (1)
Common Stock	03/20/2008	P	852	A	$ 11.845	2,988,244	I	See Footnote (1)
Common Stock	03/20/2008	P	40,171	A	$ 11.85	3,028,415	I	See Footnote (1)
Common Stock	03/20/2008	P	3,029	A	$ 11.86	3,031,444	I	See Footnote (1)
Common Stock	03/20/2008	P	284	A	$ 11.87	3,031,728	I	See Footnote (1)
Common Stock	03/20/2008	P	5,677	A	$ 11.88	3,037,405	I	See Footnote (1)
Common Stock	03/20/2008	P	189	A	$ 11.885	3,037,594	I	See Footnote

									(1)
Common Stock	03/20/2008		P	14,456	A	$ 11.89	3,052,050	I	See Footnote (1)
Common Stock	03/20/2008		P	189	A	$ 11.895	3,052,239	I	See Footnote (1)
Common Stock	03/20/2008		P	757	A	$ 11.897	3,052,996	I	See Footnote (1)
Common Stock	03/20/2008		P	37,645	A	$ 11.9	3,090,641	I	See Footnote (1)
Common Stock	03/20/2008		P	7,074	A	$ 11.91	3,097,715	I	See Footnote (1)
Common Stock	03/20/2008		P	3,785	A	$ 11.92	3,101,500	I	See Footnote (1)
Common Stock	03/20/2008		P	94	A	$ 11.93	3,101,594	I	See Footnote (1)
Common Stock	03/20/2008		P	15,228	A	$ 11.94	3,116,822	I	See Footnote (1)
Common Stock	03/20/2008		P	94	A	$ 11.942	3,116,916	I	See Footnote (1)
Common Stock	03/20/2008		P	284	A	$ 11.945	3,117,200	I	See Footnote (1)
Common Stock	03/20/2008		P	1,420	A	$ 11.9475	3,118,620	I	See Footnote (1)
Common Stock	03/20/2008		P	24,418	A	$ 11.95	3,143,038	I	See Footnote (1)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(*e.g.*, puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Nu Deriv Secur Bene Owne Follo Repo Trans (Instr
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MASTO CHRISTOPHER A C/O FRIEDMAN FLEISCHER & LOWE ONE MARITIME PLAZA, 22ND FLOOR SAN FRANCISCO, CA 94111	X			

Signatures

/s/ Christopher A. Masto	03/21/2008
**Signature of Reporting Person	Date

Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) These shares are held by Friedman Fleischer & Lowe Capital Partners II, LP. Friedman Fleischer & Lowe Capital Partners II, LP is controlled by Friedman Fleischer & Lowe GP II, LP, its general partner, which is controlled by Friedman Fleischer & Lowe GP II, LLC, its general partner. The reporting person is Managing Member of Friedman Fleischer & Lowe GP II, LLC, and may be deemed to beneficially own the shares of Common Stock owned by Friedman Fleischer & Lowe Capital Partners II, LP. The reporting person disclaims beneficial ownership of any shares in which he does not have a pecuniary interest.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.
Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. -family:Times New Roman; font-size:0.5pt" COLOR="#FFFFFF">The representations and warranties made by Ultragaz are (i) the organization and existence of the buyer pursuant to the terms of Brazilian Law; ((ii) capacity of Ultragaz to execute the CCVA, comply with the obligations assumed therein and consummate the transaction set forth in same; (iii) absence of violation of law, of the corporate documents of Ultragaz and of any other instrument executed by Ultragaz, resulting from the execution of the CCVA; (iv) availability of funds, own, or upon financing by first class financial institution, to comply with the obligations of the CCVA; (v) absence of any fee or commission of broker, intermediary or other similar fee or commission in respect of the transaction, except by

Banco Bradesco BBI S.A.; (vi) Ultragaz had access to information on Liquigás during the negotiation phase through technical visits, questions and answers (Q&A) and consultation of the documentation made available in the Data Room.

Rules on indemnification by PETROBRAS

PETROBRAS shall indemnify Ultragaz, Liquigás (after the closing date of the transaction), its affiliates and respective administrators for any losses, obligations, lawsuits or liabilities, as well as fines, interest, penalties, costs or expenses, including procedural costs, reasonable attorney fees and the fees of other specialists (Losses), effectively and directly sustained or incurred by such persons resulting from: (i) any imprecision, violation or omission of any representation or warranty provided by PETROBRAS in the CCV; (ii) of partial or total failure to comply with any obligation, duty or agreement assumed by PETROBRAS in the CCV; (iii) of noncompliance with anti-corruption laws in conducting the administration and/or business and activities of Liquigás; and/or

(iv) of the Osasco plot of land, if has been sold by Liquigás to third parties before the closing date of the transaction.

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Certain limitations apply to the obligation to pay indemnification, which vary depending on the nature of the loss. Losses specifically related to fraud, willful misconduct or bad faith by PETROBRAS, to noncompliance with the anti–corruption laws in conducting the administration and/or business and activities of Liquigás shall be subject to indemnification within a period of up to 5 years counting from the closing date of the transaction, limited to the value of the acquisition price.

Rules on indemnification by Ultragaz

Ultragaz shall indemnify PETROBRAS and Liquigás (before the date of closing of the transaction), their affiliates and respective administrators for (i) losses effectively sustained or incurred resulting from any violation or omission of any representation or warranty provided; (ii) partial or total noncompliance, with any obligation, duty or agreement assumed in the CCVA.

Necessary government approvals

The Acquisition is subject to approval by CADE.

Having in view that Liquigás leases certain areas located in port terminals, ANTAQ s must also be obtained by PETROBRAS in the scope of compliance with the conditions precedent to the closing, to prevent termination of the relevant contracts.

Guarantees granted

Ultragaz submitted the Bank Guarantee Letter No. 2.076.299-3 issued by Banco Bradesco S.A., and valid until 02.14.2018, which is intended to guarantee (i) the payment of the Acquisition Price, (ii) the payment of the adjustment to the Acquisition Price (it is due by Ultragaz pursuant to the terms of the CCVA) and (iii) the payment of a penalty in case of the complete rejection of the transaction by CADE or in case of the extraordinary general meeting of Ultrapar does not approve the acquisition transaction.

Inapplicability of article 253 of the Brazilian Corporations Law -LSA

It must be stressed, moreover, that based on Circular Official Letter /CVM/SEP/No. 02/2016 and on article 253 of Law No. 6.404/76 it does not apply in this case, considering the current positioning of the Brazilian Securities and Exchange Commission -Comissão de Valores Mobiliários (CVM) on the subject, to the effect that such provision would only be applicable if Liquigás had become a wholly-owned subsidiary through a transaction of acquisition of shares, which

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was not the case, as Liquigás started to integrate the PETROBRAS System after a stock acquisition and sale transaction.

Legal Actions and the Federal Court of Accounts -TCU

Finally, in relation to the provisional decision of the Federal Court of Accounts –Tribunal de Contas da União (TCU), as disclosed on 12/8/2016, and to the legal proceedings being processed at the Judiciary dealing with transactions of divestments by PETROBRAS, with respect to the disposal of the shares of Liquigás, to date such disposal was not suspended by injunctions filed in the scope of popular actions and of public civil actions, and there is no impediment for PETROBRAS to continue to comply with the conditions precedent set forth in the CCVA.

There is also decision TC-013.056/2016-6 pronounced by the Full Court of the TCU, which gave PETROBRAS permission to conclude five deals, in addition to the disposal of the shares of Liquigás, whose contractual instruments relative to the Transaction had already been signed.

Economic valuations

Economic internal (buyer s perspective) and external (market perspective) valuations were made, in compliance with the Methodology for Divestment of Assets and Companies of the PETROBRAS System. The final value of the transaction exceeded corporate valuation scenarios; and it was considered reasonable by the fairness opinions on the transactions issued by Itaú BBA and by Banco Crédit Agricóle Brasil S.A.

In view of the above, the Board of Directors of PETROBRAS submits to the esteemed appreciation and resolution of the General Meeting, the proposal for disposal of 100% (one hundred percent) of the shares held by Petróleo Brasileiro S.A. – PETROBRAS of Liquigás Distribuidora S.A. to Companhia Ultragaz S.A. for the amount of BRL 2.666 billion.

Attached: Copy of the Fairness Opinions and of the Valuation Report

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CONFIDENCIAL

São Paulo, 1 de novembro de 2016

Ao Conselho de Administração da PETRÓLEO BRASILEIRO S.A.- PETROBRAS (Petrobras),

Prezados Membros do Conselho de Administração da Petrobras,

Com relação à potencial transação envolvendo a Uquigás Distribuidora S.A (Companhia~). empresa que concentra as atiVÍdades de distribuição de gás liquefeito de petróleo da Petróleo Brasileiro S.A. - Petrobras (uPetrobras), fomos solicitados pelo Conselho de Administração da Petrobras para emitir uma opinião sobre a justeza, para a Petrobras. do ponto de vista exclusivamente financeiro, do valor atribuldo à Companhia no contexto da allenação à Companhia Ultragaz SA { Uitragaz) da participação da Petrobras representando 100% das ações de emissão da Companhia (Transação), conforme proposta recebida pela Petrobras em 30 de Setembro de 2016 (Proposta).

A Transação, conforme nos foi informado por V.Sas., consistirá na alienação de 100% das ações de emissão da Companhia, de titularidade da Petrobras, à Ultragaz, por montante equivalente a um Enterprise Va/ue de R$2.861.600.000,00 (dois bilhões, oitocentos e sessenta e um milhões e seiscentos mil reais), com base nos demonstrativos financeiros da Companhia no exercfcio findo em 31 de dezembro de 2015. O valor a ser efetivamente pago em caixa pela Ultragaz está sujelto a: (i) correção pelo CDI do equity value entre a data de assinatura e a data de fechamento da transação; e (ii) ajuste baseado nas variações das posições de caixa, endividamento financeiro e capital de giro entre 31 de dezembro de 2015 e a data de fechamento da transação.

Ressaltamos que a descrição da Transação acima n~o busca reproduzir todos os detalhes da Transação, os quais constam com maior especificidade nos documentos da Transação, devendo os senhOres, caso tenham quaisquer dúvidas em relação à Transação, diligenciar para a obtenção de referidos documentos e/ou questionar os responsáveis e representantes da Companhia. Reiteramos ainda que esta carta é uma obrigação de meio e não de fim por parte do ltaú BBA Nossas anállses não distinguem quaisquer classes ou espécies de ações representativas do capital social da Companhia e não incluem beneficios ou perdas operacionais, fiscais ou de outra natureza, incluindo eventual âgio, nem quaisquer sinergias, valor incrementai e custos, caso existam, a partir do fechamento da Transação. Adicionalmente, nossas análises não distinguem e tampouco consideram ou incluem eventuais alterações regulatórias nos setores de atuação direta ou indireta da Companhia que tenham sido emitidas por quaisquer órgãos ou entidades governamentais.

Na preparação de nossa opinião, nós exclusivamente {i) revisamos determinadas informações financeiras públicas relativas ã Companhia; {ii) revisamos certos demonstrativos financeiros auditados da Companhia, bem como certos dados financeiros, incluindo-se projeções financeiras da Companhia que nos foram fornecidas pela Petrobras e que conosco foram discutidas pela administração da Petrobras; {iii) mantivemos discussões com a administração da-Petrobras com relação às operações da Companhia, bem como sobre as caracterlsticas da Transação; (iv} consideramos outros fatores e informações e conduzimos outras análises que consideramos apropriadas; e {v) comparamos o desempenho financeiro e operacional da Companhia com as informações publicamente disponlveis de outras empresas que julgamos relevantes. Levamos ainda em consideração outras inforrriações, análises, pesquisas, estudos financeiros, critérios financeiros, econômicos e de mercado que julgamos a nosso exclusivo critério serem relevantes.

Na preparação de nossa opiniêo, não assumimos qualquer obrigação de providenciar a verÍficação independente de qualquer informação financeira, comercial ou outras informações utilizadas, revisadas ou consideradas por nós para esse trabalho, e presumimos e confiamos, com a anuência da Petrobras e da

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Companhia e sem investigações independentes, na exatidao. conteúdo, veracidade, consistência, completude, suficiência e integralidade das informações financeiras, contãbeis, legais, tributárias e outras informações analisadas por nôs ou conosco discutidas pela Petrobras e/ou Companhia. Neste sentido, nos baseamos em tais informações considerandoMas como sendo exatas, completas, precisas e suficientes em todos os seus aspectos relevantes. No que diz respeito às projeções financeiras e outras informações, premissas e dados operacionais relativos à Transação ou â Companhia e às sensibilidades relacionadas à performance financeira futura da Companhia que nos foram fornecidas e que conosco foram discutidas pela administração da Petrobras e/ou Companhia, assumimos que tais previsões foram preparadas de boaMfé, de maneira razoável e exata, de forma a refletir as melhores estimativas e julgamentos da administração da Petrobras com relação à performance financeira futura da Companhia e ao potencial impacto que determinadas sensibilidades passlveis de afetar seu desempenho financeiro poderão ter sobre as referidas projeções. Com isso, não assumimos qualquer responsabilidade relacionada à exatidão, veracidade, integridade, consistência ou suficiência de tais informações e projeções. Ademais, não fomos informados acerca de qualquer alteração relevante em relação aos ativos, condição financeira, resultados das operações, negócios ou perspectivas da Companhia desde as datas das informações às quais tivemos acesso e consideramos em nossas análises.

Não assumimos, nem assumiremos por meio desta, qualquer responsabilidade de proceder a uma verificação independente ou avaliação de quaisquer ativos ou passivos {contingentes ou outros) da Companhia. No que se refere aos passivos e contingências da Companhia, vale esclarecer que consideramos apenas os valores devidamente provisionados nas demonstrações financeiras objeto de nossa anâlise, sendo certo que não consideramos a possibilidade de sua eventual incorreção ou insuficiência, nem tampouco os efeitos de quaisquer ações judiciais, inquéritos, investigações e/ou processos administrativos (de natureza civil, ambiental, fiscal, criminal, trabalhista, previdenciária etc.), ainda que desconhecidos ou não declarados, em curso ou ameaçados, envolvendo tais sociedades ou que possam impactar o valor das ações de emissão de tais sociedades. Além disto, nós não assumimos qualquer obrigaçao de conduzir, como de fato não conduzimos, qualquer due difigence na Companhia, tampouco inspeção ffsica das propriedades, ativos ou instalações da Companhia Não realizamos, e não nos responsabilizamos por realizar a identificação e/ou prevenção de quaisquer contingências, fraudes, irregularidades, passivos, insuficiências ou incorreção de informações, distorções ou condutas relacionadas à Companhia, suas respectivas administrações, sócios ou empregados, bem como quaisquer fornecedores, prestadores de serviços, assessores, escritórios de advocacia ou quaisquer outros terceiros envolvidos na Operação. Por fim, não avaliamos a solvência ou a valor justo das sociedades considerando as leis relativas à falência, insolvência ou questões similares.

Não assumimos qualquer responsabilidade, bem como não analisamos, não consideramos na preparação da Fairness Opinion e não expressamos quaisquer opiniões em relação a questões (i) de verificação de regularidades dos contratos firmados pela Companhia; (ii) de aplicação ou verificação de cumprimento de (a) sistemas legais envolvidos na Transação, incluindo, mas não se limitando a matérias de cunho regulatório, ambiental, cancorrencial, fiscal, penal e anticorrupção; e (b) quaisquer normas de direito internacional público ou privado ou sobre regras promulgadas por qualquer tratado ou por qualquer organização, incluindo, mas não se limitando a regulamentos de contabilidade; e (iiĺ) relativas à manutenção das condições atuais dos negócios e contratos existentes firmados pela Companhia. Caso determinados negócios e contratos da Companhia sejam discutidas, descontinuados, rescindidos e/ou se de qualquer forma deixarem de gerar resultados para a Companhia, total ou parcialmente, as conclusões aqui descritas poderão ser, e provavelmente serão, materialmente diferentes dos resultados efetivos atingidos pela Companhia. Entendemos que a Companhia e a Petrobras obtiveram auxilio jurĺdico para confirmar a validade, eficácia e legalidade de tais contratos e realizou auditoria com assessores especĺficos para tais confirmações.

Não nos foi solicitado considerar, e esta opinião não considera, os méritos relativos à Transação quando comparada com qualquer outra alternativa estratégica de negócios que possa existir para a Companhia. Adicionalmente, não pretendemos definir o preço pelo qual as ativos ou ações da Companhia deveriam ser negociadas a qualquer momento.

Nossa opinião foi elaborada assumindo informações de mercado e é baseada em condições de mercado, econômicas, monetárias e outras condições existentes e efetivas no momento de sua elaboração, bem como nas informações que nos foram disponibilizadas até a presente data, de forma que é válida exclusivamente nesta data, uma vez que eventos futuros e outros desdobramentos podem afetáMia. Assim sendo, embora fatos e eventos posteriores à presente data, incluindo resultados de processos judiciais ou administrativos, inquéritos e/ou investigações possam afetar a conclusão desta carta, não assumimos qualquer obrigação ou responsabilidade de atualizar, revisar ou revogar a mesma em decorrência de qualquer desdobramento posterior ou por qualquer outro motivo.
A preparação de qualquer análise finance·lra é um processo complexo, que envolve várias defin 1ções acerca dos métodos mais apropriados e relevantes e a aplicação de tais métodos para circunstâncias particulares. Portanto, a análise de que trata a presente Faimess Opinion não deve ser objeto de uma análise parciaL Para chegar ás conclusões apresentadas nesta opinião, realizamos um raciocfnio qualitativo a respeito das análises e fatores por nós considerados. Nós chegamos a uma conclusão final com base nos resultados de toda a análise por nós realizada e avaliada como um todo, e não chegamos isoladamente a conclusões baseadas em, ou relacionadas a, qualquer dos fatores ou métodos de nossa análise. Desse modo, acreditamos que nossa análise deva ser considerada como um todo e que a seleção de partes da nossa analise e fatores especificas, sem considerar o contexto integral de nossa anãlÍse e conclusões, pode resultar em um entendimento incompleto e incorreto dos processos utilizados para atingir tais conclusões.
Receberemos o valor equivalente a cerca de para atuarmos como assessores financeiros da Petrobras na Transação e para elaborarmos e emitirmos a presente Faimess Opinion. Além disso, nosso contrato de prestação de serviços com a Petrobras prevê hipóteses em que poderemos ser indenizados em decorrência da emissão da presente carta, conforme padrões de mercado para contratos de prestação de serviços desta natureza.
Além do relacionamento decorrente da presente Transação, nesta data, a Petrobras e/ou suas controladas mantêm relacionamento comercial com o ltaú BBA e demais instituições financeiras integrantes de seu conglomerado financeiro, que inclui diversas operações e produtos contratados, sendo as mais relevantes descritas com maiores detalhes abaixo:
86 (oitenta e seis) operações de prestação de fiança, no valor total de R$1,4 bilhão. celebradas entre Fev/13 e Out/16. sendo 63 operações com prazo indeterminado e 2 com vencimento em Out/17 e 1 com vencimento em Fev/17, todas com taxa de juros entre ao ano e ao ano.
3 (três) certificados de receblveis imobiliários (CRis), no valor total de R$1.1 bithao, celebrados entre julho de 2006 e junho de 2010, com vencimentos entre abril de 2018 e dezembro de 2029. Com taxas de juros entre + TR e + TR, respectivamente.
12 (doze) operações de financiamento sob a modalidade FINAME, no valor total de R$1 ,5 bilhão, celebradas entre-fevereiro de 2012 e julho de 2015. com vencimentos entre novembro de 2021 e setembro de 2024. sendo 9 (nove) dessas operações com taxa de juros de ao ano, duas com taxa de juros de e uma operação com taxa de juros de ao ano.
Operação de emissão de debêntures, não converslveis em ações da BR Distribuidora S.A, com fiança da Petrobras, no valor de R$3,5 bilhões, liquidada em 20 de agosto de 2015, com juros semestrais e vencimento em 15/04/2020. Os encargos sobre a remuneração são de do CDI.
Operação de NCE R$1 bilhão com a Petrobras, vencimento em Ago/20 (bullet) e com remuneração de do CDI.
O ltaú BBA ou sociedades integrantes do seu conglomerado econômico não possuem, nesta data,

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ações de emissão da Petrobras ou da Companhia em carteira. Todavia, O ltaú BBA ou sociedades integrantes do seu conglomerado ecof10mico possuem, nesta data, posição vendida de 65.000 ações ordinárias e de 1.874.224 ações preferenciais da Petrobras.

Prestamos. de tempos em tempos, no passado, serviços de investment bankfng, serviços bancários e financeiros em geral e outros serviços financeiros para a Petrobras e suas afiliadas e para a Ultragaz e suas afiliadas pelos quais fomos remunerados, e poderemos no futuro prestar tais serviços para tais companhias e suas afiliadas, pelos quais esperamos ser remunerados. Além disso, somos ou poderemos vir a ser sócios da Ultragaz ou suas afiliadas em sociedades.

Além disso, atualmente, nós e empresas do nosso conglomerado econômico possuimos e poderemos manter no futuro relacionamento relevante com a Companhia, a Petrobras ou a Ullragaz, incluindo a concessão de crédito, em termos e condições de mercado, por meio do qual somos e esperamos ser remunerados, conforme o caso. Nós e nossas afiliadas prestamos uma variedade de serviços financeiros e outros relacionados a valores mobiliãrios, corretagem e investment banking. No curso normal de nossas atividades podemos adquirir, deter ou vender, por nossa conta ou por conta e ordem de nossos clientes, ações, instrumentos de divida e outros valores mobiliários e instrumentos financeiros (incluindo empréstimos bancários e outras obrigações) da Companhia e/ou de suas afiliadas e de quaisquer outras empresas que estejam envolvidas na Transaçao, bem como fornecer serviços de investment banking e outros serviços financeiros para tais empresas, seus controladores ou controladas. Os profissionais dos departamentos de análise de valores mobiliários (researoh) e de outras divisões do Grupo ltaú Unibanco, incluindo o próprio ltaú BBA, podem basear suas análises e publicações em diferentes premissas operacionais e de mercado e em diferentes metodologĺas de análise quando comparadas com aquelas empregadas na preparação deste documento, de forma que os relatórios de pesquisa e outras publicações preparados por eles podem conter resultados e conclusões diferentes daquelas aqui apresentadas, considerando que tais análises e relatórios são realizadas por analistas independentes sem qualquer ligação com os profissionais que atuaram na elaboração deste documento, Adotamos polfticas e procedimentos para preservar a independência dos nossos analistas de valores mobiliários, os quais podem ter visões diferentes daquelas do nosso departamento de investrnent banking.

V.Sas. devem notar ainda que não somos uma firma de contabilidade e não prestamos serviços de contabilidade ou auditoria em relação a esta Transação. Ao prepararmos nossa opinião, nós não levamos em conta (i) os efeitos tributérios oriundos da Transação; (il) o impacto de quaisquer comissões e despesas que possam resultar da consumação da Transação; e {iii) o impacto contábĺl futuro oriundo da Transação.

Nossa opinião está limitada à justeza do valor atribuldo na Transação à Companhia do ponto de vista exclusivamente financeiro para a Petrobras, no contexto da Transaçao, e relativamente á presente data. Não analisamos a Transação do ponto de vista legal, regulatório ou de qualquer outro ponto de vista e, assim sendo, não nos compete qualquer responsabilidade (seja por força de contrato, disposições de responsabilidade civH ou por outros motivas) oriunda de tais anéiJses ou advinda de quaisquer riscos, incluindcrse riscos de imagem e reputação assumidos pela Petrobras e a Companhia em relação à Transação.

A apresentação desta opinião foi aprovada por um comitê de Faimess Opinion do ltaú BBA Esta carta é emitida com a finalidade exclusiva de ser utilizada pelo Conselho de Administração da Petrobras em relação e para os fins de sua avaliação da Transaçao, conforme detalhado acima, não sendo dirigida aos acionistas da Petrobras, da Companhia e/ou da Ultragaz. A presente Fairness Opinion não deverá ser utilizada para quaisquer outros propósitos, incluindo, sem limitação, para fins dê fófmação do capital, nem tampouco confere direitos ou recursos ao Conselho de Administração da Companhia, à Diretoria ou a qualquer acionista, detentor de valores mobiliérios ou credor da Companhia ou da Petrobras, Este documento não é, e não deve ser utilizado como, uma recomendação ou opinião para os acionistas da Petrobras com relaçao ao posicionamento que eles devem tomar com relação ã aceitação da Transação. Todos os acionistas devem conduzir suas próprias análises sobre a Transação e, ao avaliar a Transação, devem se basear nos seus próprios assessores financeiros, fiscais e legais.

Baseado no e sujeito ao disposto acima e a outros fatores relevantes por nós considerados, é nossa opinião que, na presente data, o Enterprise Va/ue da Companhia de R$2,861,600,000,00 (doÍs bllhões, oitocentos e sessenta e um milhões e seiscentos mil reais), conforme descrito na Proposta. nos pareceu razoável, do ponto de vista exclusivamente financeiro, para a Petrobras. Não consideramos na nossa anâllse as métricas referentes à {i) correção por CDI do aquity value entre a data de assinatura e de fechamento da transação; e (ii) ajuste baseado nas variações das posições de caixa, endividamento financeiro e capital de giro entre 31 de dezembro de 2015 e a data de fechamento da transação.

Essa opinião não poderá ser divulgada, encaminhada ou comunicada, total ou parcialmente, a qualquer terceiro para qualquer finalidade sem a nossa prévia aprovação por escrito. Assim, esta carta não terá o seu conteúdo exposto ou divulgado para o mercado e para os acionistas e demais executivos da Companhia ou da Petrobras, sendo vedada a disponibilização de cópias f!sÍcas ou eletrônica desta Faimess Opinion ou a sua publicação na internet, bem como a exposição de seu conteúdo (no todo ou em parte) em apresentações não dirigidas exclusivamente aos membros do Conselho de Administração da Petrobras, sem autorização expressa do ltaú BBA, exceto na medida exigida por órgãos reguladores ou Poder Judiciàrlo {incluindo, mas não limitado ao Tribunal de Contas da União). No entanto, fica excJufda da vedação anteriormente citada, a divulgação da presente opinião no contexto da Transação, apenas no seu inteiro teor, sem qualquer modificação, (i) aos órgãos reguladores do mercado de capitais brasileiros, na medida do estritamente necessário, mediante solicitação expressa dos aludidos órgãos e observada a necessidade de divulgação em observância aos termos da lei brasileira ou das normas da CVM, confonne venha a ser indicado por escrito pelos assessores legais externos do ltaú BBA, e (ii) para verificação de acionistas da Petrobras que expressamente tenham requerido acesso, única e exclusivamente na sede da Companhia, sendo vedada qualquer forma de reprodução (eletrônica ou manual) do seu conteúdo. Em quaisquer dos casos de divulgação da presente opinião anteriormente citados, a Companhia deverá informar tal divulgação prontamente ao ltali BBA

Esta carta está sujeita a leis Brasileiras e qualquer discussão em relação ao seu conteúdo deverá ser discutida no foro da Capital do Estado de São Paulo,

Atenciosamente, subescrevemos-nos.

Banco ltaú BBA S.A.

Eduardo Ferreira Guimarães
Managing Director
!nvestmenl Banking Oeparlment

Cristiar{o Guimarães
Managing Director
!nvestmenl Banking Oeparlment

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To the Board of Directors of Petróleo Brasileiro S.A.
November 4th, 2016
Petróleo Brasileiro S.A.
Av . República do Chile, 65
Rio de Janeiro 20031-912
Brazil

Dear Sirs:

We understand that Petróleo Brasileiro S.A. (Petrobras) is negotiating the sale of Liquigás Distribuidora S.A. (Liquigás or the Company), to Companhia Ultragaz S.A. (Buyer), which shall include 100% of the share capital of the Company (the Proposed Acquisition).

On October 21st, 2016 Petrobras made available to us the final version of the stock purchase agreement (SPA) and the Binding Offer (BO) containing the final terms of the Proposed Acquisition, with an offer price of BRL 2,800,000,000.00 (two billion and eight hundred million Reais) in a cash and debt free basis, including three minority stakes that Liquigás holds in other companies but excluding a non-operational real estate asset (Enterprise Value or Offer Price).

The Proposed Acquisition is to be effected by the transfer of 100% (one hundred percent) of Liquigás shares to the Buyer, whereby Petrobras will receive 100% of the Enterprise Value at the closing adjusted by the CDI interest rate between the signing of the SPA and the closing date, minus the Company s net debt at closing plus the working capital variation between December 31st, 2015 and the closing date plus BRL 61,600,000.00 (sixty one million and six hundred thousand Reais) for the real estate asset (Real Estate Asset Price) if Petrobras is not able to sell the asset before the closing date.

We have been requested by Petrobras to give an opinion with respect to the fairness to Petrobras, from a financial point of view, of the Offer Price to be paid by the Buyer in the context of the Proposed Acquisition (the Opinion).

In arriving at our Opinion, we have reviewed certain business information related to Liquigás provided to us by Petrobras, including the respective operational, financial and prices forecasts of the Company, the business plan, and the audited financial statements, when available.

We have considered certain financial and stock market data , up to October 21st, 2016, of publicly-held companies with businesses which we deemed relatively similar to those of the Company. We have also considered other information such as managerial reports, financial studies, analyses and investigations and financial, economic and market criteria which we deemed relevant.

We have also assumed that all the relevant contracts and the business plans that have been provided by Petrobras and its financial advisor in the virtual data roam are in force, updated and represent the Company s management views as of the date hereof.

In addition, we have held discussions with members of Petrobras acquisitions and divestments team , regarding their views for the existing business of the Company and its future perspectives.

In connection with our review, we have not assumed any responsibility for Independent verification of any of the foregoing information and have relied on its being complete and accurate in all material respects.

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We have assumed, with your consent, that in the course of obtaining necessary regulatory and third party approvals and consents for the Proposed Acquisition, no modification, delay, limitation, restriction or condition will be imposed that will have an adverse effect on Petrobras, Liquigás or any of their affiliates.

We have also assumed that the Proposed Acquisition will be consummated in accordance with its current financial terms described herein , in the BO and in the SPA , without waiver , modification or amendment of any material term, condition or agreement therein .

In addition we have not been requested to make, and have not made, an independent evaluation or appraisal of the contingent or off-balance assets and liabilities of the Company and its affiliates.

Our Opinion addresses only the fairness, from a financial point of view, to Petrobras of the Offer Price and does not address any other aspect or implication of the Proposed Acquisition, including the Real Estate Asset Price, or any other agreement or understanding entered into in connection with the Proposed Acquisition or otherwise. Our Opinion is necessarily based upon information made available to us on the date hereof and upon financial, economic, market and other conditions as they exist and can be evaluated on the date hereof. Our Opinion does not address the merits of the underlying decision by Petrobras to enter into the Proposed Acquisition, neither shall be deemed to be an assurance or guarantee as to the expected results of the said transaction. We are not expressing any opinion as to what the future value of the ordinary shares of Liquigás or Petrobras actually will be pursuant to the Proposed Acquisition.

We will receive a fee from Petrobras for the delivery of this Opinion, which is not dependent on the completion of the Proposed Acquisition. lf, notwithstanding the terms of this letter, Petrobras does rely upon this Opinion, it will do so entirely at its own account and responsibility . In addition, Petrobras has agreed to indemnify and hold us harmless against any liabilities and other items arising out of our engagement.

From time to time, we and our affiliates have in the past provided, are currently providing and in the future we may provide investment banking and other financial services to Petrobras and/or Companhia Ultragaz S.A., for which we have received, and would expect to receive, compensation. We are a full service securities firm engaged in securities trading and brokerage activities as well as providing investment banking and other financial services. In the ordinary course of business, we and our affiliates may acquire, hold or sell, for ourselves and/or affiliates own accounts and the accounts of costumers, equity, debt and other securities and financial instruments (including bank loans and other obligations) of Petrobras, Companhia Ultragaz S.A. and any other company that may be involved in the Proposed Acquisition, as well as provide investment banking and other financial services to such companies .

lt is agreed that this letter is for the exclusive use of the Board of Directors of Petrobras only in connection with its consideration of the Proposed Acquisition. This letter is not issued pursuant to or as a result of the existence of any regulation , law or any particular Stock Market regulation (including the Brazilian Lei das Sociedades Anônimas - Lei 6.404/76 , and its amendments ar any other jurisdiction legislation or regulation) possibly applicable in the context of the Proposed Acquisition, and cannot be used as an independent appraisal in particular vis-à-vis Petrobras shareholders meeting, the general public or any authorities . Furthermore, this letter is not intended to be , and does not constitute any recommendation in relation to the Proposed Acquisition .

This letter is confidential and its content may not be disclosed to any person without our prior consent and it is not to be quoted or referred to, in whole or in part, nor shall this letter be used for any other purposes, without our prior written consent.

Based upon and subject to the foregoing, it is our opinion that, as of the date hereof, the Offer Price is fair to Petrobras from a financial point of view.

This letter was submitted and approved by our internal committees.

Yours Faithfully,

Banco Crédit Agricole Brasil S.A.

Marco Aurélio Ponce

Gerente Geral de Controladoria

Banco Credit Agricole Brasil SA

Edson Cremonesi

General Manager

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Project Laguna
Valuation Memorandum
November, 2016
Global Investment Banking
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Section I
Executive Summary

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Executive Summary

• Crédit Agricole CIB has been retained by Petróleo Brasileiro S.A. (Petrobras or Seller) to provide a fairness opinion regarding the disposal of 100% of Liquigás Distribuidora S.A. (Liquigás or the Company), a Brazilian Liquefied Petroleum Gas (LPG) distribution company:

• Petrobras performed a competitive process for the sale of 100% of Liquigás Distribuidora S.A. and is currently negotiating with the winning bidder (Proposed Acquisition), the oil & gas company Companhia Ultragaz S.A. (Buyer)

• On October 21st , 2016, Petrobras made available to us the final version of the stock purchase agreement (SPA) and the Binding Offer (BO) containing the final terms of the Proposed Acquisition, with an offer price of BRL 2,800,000,000.00 for 100% of Liquigás (the Offer Price)

• The Offer Price is in a cash and debt free basis, includes three minority stakes that Liquigás holds in other companies but excludes a non-operational real estate asset

• The Offer Price will be adjusted by CDI interest rate between the signing of the SPA and the closing of the Proposed Acquisition

• Liquigás operates in the bottling, distribution and sale of LPG and is a leading player in the LPG distribution sector in Brazil, with presence in 23 out of 26 States and leading positions in all regions

• The present document has been prepared by Crédit Agricole CIB in order to determine the fairness for Petrobras from a financial perspective of the Offer Price

• To carry out a comprehensive valuation for Liquigás (Valuation), four valuation references have been selected:

• The Discounted Cash Flow (DCF) methodology based on Liquigás 2016-2030 business plan provided by Petrobras and its financial advisor

• Precedent transactions multiples based on comparable transactions in the Brazilian LPG distribution industry

• Comparable listed companies trading multiples of global LPG companies

• The shareholders equity method

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Executive Summary

• When applying the aforementioned methodologies for this specific case, it is important to notice the following:

• The DCF methodology was based in managerial information and projections provided to us by Petrobras and its financial advisor. Should those information and projections be not accurate the value of the Company could significantly change

• Both trading multiple and transaction multiple valuation do not take into account specific business plans and projects of the companies, being less relevant for our analysis

• The shareholders equity method does not capture Company s perspectives and projections, therefore is less relevant in this specific case as well

• The base date of the Valuation is December 31st , 2015 as requested by Petrobras

• The total enterprise values derived from the selected methodologies are the following, as of December 31st , 2015 :

• DCF: BRL 2,156 – 2,350 MM, representing respectively 7.5x and 8.2x 2017E Liquigás EBITDA

• Trading: BRL 2,082 – 2,301 MM, representing respectively 7.3x and 8.0x 2017E Liquigás EBITDA

• Transaction: BRL 2,259 – 2,497 MM, representing respectively 7.9x and 8.7x 2017E Liquigás EBITDA

• Shareholders Equity Method: BRL 1,057 MM, representing 4.0x 2017E Liquigás EBITDA

• Our Valuation does not address the merits of the underlying decision by Petrobras to enter into any agreement regarding the Company, neither shall be deemed to be an assurance or guarantee as to the expected results of the Proposed Acquisition, and does not constitute an opinion or recommendation to any shareholders meetings to be held in connection with this Proposed Acquisition

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Section II
Transaction Overview

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Explanation of Responses:

Transaction Overview
Envisaged Transaction
Company Description
Geographic Footprint
.Liquigás operates in the bottling, distribution and sale of LPG, operating in two business segments: bottled and bulk
.Liquigás is a leading player in the LPG distribution sector in Brazil, with presence in 23 of 26 States and leading positions in all regions
.#1 player in the bottled market (served through 13kg bottles), with 24% market share
.The Company benefits from a network of more than 4,900 branded distributors, which serve over 35 million residential customers per month
Bottling Plants (26) Storage Facilities (20)
Transaction Description
.Petrobras is negotiating the sale of 100% of Liquigás Distribuidora S.A. to the oil & gas company Companhia Ultragaz S.A.
Current Shareholders Structure
Post Acquisition Shareholders Structure
Proposed Acquisition Perimeter
100%
Source: Company and Petrobras

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Transaction Overview
Brazilian LPG Industry Model
PRODUCERS
Petrobras Refineries1: 12 Private Refineries2: 1 Petrochemical Plants3: 3 Producers Importers
DISTRIBUTORS
Total of 19 distributors Leading Players Market Share4
SALES CHANNELS
RESELLERS
END USERS
Domestic User (Bottled)
END USERS
Large commercial and residential consumers (Bulk)
.Industry is structured in producers, distributors and sales channels to get to the end users
.Liquigás has its own primary logistics infrastructure, with direct access to primary sourcing of LPG
.Bottled LPG is transported from the bottling plants to the distributors premises
.Bulk LPG is usually supplied directly from the bottling plants to end users
.The client profile includes households, industrial clients, commercial facilities, industries and farms
Notes:
1. Replan, Rlam, Revap, Reduc, Repar, Refap, RPBC, Regap, RNEST, Recap, Reman and Lubnor
2. Riograndense
3. Braskem, Copesul and Quattor Source: ANP (2015)
4. As of 2015
Source: ANP (2015)

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Transaction Overview
Market Segments -LPG distribution operates under Bottled and Bulk market segments in Brazil
Bottled Bulk
DOMESTIC INDUSTRIAL AND COMMERCIAL
Product / Supply
Client Profile
Market Volume (mm tons) –
2015
Market Historical Growth
Considerations
Bottled Bulk
DOMESTIC INDUSTRIAL AND COMMERCIAL
Cylinders of 5kg, 8kg, 13kg
and 45kg (typically 13kg)
Cylinders of 20kg, 45kg and 90kg
Tanks and pipelines
Industrial companies, households, commercial facilities,
industries, farms and transportation
Households
Industrial companies,
commercial areas and lifts
5.26 (72% of total)1 2.04 (28% of total)
CAGR 2007-15: 1%1 CAGR 2007-15: 2%
The most common way of promoting the product is through 13kg bottles (popularly called cooking gas) targeting domestic use
LPG is the most versatile form of energy for cooking food and heating water, being the second most used energy source by the country s commercial sectors
Branded distributors are the most common distribution channel to sell the product to end users
The bulk market is characterized by the distribution of LPG through tanker trucks and also customized to the needs of each client
Unlike the distribution of gas for domestic use (bottled) in which there is an exchange of the container, the distribution of the bulk gas is performed on site, wherein the container can be stationary (fixed) or transportable and receives the LPG in liquid form
Notes: 1. Considers P13kg and equivalents
Source: ANP

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Section III
Business Plan
11 November, 2016 Confidential

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Business Plan
Main assumptions and methodology
.Liquigás Business Plan provided by Petrobras for the period comprised between 2016 and 2030 including but not limited to the following documents available in the virtual data room (VDR):
• dados_itau.xlsx
• Projeto Laguna_Relatório Final_Rev_DIP CONTROLADORIA_DN 7_2016.pdf
.Audited Financial Statements (income statement and balance sheet) of Liquigás available in the VDR as of October 24th , 2016 for 2015, 2014 and 2013
.Trial balances (income statement and balance sheet) of Liquigás available in the VDR as of October 24th , 2016
.Information Memorandum available in the VDR as of October 24th , 2016
.Management Presentation available in the VDR as of October 24th , 2016
.Share Purchase Agreement available in the VDR as of October 24th , 2016, including Exhibit 4.1 for the price adjustment mechanics
.Q&A exchanged with Petrobras and Liquigás
.Petrobras LPG supply contract and its amendments available in the VDR, as of October 24th , 2016
.Market inflation assumptions based on Brazilian Central Bank Focus Report (Focus Report), as of October 14th , 2016
.All the operational assumptions from 2016-2030 were based on information from Liquigás provided to us by Petrobras, including the Company business plan and management main thoughts on Liquigás expectations.
.Additionally, CA-CIB team had conference calls with Petrobras and Liquigás management to understand key points of the recent developments and expectations of Liquigás performance
.Our Valuation does not include the non-operational real estate asset of the Company

Business Plan
Main assumptions and methodology
The company business plan has been provided by Petrobras for the 2016-2030 period
General
.Projections were forecasted considering Liquigás Business Plan for 2016-2030 period
.Projections of Liquigás are in real terms, we applied market consensus inflation projections (Focus Report) in order to convert it to nominal terms
.Projections don t consider any synergies
Sales Sales Volume
Sales Volume was forecasted individually by each market segment: Bottled and Bulk
Volumes were forecasted according to Liquigás management expectations of market growth and market share for each segment
Liquigás management expects a growth in the market share for the 2016-2030 period due to its brand recognition.
According to a survey made in 2014, Liquigás brand is Top of Mind in LPG segment
Sales LPG Sale Prices
LPG Prices were estimated by Liquigás management for Bottled and Bulk market segments
Prices were estimated based on three factors:
Commodity Price: Price of LPG acquired by Liquigás from Petrobras
Freight Costs: Costs of the transportation of the LPG
Margin: Margin applied by Liquigás over its variable costs

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Business Plan
Main assumptions and methodology
14 November, 2016 Confidential
Business Plan
Main assumptions and methodology
SG&A estimates were based on Liquigás business plan
Liquigás Business Plan assumes a constant workforce in the projections with a real wage increase of around 1.0% annually
Costs &
Expenses
Costs were estimated based on Liquigás business plan for 2016-2030 commodity prices and freight costs
LPG commodity prices are freely defined by Petrobras and were projected constant by Liquigás Management
Corporate taxes were forecasted according to Brazilian current corporate law and Liquigás Audited Financial Statements, including the amortization of deferred fiscal assets and liabilities and interest on capital
Costs
SG&A
Taxes
Free Cash
Flow Items
Working Capital assumptions were based on historical levels, according to the main drivers below:
Receivables: estimated as days of revenues
Suppliers: estimated as days of cash COGS
Working
Capital
Capex
Capex was projected according to Liquigás business plan for the 2016-2030 period
Most of the capex is related to the refurbishment of operating units and bottles replacement
Inventory: estimated as days of cash COGS
Taxes: estimated as days of revenues

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Business Plan

Projections Summary: Volumes and Market Share

• Gas Sale Volume was estimated by the management based on Bulk and Bottled expected market share

• Bulk volume is expected to increase more than Bottled (CAGR of 2.2% vs 0.7%, respectively) within the 2016-2030 period due to a higher increase in market share and market volumes

Gas Sale Volume (000 m3 / year)

Market Volumes and Liquigás Market Share (000 m3 / year)

Bottled Market Volume Bulk Market Volume Liquigás Bottled Mkt Share Liquigás Bulk Mkt Share

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Business Plan

Projections Summary: Prices and Revenues

• Bottled prices are expected to remain constant in real terms during the projected period and Bulk prices are expected to have a slightly real increase

• Net Revenues are projected to increase above inflation mainly due to market share gains

Net prices (BRL / m3)

2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E

Bottled Prices Bulk Prices

Net Revenues (BRL MM)

2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E

Bottled Revenues Bulk Revenues

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Business Plan
Projections Summary: COGS
• COGS per m³ of both segments are expected to remain constant in real terms over the 2016-2030 period
• The growth in the total costs is caused by volume increase and inflation
COGS of Bottled LPG Segment (BRL MM)
2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
Bottled Commodity Prices Bottled Freight
COGS of Bulk LPG Segment (BRL MM)
2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
Bulk Commodity Prices Bulk Freight

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Business Plan
Projections Summary: SG&A and EBITDA

- Liquigás SG&A s most significant items are personnel expenses and freight. Personnel expenses were projected considering a flat workforce and a real wage increase of around 1%
- Others expenses are formed by advertisement, water, electric energy, fuel, lubricants and tax expenses
- Liquigás EBITDA margin is expected to increase throughout the projection period due to an increase in Bulk segment gross margins

SG&A (BRL MM)
2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
Personnel Expenses Freight, Services and Rent Others
EBITDA (BRL MM)
2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
EBITDA EBITDA margin

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Business Plan
Projections Summary: CAPEX and Working Capital
• Capex was projected by the management aligned with Company s growth strategy. Most relevant investments for Liquigás are: refurbishment of operating units, replacement of bottles and growth capex
• Liquigás main working capital requirements are clients receivables and taxes receivables
CAPEX (BRL MM)
2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
CAPEX % of net revenues
Working Capital (BRL MM)
2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
Working capital % of net revenues

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Section IV
Valuation Analysis
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• The DCF method, which reflects the intrinsic value of the company, was used to value Liquigás, as we believe it to be the most relevant method
• The DCF model was based on Liquigás business plan without synergies
• Sensitivities run on WACC and perpetuity growth rate
• WACC calculated at 12.55% in nominal terms (in BRL) and perpetual growth rate is estimated at 0.0% (real terms) or 4.4% (nominal terms)
BENCHMARK
RETAINED
• This method allows a direct comparison between the valuation of a company and its listed peers
• Peers in LPG distribution business were selected
• Relevant metric: EBITDA
• There is no listed Brazilian LPG pure player, most of the Companies are located in other markets and also engages in other activities affecting its multiples, therefore we consider this parameter to be less relevant in this case
• Only transactions in the LPG Brazilian market were analyzed due to the specific characteristics of the market (high penetration, low competition of natural gas and Petrobras role as sole supplier)
• Based on the limited number of transactions in Brazil and considering undisclosed expected synergies from comparables, we consider this parameter to be less relevant
• Based on the company s shareholders equity
• This method is usually employed for companies in sectors with strong asset bases such as utilities. It does not capture profitability and future perspectives
Discounted Cash Flows
Trading multiples
Transaction multiples
Book value
Relevance

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Valuation Analysis
Summary – Enterprise Value (as of December 31st, 2015)
Liquigás Total Enterprise Value – BRL million Comments
Offer Implied EV @ BRL 2,800 MM
Discounted cash flow
Trading
Multiples
Transaction
Book Value
Implied EV/EBITDA 2015A
Implied EV/EBITDA 2016E
Implied EV/EBITDA 2017E
BRL1,136MM
4.0x EBITDA 17E
BRL2,249MM
7.8x EBITDA 17E
BRL2,156MM
7.5x EBITDA 17E
BRL2,350MM
8.2x EBITDA 17E
BRL2,082MM
7.3x EBITDA 17E
BRL2,301MM
8.0x EBITDA 17E
BRL2,378MM
8.3x EBITDA 17E
BRL2,259MM
7.9x EBITDA 17E
BRL2,497MM
8.7x EBITDA 17E
BRL1,136MM
4.0x EBITDA 17E
EBITDA 15A: BRL214MM
EBITDA 16E: BRL312MM
EBITDA 17E: BRL287MM
Implied EV/EBITDA 2015A Implied EV/EBITDA 2016E Implied EV/EBITDA 2017E
.Based on a WACC of 12.55%
.Range based on a -0.3%/+0.3% WACC variation
.Median of Trading Comps EV/EBITDA 2017E multiples applied to EBITDA 2017E
.Range based on a -5%/-+5%
.Median of Transaction Comps LTM EV/EBITDA multiples applied to 2015
.Range based on a -5%/+5%
.Shareholders Equity Value plus BRL 196.0 MM of Net Debt
We consider these valuation methodologies to be less relevant to the analysis

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Valuation Analysis

Summary – DCF Enterprise Value (as of December 31st, 2015)

DCF Enterprise Value Breakdown (BRL MM)

17.7

986.4

(+) NPV Cash flows (+) NPV Terminal Value (+) Associates Total Enterprise value[1]

Enterprise Value s sensitivity based on DCF (BRL MM)

.Central value of Enterprise Value obtained with Discounted Cash Flow analysis: BRL 2,248.9 MM

- Sum of discounted cash flows represents 55.4% of total value
- Terminal value represents approximately 43.9% of total value
- Associates[1] represents approximately 0.7% of total value

.Implied multiples of the central enterprise value of DCF are:

- 2015A EV/EBITDA: 10.5x
- 2016E EV/EBITDA: 7.2x
- 2017E EV/EBITDA: 7.8x

13.1% 12.8% 12.5% 12.2% 11.9%
3.4% 1,975 2,051 2,133 2,221 2,316
3.9% 2,020 2,101 2,188 2,282 2,383
4.4% 2,069 2,156 2,350 2,459
4.9% 2,125 2,218 2,318 2,427 2,546
5.4% 2,188 2,288 2,397 2,516 2,647

.The impact of perpetuity rate variation on Firm Value, being WACC constant, is as follow:

- A 0.5% change in the perpetuity rate contributes with a variation of around BRL 70 MM on Firm Value

.The impact of WACC variation on Firm Value, being perpetuity rate constant, is as follow:

- A 0.3% change in WACC contributes with a variation of approximately BRL 100 MM on Firm Value

1 – Include associates in order to compare with Offer Price EV

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Valuation Analysis
WACC
WACC = (USD, Nominal)
(+) INFBR
Cost of Debt After Taxes Cost of Equity
Legend:
D – Net Debt (Target Structure)1
E – Equity (Target Structure)1
KD – Marginal cost of debt in USD of Liquigás estimated based
on Petrobras bonds
t – Brazil Marginal Corporate Tax Rate (long term)
INFBR – Inflation differential BRA/USA of 2.6%
Legend:
– bAL –
Rf, USA
– PE –
PM, BRL
Risk Free rate, calculated by the last 6 months average of the 30 year USA Government Bond (Source: Bloomberg, as of October 20th , 2016)[2] Monthly Adjusted Industry Unlevered Beta (3-year average) of 0.50, releveraged to Target Capital Structure (Source: Thomson One, as of December 31st , 2015)[1]
Country Risk Premium of Brazil based on last 6 months average of 30 years bond CDS (Source: Bloomberg, as of October 20th , 2016)[2] Equity Risk Premium of the US market (30 years), last 6 months average (Source: Bloomberg, as of October 20th , 2016)[2]
Note 1. Please refer to pg. 30
Note 2. Please refer to appendix C for data details (pg. 44)

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Valuation Analysis
DCF – Discounted Cash Flow
Discounted Cash Flow
… … … … … … … … … …
Terminal Value Calculation
Perpetuity
Cash Flow
WACC
Perpetuity
Growth
Discount
Factor
Terminal
Value
BRL448
MM
12.55% 4.4% 0.180
BRL 986
MM
Free Cash Flow (BRL MM) 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
EBITDA 312 287 319 341 375 397 426 462 491 510 562 609 662 688 737
EBITDA Margin 8% 7% 7% 8% 8% 8% 8% 8% 8% 8% 8% 8% 9% 9% 9%
Depreciation & amortization (65) (69) (75) (77) (81) (63) (71) (79) (88) (96) (104) (113) (122) (131) (139)
EBIT 247 218 244 264 294 334 355 383 403 415 458 496 540 557 598
EBIT Margin 6% 5% 6% 6% 6% 7% 7% 7% 7% 6% 7% 7% 7% 7% 7%
Tax rate 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34%
(-) Taxes (84) (74) (83) (90) (100) (114) (121) (130) (137) (141) (156) (169) (184) (189) (203)
(+) Equity Interest (JCP) 24 29 31 32 34 36 39 42 46 49 51 54 57 59 62
NOPLAT 187 172 192 206 228 257 274 295 312 322 354 382 413 427 457
NOPLAT Margin 5% 4% 4% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5%
Depreciation & amortization 65 69 75 77 81 63 71 79 88 96 104 113 122 131 139
Δ Working capital (10) (7) (10) (11) (11) (12) (13) (13) (15) (14) (16) (16) (17) (19) (19)
Capex (100) (124) (113) (135) (139) (165) (179) (180) (189) (182) (192) (189) (188) (216) (147)
Free cash flow to firm 142 110 144 138 159 142 152 181 196 221 251 289 330 323 430
(x) Discount factor (WACC) 0.94 0.84 0.74 0.66 0.59 0.52 0.46 0.41 0.37 0.33 0.29 0.26 0.23 0.20 0.18
NPV of free cash flows 134 92 107 91 93 74 70 75 72 72 72 74 75 66 77
Key Assumptions
• Valuation as of December 31st, 2015
• We have applied a Weighted Average Cost of Capital (WACC) of 12.55%, in BRL nominal terms, to discount the cash flows
• We consider Liquigás business plan until 2030
• Terminal value was calculated using a 0% perpetuity growth in real terms (4.4% in nominal terms)
• The 0% perpetuity growth assumption is based on Liquigás Management s view
• Book Value of the investments in subsidiaries of BRL 17.7 MM
1,245
Terminal Value Calculation
BRL448 12.55% 4.4% 0.180 BRL 986 MM

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Valuation Analysis
Multiples
Trading Comps (as of December 31st, 2015)
.We selected global LPG peers for our analysis
.We selected 2017E EV/EBITDA multiples and applied to Company s 2017E EBITDA as it is the best representative of Company s profitability going forward
Company Country Mkt Cap EV
Net Debt /
EBITDA LTM
EV/Sales EV/EBITDA EBITDA Margin D / EV Unlev.
LTM 16E 17E LTM 16E 17E Beta LTM 16E 17E
Amerigas Partners Lp United States of America 3,183 5,661 3.5x 2.4x 2.3x 2.1x 8.1x 8.9x 8.7x 29.8% 25.3% 24.3% 42.8% 0.50
Aygaz As Turkey 1,038 449 0.2x 0.2x 0.2x 0.2x 3.1x 3.4x 3.2x 6.2% 5.6% 5.1% 7.3% 0.67
Rubis Sca France 3,275 3,636 0.7x 1.1x 1.0x 1.0x 8.1x 7.9x 7.6x 13.5% 12.8% 12.8% 8.4% 0.79
Sk Gas Ltd Korea; Republic (S. Korea) 553 1,730 5.9x 0.4x 0.4x 0.4x 9.2x 8.6x 8.0x 4.7% 4.8% 5.2% 64.5% 0.18
Siamgas And Petrochemicals Pcl Thailand 266 491 2.8x 0.3x 0.3x 0.3x 6.3x 6.6x 6.1x 5.1% 5.2% 5.1% 44.8% 0.37
Total Nigeria Plc Nigeria 251 186 n.m 0.1x 0.1x 0.1x 1.3x 2.1x 2.0x 8.7% 5.5% 5.9% -69.2% 0.36
Ultrapar Participacoes Sa Brazil 8,502 10,267 1.4x 0.5x 0.5x 0.5x 9.9x 9.5x 9.1x 5.0% 5.2% 5.0% 14.3% 0.67
Median 2.8x 0.4x 0.4x 0.4x 8.1x 7.9x 7.6x 6.2% 5.5% 5.2% 14.3% 0.50
Average 2.6x 0.7x 0.7x 0.6x 6.6x 6.7x 6.4x 10.4% 9.2% 9.1% 16.1% 0.50
Source: Thomson One

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Valuation Analysis
Multiples
Trading Comps Details
Other
(1)
Net Revenues
• AmeriGas Partners, L.P. is a holding company that operates as a retail propane distributor in the United States, serving approximately two million residential, commercial, industrial, agricultural, wholesale and motor fuel customers in all 50 states from approximately 2,000 propane distribution locations.
EBITDA
Net Debt/EBITDA
Other 15%
Net Revenues EBITDA 124
• Aygaz is the only Turkish fully integrated LPG company, operating in production, procurement, storage, filling and production and sale of LPG-operated devices
• Aygaz provides its services in 81 cities and more than 100k homes per day through 3,800 cylinder gas dealers and autogas stations
Gas and petroleum products
Net Debt/EBITDA
0.8x
85%
Net Revenues 3,233
EBITDA 382
Net Debt/EBITDA 1.0x
Support and Storage
(1) Services 20%
(1) 20%
(1) 60%
• Rubis SCA is a France-based international company engaged in the storage and distribution of petroleum and other liquid products. The Company is structured around two operational divisions: Rubis Terminal, specialized in the bulk storage of liquid industrial products; and Rubis Energie, engaged in the logistics and distribution of petroleum products, notably LPG, which are sold as bottled gas and marketed under the Vitogaz brand name (1) Based on Revenues Source: Companies and Thomson

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Valuation Analysis
Multiples
Trading Comps Details
Net Revenues 1,699
EBITDA 83
Net Debt/EBITDA 2.1x
Services
(1)
>1%
LPG Sales and Distribution
100%
(1)
• Siamgas and Petrochemicals Public Company Limited is a Thailand-based company engaged in the trading business of LPG and related petroleum products. Its products are distributed under the brand names of Siam Gas and Unique Gas. It operates LPG warehouses and gas containing factories, as well as works with the dealers and gas service stations throughout Thailand
Net Revenues 1,699
EBITDA 83
Net Debt/EBITDA 5.0x
Others 7%
(1) LPG Exports
(1) 43% LPG Domestic
(1) 50%
• Siamgas and Petrochemicals Public Company Limited is a Thailand-based company engaged in the trading business of LPG and related petroleum products. Its products are distributed under the brand names of Siam Gas and Unique Gas. It operates LPG warehouses and gas containing factories, as well as works with the dealers and gas service stations throughout Thailand
Net Revenues 1,059
EBITDA 47
NIGERIA
Net Debt/EBITDA 0.0x
Lubricants and others 12%
Petroleum products 88%
• Total Nigeria is a marketing and services subsidiary of Total
• Total Nigeria is the leader in the downstream sector of the Nigerian oil and gas industry, with its distribution network of over 500 service stations nationwide and other energy products and services
• Total Nigeria has 5 LPG bottling plants distributed over the country and also owns a coastal storage in Apapa
(1) Based on Revenues Source: Companies and Thomson

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Valuation Analysis
Multiples
Trading Comps Details
Company
Key Financials
(USD MM 2015)
Revenues Breakdown (2015)
Description
Others LPG Distribution
Net Revenues
1% 9%Chemicals
• Ultrapar Participacoes S.A. (Ultrapar) is a Brazilian holding company that engages in services, commercial and industrial activities. It operates through five segments: gas distribution (Ultragaz), which distributes LPG to residential, commercial and industrial; fuel distribution (Ipiranga); chemicals Fuel Distribution Net Debt/EBITDA (Oxiteno); storage (Ultracargo), and drugstores (Extrafarma)
22,712
19%
EBITDA
1,187
71%
1.4x
Source: Companies and Thomson

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Valuation Analysis
Multiples
Transaction Comps
.We selected transactions involving LPG companies in the Brazilian Market
1 Oct-11 Repsol Gas Brasil SA Brazil Ultragaz Participações Ltda 100% 50 47.85 10.19x
Aug-04 Agip Liquigás Brazil Petrobras 100% 1,424 2,071.23 12.06x
Supergasbras
3 Jul-04 Brazil SHV Holdings NV 51% 308 602.94 19.98x
Inds e Comercio
4 Aug-03 Shell Gas (LPG) Brasil S.A. Brazil Ultrapar Participações S.A. 100% 171 170.57 10.03x
Median 11.12x
Average 13.06x
Source: Companies

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Valuation Analysis
Multiples
Transaction Comps Details
Target Company Target Description Transaction Description
• Repsol Gás Brasil (Repsol) is a LPG company that operates in the Brazilian bottled LPG with 1% of market share in 2011
• In October 2011, Ultragaz Participacoes Ltda, a unit of Ultrapar Participacoes SA, acquired the entire bottled LPG with 1% of market share in share capital of Repsol Gas Brasil SA, a Rio de Janeiro-based bottled LPG company for BRL 50 MM 2011 (USD 28.5 MM)
• Twelve months prior to the transaction, Repsol sold a total of 22k ton of LPG
• After the transaction Repsol Gás Brasil S.A. was renamed to Distribuidora de Gás LP Azul S.A.
• Agip do Brasil (Agip) is a company that operates in the marketing and distribution of fuels, petroleum derivates and natural gas, especially in the bottling, marketing and distribution of LPG
• In August 2004, in a transaction with ENI SpA, Petroleo Brasileiro SA (Petrobras) acquired AGIP do Brasil (Agip), a company engaged in the distribution of LPG, fuels and lubricants, for USD 450 MM In the transaction, Petrobras acquired 28 envasing units, 28 deposits, the brands Liquigás, Tropigás and Novogás and 21.4% of the LPG market share
• In 2003, Agip had around 3% of market share in Brazil
Petrobras also acquired fuel and lubricants contracts and assets, including distribution centers and gas stations
• Founded in 1946, Supergasbras is a company mainly engaged in the marketing and distribution of bottled LPG
• Supergasbras works with bottled gas (P13), gas cilinder (P45) and gas tanks (P1900, (Supergasbras), a wholesaler of liquefied gas and a holding company, from Sajutha Rio Participacoes SA, for BRL 304.1 MM (USD 100 MM), in a privately negotiated transaction P2000 and P500)
In July 2004, SHV Holdings NV acquired the remaining 51% interest, or 14.86 Bn ordinary and preferential shares, which it did not own yet, in Supergasbras Industria e Comercio SA (Supergasbras), a wholesaler of liquefied gas and a holding company, from Sajutha Rio Participacoes SA, for BRL 304.1 MM (USD 100 MM), in a privately negotiated transaction
• Shell Gas (LPG) Brasil S.A. (Shell Gas) is a company engaged in purchase, bottling, distribution, transport and storage of gases and other petroleum hydrocarbons
• Shell Gas had 4.5% share in the Brazilian LPG distribution market in 2003
• In August 2003, Ultrapar Participacoes SA acquired Shell Gas SA, a gas utility company, from Royal distribution, transport and storage of gases Dutch/Shell Group s Shell Brasil SA unit, for BRL 170.6 MM (USD 57.1 MM)and other petroleum hydrocarbons
• The acquisition included the liquefied petroleum gas operations of Shell Gas SA, with 6 bottling plants
Source: Companies

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A. Macroeconomic Assumptions

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C. WACC Parameters

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Macroeconomic Assumptions

Macroeconomic assumptions 2014A 2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E

Inflation

Brazil (IPCA) % 6.4% 10.7% 7.0% 4.9% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4%

USA (CPI) % 1.6% 0.1% 1.7% 1.9% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%

Interest Rate

Selic - Average % 10.9% 13.5% 14.2% 11.8% 10.5% 10.3% 9.3% 9.3% 9.3% 9.3% 9.3% 9.3% 9.3% 9.3% 9.3% 9.3% 9.3%

TJLP Average % 5.0% 6.0% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5%

Source: Focus Survey as of October 20th 2016 and FED as of July 31st 2016

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A. Macroeconomic Assumptions

B. Financial Statements

C. WACC Parameters

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Appendices
Liquigás Financial Statements
Assets (BRL MM) 2014A 2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
Cash and equivalents 13 13 96 101 107 113 120 128 135 143 152 161 170 180 190 201 212
Accounts receivable 174 203 230 243 257 272 289 306 325 344 365 386 408 432 456 482 509
Inventory 39 30 42 44 47 50 53 56 59 63 67 71 75 79 83 88 93
Taxes receivable 42 65 62 67 71 75 79 84 89 94 100 106 112 118 125 132 139
Prepaid Expenses 5 7 7 8 8 8 9 9 10 11 11 12 13 13 14 15 16
Other current assets 7 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15
Current assets 280 333 452 479 506 534 565 599 634 670 710 750 792 836 882 932 984
Accounts receivable 23 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Judicial Deposits 53 58 58 58 58 58 58 58 58 58 58 58 58 58 58 58 58
Taxes receivable 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Deferred Taxes 108 79 53 23 13 10 9 8 7 6 5 4 3 2 1 0 0
Other non current assets 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
PP&E 800 840 875 930 968 1,026 1,084 1,187 1,295 1,396 1,497 1,584 1,671 1,747 1,813 1,898 1,906
Investments 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18
Non current assets 1,003 1,006 1,015 1,040 1,068 1,123 1,180 1,281 1,389 1,488 1,589 1,674 1,761 1,836 1,901 1,985 1,993
Total assets 1,283 1,339 1,468 1,518 1,574 1,657 1,745 1,880 2,023 2,159 2,299 2,424 2,553 2,672 2,783 2,917 2,977

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Liquigás Financial Statements
Liabilities (BRL MM) 2014A 2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E
Suppliers 91 79 100 108 114 120 127 135 143 152 161 170 180 190 200 212 223
Revolver Debt 0 0 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Short-term Debt 46 101 23 10 6 5 0 0 0 0 0 0 0 0 0 0 0
Labor 47 52 58 62 66 70 74 78 83 88 93 98 104 110 116 123 130
Taxes 15 22 22 23 25 26 28 29 31 33 35 37 39 41 44 46 49
Clients Paid in Advance 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Health Plan Provision 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Other Current Liabilities 11 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Current liabilities 230 270 237 219 226 236 244 258 273 288 304 320 338 356 375 396 417
Long-term Debt 69 44 21 11 5 0 0 0 0 0 0 0 0 0 0 0 0
Related Parties 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Health Plan Provision 49 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50
Provisions 24 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32
Others non-current liabilities 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Non current liabilities 143 129 106 95 89 85 85 85 85 85 85 85 85 85 85 85 85
Capital stock 630 644 644 644 644 644 644 644 644 644 644 644 644 644 644 644 644
Reserves 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165 165
Impairment Adjustment 17 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19
Retained prof its 61 55 240 319 374 451 531 652 780 901 1,025 1,134 1,246 1,347 1,439 1,552 1,591
Additional Dividends 37 57 57 57 57 57 57 57 57 57 57 57 57 57 57 57 57
Shareholders equity 910 940 1,125 1,204 1,259 1,336 1,416 1,537 1,665 1,786 1,910 2,019 2,131 2,232 2,324 2,437 2,476
Total equity & liabilities 1,283 1,339 1,468 1,518 1,574 1,657 1,745 1,880 2,023 2,159 2,299 2,424 2,553 2,672 2,783 2,917 2,977

Appendices

Liquigás Financial Statements

Income statement (BRL MM) 2014A 2015A 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E

Net revenues 2,978 3,296 3,831 4,050 4,287 4,536 4,810 5,102 5,411 5,731 6,081 6,424 6,800 7,185 7,588 8,027 8,479

Annual growth n.a. 11% 16% 6% 6% 6% 6% 6% 6% 6% 6% 6% 6% 6% 6% 6% 6%

COGS (2,054) (2,218) (2,503) (2,689) (2,844) (3,008) (3,187) (3,378) (3,581) (3,791) (4,021) (4,245) (4,491) (4,742) (5,005) (5,292) (5,586)

Gross profit 924 1,078 1,328 1,361 1,443 1,529 1,623 1,723 1,829 1,939 2,060 2,179 2,309 2,443 2,583 2,736 2,893

Gross margin 31% 33% 35% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34% 34%

Personnel Expenses (398) (428) (507) (537) (566) (597) (629) (663) (698) (736) (775) (816) (860) (905) (953) (1,004) (1,057)

Freight, Services and Rent (287) (292) (357) (377) (391) (415) (435) (467) (497) (523) (561) (603) (628) (657) (686) (741) (782)

Materials for Bottling (24) (27) (32) (33) (33) (36) (37) (41) (43) (44) (49) (54) (53) (54) (54) (61) (63)

Advertisement (19) (17) (19) (20) (21) (23) (24) (26) (27) (29) (30) (32) (34) (36) (38) (40) (42)

Water & Electric Energy (10) (14) (19) (20) (21) (22) (23) (24) (26) (27) (29) (30) (32) (34) (36) (38) (40)

Fuel and Lubricants (13) (14) (18) (19) (21) (22) (24) (25) (27) (29) (32) (34) (36) (39) (42) (45) (48)

Other Expenses (63) (72) (64) (68) (70) (74) (77) (81) (85) (90) (94) (99) (103) (108) (113) (119) (124)

SG&A (813) (864) (1,016) (1,074) (1,124) (1,188) (1,248) (1,327) (1,404) (1,477) (1,569) (1,669) (1,747) (1,834) (1,921) (2,048) (2,156)

EBITDA 111 214 312 287 319 341 375 397 426 462 491 510 562 609 662 688 737

EBITDA margin 4% 6% 8% 7% 7% 8% 8% 8% 8% 8% 8% 8% 8% 8% 9% 9% 9%

Depreciation & amortization (69) (67) (65) (69) (75) (77) (81) (63) (71) (79) (88) (96) (104) (113) (122) (131) (139)

EBIT 42 146 247 218 244 264 294 334 355 383 403 415 458 496 540 557 598

EBIT margin 1% 4% 6% 5% 6% 6% 6% 7% 7% 7% 7% 6% 7% 7% 7% 7% 7%

Financial revenues 8 10 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Financial expenses (11) (12) (6) (3) (1) (1) (0) 0 0 0 0 0 0 0 0 0 0

EBT 77 143 244 215 243 263 294 334 355 383 403 415 459 496 540 557 599

Income taxes (24) (29) (59) (44) (52) (57) (66) (78) (82) (88) (92) (92) (104) (114) (127) (130) (141)

Net income 52.9 114 185 171 191 206 228 257 274 295 312 323 354 382 414 427 457

Net margin 2% 3% 5% 4% 4% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5%

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Appendices

Liquigás Financial Statements

Cash flow (BRL MM)	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Operational cash flow	265	263	266	276	298	308	332	362	386	405	443	480	520	541	577
Net income	185	171	191	206	228	257	274	295	312	323	354	382	414	427	457
Depreciation & amortization	65	69	75	77	81	63	71	79	88	96	104	113	122	131	139
Δ Working Capital	(10)	(7)	(10)	(11)	(11)	(12)	(13)	(13)	(15)	(14)	(16)	(16)	(17)	(19)	(19)
Deferred Tax Change	26	31	10	3	1	1	1	1	1	1	1	1	1	1	0
Investments cash flow	(100)	(124)	(113)	(135)	(139)	(165)	(179)	(180)	(189)	(182)	(192)	(189)	(188)	(216)	(147)
CAPEX	(100)	(124)	(113)	(135)	(139)	(165)	(179)	(180)	(189)	(182)	(192)	(189)	(188)	(216)	(147)
Financing cash flow	(83)	(133)	(147)	(134)	(153)	(136)	(145)	(174)	(188)	(214)	(242)	(281)	(321)	(313)	(419)
New debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt amortization	(101)	(23)	(10)	(6)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
Revolver	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Revolver amortization	0	(18)	0	0	0	0	0	0	0	0	0	0	0	0	0
Dividends paid	0	(92)	(136)	(128)	(148)	(136)	(145)	(174)	(188)	(214)	(242)	(281)	(321)	(313)	(419)
Total cash flow	83	5	6	6	7	7	8	8	9	9	9	10	10	11	11
Cash balance - BoP	13	96	101	107	113	120	128	135	143	152	161	170	180	190	201
(-) Period cash flow	83	5	6	6	7	7	8	8	9	9	9	10	10	11	11
Cash balance - EoP	96	101	107	113	120	128	135	143	152	161	170	180	190	201	212

Appendices

A. Macroeconomic Assumptions

B. Financial Statements

C. WACC Parameters

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Appendices
WACC Parameters
7.3% 7.2% 7.1% 7.0% 6.9% 6.8% 6.7% 6.6%
2.8% 2.7% 2.6% 2.5% 2.4% 2.3% 2.2% 2.1% 2.0%
20-Apr 20-May 20-Jun 20-Jul 20-Aug 20-Sep 20-Oct 20-Apr 20-May 20-Jun 20-Jul 20-Aug 20-Sep 20-Oct
Equity Market Risk premium 6 month Equity Market Risk premium Risk free rate 6 month Risk free rate
5.0% 4.8% 4.6% 4.4% 4.2% 4.0% 3.8% 3.6% 3.4% 3.2%
20-Apr 20-May 20-Jun 20-Jul 20-Aug 20-Sep 20-Oct Average CDS CDS
US equity market risk premium – 30 Year
Risk free rate – US 30-y government bonds
Brazil CDS – 30 Year Government Bond
Average CDS CDS
Source: Bloomberg, as of October 20tth, 2016

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EXTRAORDINARY GENERAL MEETING
PRESENTATION TO SHAREHOLDERS
ITEM II
Disposal to GRUPO PETROTEMEX, S.A. DE C.V. (GRUPO PETROTEMEX) and to DAK AMERICAS EXTERIOR, S.L. (DAK), subsidiaries of Alpek, S.A.B. de C.V. (Alpek), of 100% (one hundred percent) of the shares held by Petróleo Brasileiro S.A. – PETROBRAS of the companies Companhia Petroquímica de Pernambuco (PetroquímicaSuape) and Companhia Integrada Têxtil de Pernambuco (CITEPE)

On 12/28/2016, the Board of Directors (CA), at meeting held on that date, approved the call of an Extraordinary General Meeting of PETROBRAS to resolve on the disposal of 100% (one hundred percent) of the shares held by Petróleo Brasileiro S.A. – PETROBRAS of PetroquímicaSuape and in CITEPE for the amount in reais equivalent to US$ 385,000,000.00 (three hundred eighty-five million dollars), adjusted by the positive cumulative change in the United States inflation rate, between the base date (12/31/2015) and the closing date of the operation, using the exchange rate of 3 business days prior to the closing operation date.

The companies PetroquímicaSuape and CITEPE (hereinafter Companies) are wholly-owned subsidiaries of PETROBRAS active in the area of PTA (purified terephthalic acid, input in the production of PET – terephthalate polyethylene), PET resin and textile filaments.

The fundamental objectives of the Business and Management Plan (PNG) 2015–2019, approved by the Board of Directors, on 06/26/2015 were deleveraging the Company and generating value for shareholders, providing an amount of divestments for the period between 2015 and 2016 of US$ 15.1 billion. The Strategic Plan and the PNG 2017-2021, approved on 09/19/2016 by the Board of Directors [Conselho de Administração – CA], set forth a divestment target of US$ 19.5 billion for the two-year period 2017-2018. This amount is complementary to the target for the two-year period 2015-2016.

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In addition, the Strategic Plan and the PNG 2017-2021 defined as one of their business portfolio optimization strategies, to cease its participation in the petrochemical company.

The sale of the entire interest of PETROBRAS in the Companies, therefore, is strategically in line with the Strategic Plan and PNG 2017-2021.

On 04/30/2015, the Companies were included in the Divestments Portfolio pursuant to the Minutes of the Executive Office -DE 5.222, item 52, Topic No. 467, of 04/30/2015, providing for the disposal of 100% of the shareholding of PETROBRAS.

On 10/08/2015, PETROBRAS informed the market that it had started a competitive process for the disposal of 100% of the shares of the Companies.

Sale process

PETROBRAS structured a sale process, with the participation of companies selected based on objective (financial and operating) criteria used to map the universe of potentially interested parties.

From the 29 companies that received the teaser, 4 executed a confidentiality agreement to continue throughout the process and receive the detailed Information Memorandum of the asset for sale, which contains aspects such as financial forecasts and sector analysis. After receiving non-binding offers, 2 companies qualified for the first stage and were invited to conduct the due diligence, and submit binding offers together with the alterations proposed in the standard draft of the Stock Purchase and Sale Agreement -Contrato de Compra e Venda de Ações (CCVA).

After analyzing the proposals received, considering their terms and conditions, the proposal of GRUPO PETROTEMEX, S.A. of C.V. (GRUPO PETROTEMEX) and DAK AMERICAS EXTERIOR, S.L. (DAK), submitted by the two companies, which are members of the economic group of Alpek, prevailed in the competitive process.

On 07/28/2016, PETROBRAS informed the market that it was holding exclusive negotiations with the company Alpek, for the term of 60 days, subject to extension to a further 30 days (which occurred, as informed on 09/27/2016). Additionally, on 11/03/2016, Petrobras informed the market that the negotiation with the company Alpek was at an advanced stage.

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When the process of negotiation with GRUPO PETROTEMEX and DAK, and the internal process of approval of the transaction by the Executive Office and the Board of Directors of PETROBRAS were finalized on 12/28/2016, PETROBRAS and GRUPO PETROTEMEX, S.A. DE C.V. and DAK AMERICAS EXTERIOR, S.L., executed the Stock Purchase and Sale Agreement -CCVA, which contained a conditions precedent clause imposing, among others, the suspensive condition of subsequent approval by the competent corporate authorities of both parties , the approval of the transaction by the Administrative Council for Economic Defense [Conselho Administrativo de Defesa Econômica] (CADE) and the restructuring of the long-term debts of the Companies.

Summary of the representations and warranties made by PETROBRAS

The representations and warranties made by PETROBRAS are as follows: (i) Organization and existence of the Companies; (ii) capacity; (iii) absence of violation of any provision contained in the Bylaws and conflicting with the law, judicial or arbitration decision, instrument, commitment, agreement or contract;
(iv) operation of the companies; (v) tile to the shares; (vi) financial statements;
(vii) absence of restrictions; (viii) judicial and arbitration proceedings; (ix) tax questions; (x) labor and social security questions; (xi) environmental aspects; (xii) real estate; (xiii) corporate books and aspects; (xiv) material contracts; (xv) dividends and other monetary advantages; (xvi) assets; (xvii) intellectual property;
(xviii) insurance; (xix) bank accounts; (xx) powers of attorney; (xxi) business with related parties; (xxii) personal guarantees; (xxiii) brokers; (xxiv) representations and warranties on the closing date; (xxv) title to and right over assets; (xxvi) absence of long-term investments; (xxvii) no other representation.

Summary of the representations and warranties made by GRUPO PETROTEMEX and DAK

The representations and warranties made by GRUPO PETROTEMEX and DAK are as follows: (i) organization and existence; (ii) capacity; (iii) absence of violation of provision contained in the Bylaws and conflicting with the law, judicial or arbitration decision, instrument, commitment, agreement or contract; (iv) availability of funds; (v) brokers; (vi) access to information; (vii) representations and warranties on the closing date; (viii) no other representation.

Situations subject to indemnification by PETROBRAS

PETROBRAS undertakes to indemnify the Parties subject to Indemnification of the buyers, for any losses arising from: (i) any incorrectness, falsehood, violation or omission of any representation made by PETROBRAS in the CCVA; (ii) partial or total noncompliance with any obligation, duty or agreement assumed by

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PETROBRAS in the CCVA; (iii) any acts, events, omissions or claims, including existing claims disclosed or existing claims of a civil nature, occurred or originated previously (including) to the date of closing, even if its effects only materialize after such date, provided that they have not been disclosed by the seller to the buyers; (iv) any existing claim disclosed; (v) any act of corruption which directly affects the Companies committed by PETROBRAS, its affiliates or the Companies, prior to the closing date, which has been or comes to be evidenced in the future, recognized determined by a governmental authority in a final or unappealable decision; (vi) any claim filed by Construtora Norberto Odebrecht, resulting clearly from the Aliança Contract, which is not comprised in the Passive Contingencies of the Aliança Contract,. (terms defined in the CCVA); (vii) resulting from any claim by the employees of the seller assigned to the Companies; (viii) any losses related to contamination or performance or environmental remediation with respect to the analysis of risks; (ix) failure to comply with the environmental law between the date of delivery of the environmental risks analysis and the closing date.

Situations subject to indemnification by GRUPO PETROTEMEX and DAK.

The buyers undertake to indemnify PETROBRAS for: (i) any incorrectness, falsehood, violation or omission of any representation or warranty made by Buyer in the CCVA; (ii) failure to comply, partially or totally, with any obligation, duty or agreement assumed by the buyers in the CCVA; and/or (iii) any act of corruption committed by the buyers which was or comes to be evidenced in the future, recognized or determined by a governmental company in a final or unappealable decision.

Certain limitations apply to the obligation to pay indemnification, which vary depending on the nature of the loss or violation of the contract.

Necessary government approvals

The Acquisition is subject to approval by CADE.

Guarantees granted Buyers shall deposit US$ 38,500,000.00 (thirty-eight million five hundred thousand US dollars) (Initial Guarantee of Payment of the Acquisition Price) in a guarantee account (Guarantee Account), to be mutually agreed between the parties, after approval by their Board of Directors. Subsequently, within 3 business days before the date on which the Companies shall send notification of beginning of restructuring of debts, the buyers shall complement such a guarantee by depositing a further US$ 77,000,000.00 (seventy-seven million US dollars) (Guarantee Complementary to the Payment of the Acquisition Price).

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Inapplicability of article 253 of Brazilian Corporations Law -LSA

Let it also be stressed that article 253 of Law No. 6.404/76 does not apply to this case, considering the current position of the Brazilian Securities and Exchange Commission -Comissão de Valores Mobiliários (CVM) on the subject, to the effect that such provision would only apply in the event of PetroquímicaSuape and CITEPE having become wholly-owned subsidiaries by acquisition of shares, which was not the case.

Legal Actions and the Federal Court of Accounts -TCU

Finally, in relation to the provisional decision of Tribunal de Contas da União (TCU) – Federal Court of Accounts, as disclosed on 12/08/2016, and the injunctive decisions of the Judiciary on the subject of divestment transactions by PETROBRAS, with respect to the disposal of the shares of PetroquímicaSuape and CITEPE, such disposal has not been suspended to date by judicial injunctive measures filed in the scope of popular actions and of public civil actions, and there is not impediment to PETROBRAS proceeding to comply with the conditions precedent set forth in the CCVA.

There is also decision TC-013.056/2016-6 pronounced by the Full Court of the TCU, which gave PETROBRAS permission to conclude five deals, among them, disposal of the shares of PetroquímicaSuape and CITEPE.

Economic valuations

Economic internal (buyer s perspective) and external (market perspective) valuations were made, in compliance with the Methodology for Divestment of Assets and Companies of the PETROBRAS System. The final value of the transaction exceeded the internal and external assessment scenarios, and it was also considered fair by the external fairness opinions issued by G5 Evercore and by the bank Crédit Agricole.

In view of the above, the Board of Directors of PETROBRAS submits to the esteemed appreciation and deliberation of the General Meeting the proposal of disposal of 100% (one hundred percent) of the shares held by Petróleo Brasileiro
S.A. – PETROBRAS in PetroquímicaSuape and CITEPE for the amount equivalent to US$ 385,000,000.00 (three hundred eighty-five million dollars), adjusted by the positive cumulative change in the United States inflation rate, between the base date (12/31/2015) and the closing date of the operation, using the exchange rate of 3 business days prior to the closing operation date.

Attached: Fairness opinions and Valuation Memorandum

To the Board of Directors of Petróleo Brasileiro S.A.
November 4th, 2016
Petróleo Brasileiro S.A.
Av . República do Chile, 65
Rio de Janeiro 20031-912
Brazil

Dear Sirs:

We understand that Petróleo Brasileiro S.A. (Petrobras) is negotiating the sale of Liquigás Distribuidora S.A. (Liquigás or the Company), to Companhia Ultragaz S.A. (Buyer), which shall include 100% of the share capital of the Company (the Proposed Acquisition).

On October 21st, 2016 Petrobras made available to us the final version of the stock purchase agreement (SPA) and the Binding Offer (BO) containing the final terms of the Proposed Acquisition, with an offer price of BRL 2,800,000,000.00 (two billion and eight hundred million Reais) in a cash and debt free basis, including three minority stakes that Liquigás holds in other companies but excluding a non-operational real estate asset (Enterprise Value or Offer Price).

The Proposed Acquisition is to be effected by the transfer of 100% (one hundred percent) of Liquigás shares to the Buyer, whereby Petrobras will receive 100% of the Enterprise Value at the closing adjusted by the CDI interest rate between the signing of the SPA and the closing date, minus the Company s net debt at closing plus the working capital variation between December 31st, 2015 and the closing date plus BRL 61,600,000.00 (sixty one million and six hundred thousand Reais) for the real estate asset (Real Estate Asset Price) if Petrobras is not able to sell the asset before the closing date.

We have been requested by Petrobras to give an opinion with respect to the fairness to Petrobras, from a financial point of view, of the Offer Price to be paid by the Buyer in the context of the Proposed Acquisition (the Opinion).

In arriving at our Opinion, we have reviewed certain business information related to Liquigás provided to us by Petrobras, including the respective operational, financial and prices forecasts of the Company, the business plan, and the audited financial statements, when available.

We have considered certain financial and stock market data , up to October 21st, 2016, of publicly-held companies with businesses which we deemed relatively similar to those of the Company. We have also considered other information such as managerial reports, financial studies, analyses and investigations and financial, economic and market criteria which we deemed relevant.

We have also assumed that all the relevant contracts and the business plans that have been provided by Petrobras and its financial advisor in the virtual data roam are in force, updated and represent the Company s management views as of the date hereof.

In addition, we have held discussions with members of Petrobras acquisitions and divestments team , regarding their views for the existing business of the Company and its future perspectives.

In connection with our review, we have not assumed any responsibility for Independent verification of any of the foregoing information and have relied on its being complete and accurate in all material respects.

We have assumed, with your consent, that in the course of obtaining necessary regulatory and third party approvals and consents for the Proposed Acquisition, no modification, delay, limitation, restriction or condition will be imposed that will have an adverse effect on Petrobras, Liquigás or any of their affiliates.

We have also assumed that the Proposed Acquisition will be consummated in accordance with its current financial terms described herein , in the BO and in the SPA , without waiver , modification or amendment of any material term, condition or agreement therein .

In addition we have not been requested to make, and have not made, an independent evaluation or appraisal of the contingent or off-balance assets and liabilities of the Company and its affiliates.

Our Opinion addresses only the fairness, from a financial point of view, to Petrobras of the Offer Price and does not address any other aspect or implication of the Proposed Acquisition, including the Real Estate Asset Price, or any other agreement or understanding entered into in connection with the Proposed Acquisition or otherwise. Our Opinion is necessarily based upon information made available to us on the date hereof and upon financial, economic, market and other conditions as they exist and can be evaluated on the date hereof. Our Opinion does not address the merits of the underlying decision by Petrobras to enter into the Proposed Acquisition, neither shall be deemed to be an assurance or guarantee as to the expected results of the said transaction. We are not expressing any opinion as to what the future value of the ordinary shares of Liquigás or Petrobras actually will be pursuant to the Proposed Acquisition.

We will receive a fee from Petrobras for the delivery of this Opinion, which is not dependent on the completion of the Proposed Acquisition. lf, notwithstanding the terms of this letter, Petrobras does rely upon this Opinion, it will do so entirely at its own account and responsibility . In addition, Petrobras has agreed to indemnify and hold us harmless against any liabilities and other items arising out of our engagement.

From time to time, we and our affiliates have in the past provided, are currently providing and in the future we may provide investment banking and other financial services to Petrobras and/or Companhia Ultragaz S.A., for which we have received, and would expect to receive, compensation. We are a full service securities firm engaged in securities trading and brokerage activities as well as providing investment banking and other financial services. In the ordinary course of business, we and our affiliates may acquire, hold or sell, for ourselves and/or affiliates own accounts and the accounts of costumers, equity, debt and other securities and financial instruments (including bank loans and other obligations) of Petrobras, Companhia Ultragaz S.A. and any other company that may be involved in the Proposed Acquisition, as well as provide investment banking and other financial services to such companies .

lt is agreed that this letter is for the exclusive use of the Board of Directors of Petrobras only in connection with its consideration of the Proposed Acquisition. This letter is not issued pursuant to or as a result of the existence of any regulation , law or any particular Stock Market regulation (including the Brazilian Lei das Sociedades Anônimas - Lei 6.404/76 , and its amendments ar any other jurisdiction legislation or regulation) possibly applicable in the context of the Proposed Acquisition, and cannot be used as an independent appraisal in particular vis-à-vis Petrobras shareholders meeting, the general public or any authorities . Furthermore, this letter is not intended to be , and does not constitute any recommendation in relation to the Proposed Acquisition.

This letter is confidential and its content may not be disclosed to any person without our prior consent and it is not to be quoted or referred to, in whole or in part, nor shall this letter be used for any other purposes, without our prior written consent.

Based upon and subject to the foregoing, it is our opinion that, as of the date hereof, the Offer Price is fair to Petrobras from a financial point of view.

This letter was submitted and approved by our internal committees.

Yours Faithfully,

Banco Crédit Agricole Brasil S.A.

Marco Aurélio Ponce

Gerente Geral de Controladoria

Banco Credit Agricole Brasil SA

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November 17, 2016
Petróleo Brasileiro S.A Avenida República do Chile, 65 -22nd Floor 20031-912 Rio de Janeiro -RJ -Brazil
Dear Sirs,
We understand that Petróleo Brasileiro S.A. (Company or Petrobras) received a binding offer dated August, 31 2016 (Binding Offer or The Offer) to sell 100% of both Companhia Petroquímia de Pernambuco (PetroquímicaSuape or Suape) and Companhia Integrada Têxtil de Pernambuco (Citepe) (altogether Targets or PQS) (Transaction), f amount of USD380 million (the Consideration), assuming a balance sheet free of cash and debt. The Offer was submitted by Grupo Petrotemex, S.A. de c.v. (Petrotemex) and DAK: Americas Exterior, S.L. (DAK and, jointly with Petrotemex, the Purchasers or Aquirers), both comprising the Alpek Group (Alpek), together with mark-ups to a previously provided Stock Purchase Agreement (SPA).
Petrobras has asked us whether, in our opinion, on December 31, 2015 (base date of the Offer) the Transaction were fair, from a financial point of view.
In connection with rendering our opinion, we have, among other things:
(i) Developed, as requested by Petrobras, a Valuation Memorandum (Valuation Memorandum) with base date on December 31, 2015 (Base Date). As a result of that, all projections were assumed to start thereafter, including WACC calculation, trading analysis and macroeconomic data;
(ii) As indicated in the draft and preliminary versions of the Share Purchase Agreement (SPA) that Petrobras shared with us, the Transaction s final purchase price would take into consideration certain adjustments to the Purchase Price originally defined in the Offer, counted from the Base Date until the Transaction closing date (Closing). Since we did not have access to the final SPA, in order to assess the nature and form of calculation of these adjustments, we did not assume, infer or otherwise estimate them, but rather construed our Valuation Memorandum based upon December 31 2015 audited financial figures, as provided by Petrobras and PQS, as well as, among others: the Confidential Information Memorandum (dated November 2015), teaser on the Transaction (dated October 2015), Management Presentation (dated March 2016), Business Plan (document entitled PNG 2016-2025 Premissas e Resultados dated October 17, 2016), conference calls held with Petrobras about PQS, Binding Offer (dated August 31, 2016) and publicly available information about PQS, the Purchasers and the markets in which PQS operates. For the avoidance of doubt, G5 Evercore was told to have accessed the same non-public information base that was provided to all potential acquirers of PQS, which participated in a broad sales process coordinated by the sell side financial advisor Credit Agricole S.A. (Credit Agricole) (please refer to item xi below). The only
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adjustment to December 31, 2015 audited financials carried out in our Valuation Memorandum reflected a condition precedent for Closing (as indicated in the Binding Offer and also in the draft versions of the SPA, that we were provided), which was that PQS outstanding debt were prepaid in full by Petrobras (cash free and debt free basis);
(iii) Reviewed certain publicly available business and financial information relating to the industry that we deemed to be relevant;
(iv) Reviewed certain non-public internal financial statements, other non-¬public financial and operating data relating to the Target, that were prepared and furnished to us by the management of the Target as well;
(v) Reviewed certain financial projections related to the Target, that were provided to us by the Management of the Target as well;
(vi) Discussed the past and current operations, financial projections, current financial condition and prospects of the Target with certain members of Senior Management of the Company and the Target as well;
(vii) Reviewed draft agreements of the SPA between Petrobras and the Purchasers related to the acquisition of the Target;
(viii) Reviewed the financial terms of certain publicly available transactions that we deemed to be relevant;
(IX) Reviewed certain research analyst reports estimates of the future market environment in which the Target is part that we deemed to be relevant;
(x) Reviewed with the financial advisors to the Company (Credit Agricole) in this Transaction the scope and results of the transaction process to date conducted on behalf of the Company;
(xi) Been informed by Petrobras that Credit Agricole has performed a broad and competitive sales process for PQS, the result of which was that Alpek s Offer was considered the most competitive for the consummation of the Transaction
(xii) Performed such other analyses and examinations and considered such other factors that we deemed appropriate.
For purposes of our analysis and opinion, we have assumed and relied upon, without undertaking responsibility for independently verifying the accuracy and completeness of the information reviewed by us or reviewed for us. We have also assumed that the process that led to the Transaction undertaken by the Company was appropriate and negotiated on an arm s length basis. With respect to the financial projections of the Target which were furnished to us, we have assumed that such financial projections have been reasonably prepared by the Company and the Target as well, on bases reflecting the best currently available estimates and good faith judgments of the future competitive, operating and regulatory environments and related financial
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G5 EVERCORE

performance of the Target. We express no View as to any such financial projections or the assumptions on which they are based.

We have assumed, that all governmental, regulatory or other consents, approvals or releases necessary for the consummation of the Transaction will be obtained without any delay, limitation, restriction or condition that would have an adverse effect on the Company or the consummation of the Transaction.

Our opinion is necessarily based on economic, market and other conditions as in effect on, and the information made available to us as of, the date hereof. Additionally, our valuation assumes that the Target will operate on a standalone basis without potential synergies or operational gains from the Acquirers. Furthermore, please be advised that our valuation methodologies are detailed in the presentation named Valuation Memorandum of PetroquímicaSuape and Citepe (PQS) , which should be understood as part of this document. Please also be informed that subsequent developments may affect this opinion and that we do not have any obligation to update, revise or reaffirm this opinion.

We have not been asked to consider, and/or express any opinion with respect to any matter other than the fairness, from a financial point of view, as of the Base Date. Our opinion does not address the relative merits of the Transaction as compared to other business or financial strategies that might be available to the Target, nor does it address the underlying business decision of the Company to engage in the Transaction, be it in its current or in any other format.

We are not legal, regulatory, accounting or tax experts and have assumed the accuracy and completeness of assessments by the Company and its advisors with respect to legal, regulatory, accounting and tax matters. In this respect, we have also not judged or made any inference regarding the appropriateness, accuracy, nature or rationale for the impairment tests applied to Suape and Citepe, which results led to significant losses in the latter s financial statements as of December 31, 2014 and December 31, 2015.

We have been engaged as financial advisor to the Company solely for the purpose of rendering this opinion and will receive a fee in connection with the delivery of this opinion. In addition, the Company has agreed to reimburse certain of our expenses and to indemnify us against certain liabilities arising out of our engagement. In addition, we and our affiliates may have in the past provided, may be currently providing and in the future may provide, other financial advisory services to the Company, or their respective affiliates, for which we have received, and would expect to receive, compensation.

It is understood that this opinion is solely for the information of the Company in connection with and for the purposes of its evaluation of the Transaction, and may not be disclosed to any third party or used for any other purpose without our prior written consent, except that a copy of this opinion may be included in any filing the Company is required to make with the Comissão de Valores Mobiliários (CVM) or any other disclosure required by law in connection with the Transaction if such inclusion is required by applicable law, provided that the opinion is reproduced in full in such filing and any description of or reference to us or summary of this opinion and the related analyses in such filing is in a form reasonably acceptable to us and our counsel. Our opinion does not constitute a recommendation to any holder of Company shares to agree or not in the Transaction.

Based upon and subject to the foregoing, it is our opinion that, on the Base Date, the Consideration to be paid by the Company for the Transaction, as stated in the Binding Offer, is fair, from a financial point of view.

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Very truly yours,
G5 Consultoria e Assessoria Ltda (G5 EVERCORE)
By: ______________________________
Corrado Varoli
Co-Founder & CEO
By: _______________________________
Marcio Santiago
Senior Partner
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Valuation Memorandum of PetroquímicaSuape and Citepe (PQS)
November 17, 2016
Evercore

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G5 Consultoria e Assessoria Ltda. (G5|Evercore) has been engaged by Petróleo Brasileiro S.A. together with its affiliates (Petrobras) to prepare and deliver a Valuation Memorandum concerning the proposed sale of Companhia Petroquímica de Pernambuco (PetroquímicaSuape) and the Companhia Integrada Têxtil de Pernambuco (Citepe), collectively the Suape Petrochemical Complex (PQS) based on commonly accepted valuation methodologies (Valuation Memorandum) with the purpose of providing its opinion as to the fairness, from a financial point of view, of the proposed purchase consideration offered by Grupo Petrotemex, S.A. de C.V. (Petrotemex) and DAK Americas Exterior, S.L. (DAK) (collectively the Buyers or Alpek), a subsidiary of Alpek S.A.B. de C.V., to acquire 100% of the shares of PQS (Transaction). Notwithstanding the above, G5|Evercore provides the following information and clarification regarding the Valuation Memorandum and its content:

1. This Valuation Memorandum is intended to provide Petrobras with a value range of the Company s equity value consisting of an initiative of such governing body and it is not derived or required by legal or regulatory statute, especially Federal Law N. 6.404/76, nor is it designed to comply with any other legal requirement derived or not from the Transaction.

2. This Valuation Memorandum has been prepared for the exclusive use of Petrobras, and should not be used by any third parties or for any other purposes.

3. This Valuation Memorandum, including its analyses and conclusions, do not constitute a recommendation to Petrobras, the Buyers, or any shareholder, director, or board member of Petrobras or of any of its affiliates (as defined below) as to how to vote, issue a statement or act regarding any matter related to the Transaction.

Affiliates means—in relation to an individual, legal entity, investment fund, or any other type of vehicle or universality of rights (Persons)—the Persons that directly or indirectly (a) control, administer, or manager such Person; (b) are controlled, administered, or managed by such Person; or (c) are under common control, administration, or management with such Person or with Persons in its economic group.

4. To arrive at the conclusions presented in this Report, among other things: (a) G5|Evercore has analyzed the audited financial information of PQS referring to the fiscal years ended on December 31, 2013, 2014, and 2015; (b) G5|Evercore has analyzed and discussed with the Officers of the Company the financial and operating projections of the Company, provided by Petrobras; (c) G5|Evercore held discussions with the Officers of the Company concerning the Company s business and prospects; and (d) G5|Evercore took into consideration other financial, economic, and market information, studies, analyses, research, and criteria that G5|Evercore found relevant (collectively, the Information).

5. Within the scope of our review, G5|Evercore has not assumed and does not assume any responsibility for independent investigations of any Information, which is the sole responsibility of the respective sources that provided it, and trusts that all Information was complete, accurate, consistent, and up to date in all material aspects. In addition, G5|Evercore has not been requested to make, and indeed did not make, any independent verification of such Information or independent verification or evaluation of any assets or liabilities (contingent or otherwise) of PQS or its Affiliates, and has not been given any evaluation in this regard. G5|Evercore did not evaluate the solvency of PQS or of its Affiliates in light of laws related to any matter, including bankruptcy, insolvency, or similar issues.

6. G5|Evercore has not made and will not make any express or implied representation in relation to any Information (including financial and operating projections of PQS or of its Affiliates or assumptions and estimates on which such projections were based) used to prepare the Valuation Memorandum. In addition, G5|Evercore has not assumed any obligation to conduct, and indeed did not conduct, any physical inspection of the properties or facilities of PQS or of its Affiliates. G5|Evercore is not an accounting firm and has not provided any accounting or auditing services in relation to this Transaction or Valuation Memorandum. G5|Evercore is not a law firm and has not provided any legal, regulatory, or tax services in relation to this Transaction or the Valuation Memorandum.

7. G5|Evercore has not carried out any accounting, financial, legal, tax, or other due diligence or audit of PQS, its Affiliates, or any third parties. The results of such procedures, if carried out, could alter the analyses and conclusions of this Valuation Memorandum.

8. No representation or warranty, expressed or implied, is made by G5|Evercore with regards to the accuracy,

completeness, truthfulness, or sufficiency of the Information contained in this Valuation Memorandum or that on which it was based. Nothing contained herein will be interpreted or construed as a declaration by G5|Evercore regarding the present, past, or future.

9. The operating and financial projections of PQS and its Affiliates contained herein and the projections relating to the demand and growth of the respective markets were based on Information provided to G5|Evercore by PQS, Petrobras and its financial advisor, or obtained from public sources. G5|Evercore assumes, without making any independent investigation, that such projections were prepared reasonably and based on the best estimates currently available to the management of Petrobras and PQS, which was evaluated on a stand-alone basis. If this assumption does not hold true, the analyses and conclusions in this Valuation Memorandum may be significantly altered.

10. This Valuation Memorandum is not an explicit or implied recommendation concerning any aspect of the Transaction.

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11. This Valuation Memorandum (a) does not quantify or express any opinion on any positive or negative effects that may impact PQS, Petrobras or its Affiliates; (b) does not create any liability for G5|Evercore regarding the result of the Transaction; and (c) does not constitute, and should not be construed as, a recommendation to Petrobras or any of its Affiliates or to their respective officers, board members, or shareholders as to how to decide or act regarding any matter related to the Transaction.

12. Since the analyses performed are inherently subject to uncertainty and are based on various events and factors beyond our control and the control of PQS, Petrobras, and its Affiliates, G5|Evercore will have no liability of any kind if the future results of PQS differ substantially from the results presented in this Valuation Memorandum. There is no guarantee that the future results of PQS will correspond to the financial projections used as a basis for the analysis contained herein. Any differences between projections and the financial results of PQS may be significant. The future results of PQS may also be affected by economic and market conditions.

13. Preparation of a financial valuation is a complex process that involves various definitions concerning the most appropriate and significant methods of financial analysis as well as how such methods are to be applied. To arrive at the conclusions presented in this Valuation Memorandum, G5|Evercore performed qualitative reasoning regarding the analyses and factors taken into consideration. We arrived at a final conclusion based on the results of all analyses carried out, considered as a whole, and G5|Evercore did not arrive at conclusions solely based on or related to any of the individual factors or methods used in our analysis. Accordingly, G5|Evercore believes that our analysis should be considered as a whole and that the selection of parts of our analysis and specific factors, without considering the entirety of our analysis and conclusions, may result in an incomplete and incorrect understanding of the processes used for our analyses and conclusions.

14. Valuations of other companies and other sectors prepared by G5|Evercore in other transactions, of a nature similar to that of the Transaction or not, may treat the market assumptions used herein differently from the approach adopted in this Valuation Memorandum; hence, any departments, persons, or executives of G5|Evercore or any of its Affiliates may use in their analyses, reports, documents, and/or publications, estimates, projections, and methodologies different from those used herein, and such analyses, reports, documents, and/or publications may arrive at different conclusions from those expressed in this Valuation Memorandum.

15. The base date used for this Valuation Memorandum is January 1, 2016. Although future events and other developments may affect the conclusions presented in this Valuation Memorandum, G5|Evercore is under no obligation to update, revise, correct, or revoke this Valuation Memorandum, wholly or in part, as a result of any subsequent development or for any other reason.

16. Petrobras has agreed to reimburse G5|Evercore and its Affiliates for expenses incurred in connection with the preparation of this Valuation Memorandum and to indemnify it for liabilities and expenses that may arise as a result of its engagement. G5|Evercore will receive from Petrobras a commission for the preparation and delivery of this Valuation Memorandum, regardless of the conclusions contained herein and/or the completion of the Transaction.

17. G5|Evercore may provide investment banking and other financial services to Petrobras and/or to any of its Affiliates in the future, for which G5|Evercore would expect to be compensated. G5|Evercore is a financial advisory company that provides a range of financial and other services related to securities, and investment banking. In the ordinary course of its activities, G5|Evercore may acquire, hold, or sell—on our own account or at the request and expense of our clients—shares, debt instruments, and other securities and financial instruments (including bank loans and other obligations) of Petrobras, of the Buyers, of any of their Affiliates, and may provide investment banking and other financial services to such Persons, to their Affiliates, and to their management.

18. This Valuation Memorandum is the intellectual property of G5|Evercore and must not be used for any purpose other than within the context described herein. When disclosing this Valuation Memorandum as required by applicable law or regulations, the following must be observed: the Valuation Memorandum may be disclosed only in its entirety.

São Paulo, November 17, 2016

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Executive Summary

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Executive Summary
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Executive Summary
Proposed Transaction – Key Considerations

• On August 31, 2016, Petrobras received a binding offer (Offer) to sell its 100% share stakes in Companhia Petroquímica de Pernambuco (PetroquímicaSuape or Suape) and in Companhia Integrada Têxtil de Pernambuco (Citepe), (Transaction), collectively the Suape Petrochemical Complex (PQS or the Company), located in the Port of Suape, in the state of Pernambuco, Brazil
• The Offer was submitted by Alpek, together with mark-ups to a previously provided Stock Purchase Agreement (SPA)
• The Offer was denominated in United States Dollars, amounted to US$380 mm for 100% of PQS shares (the Consideration), and was split as: US$200 mm for Suape and US$180 mm for Citepe
• As imposed by Alpek, one of the conditions precedent for Closing under these terms, was that PQS outstanding debt were prepaid in full by Petrobras (cash free and debt free basis)
• The Offer s base date was Dec. 31, 2015. Same for the base date as stated in the SPA, that is still under negotiation between the parties
• Within this context, G5/Evercore was retained by Petrobras with the objective of providing a supporting Valuation Memorandum (Valuation Memorandum) and a Fairness Opinion Letter (Letter) concerning the Transaction
• As requested by Petrobras, G5/Evercore s Valuation Memorandum was construed based on a Company with no debt (nor financial expenses), starting on Jan 1, 2016, and based on prevailing market conditions on December 31, 2015. As a result of that:
• Enterprise Value ended up having the same economic meaning of Equity Value in this Valuation Memorandum
• The latter s base date was December 31, 2015 and all projections were assumed to start thereafter, including WACC calculation, trading analysis and macro economic data

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Executive Summary
Proposed Transaction – Key Considerations

• This Valuation Memorandum also considered the Company as a stand-alone entity, i.e.:
• It excluded any potential benefits, impacts, synergies or disynergies that PQS might have with the buyer, be them of an operating, financial, tax, environmental or any other nature, after the conclusion of the acquisition
• Since PQS is still in the ramp up stage (negative EBITDA), it consequently has limited capacity in the short term to access bank facilities without a Corporate Guarantee (no longer to be provided by Petrobras)
• This Valuation Memorandum did not assess the merits or the appropriateness of this debt prepayment, or the Transaction as a whole
• All assumptions applied to the DCF valuation were provided by Petrobras and PQS Management teams, which we assumed to be true, accurate, and/or reflective of both companies best assumptions. We also did not evaluate PQS business plan, that was provided to G5 Evercore
• The latest draft SPA that G5 Evercore had access allowed us to acknowledge that the Transaction s final purchase price should be subject to certain future price adjustments (at and after Closing Date)
• However, the methodology for such calculation is still under negotiation between Petrobras and Alpek
• As such, no such potential adjustments were considered either in this Valuation Memorandum or in the Fairness Opinion Letter provided to Petrobras together with the former
• Our conclusion was that, on December 31, 2015 the Binding Offer Consideration for PQS was fair from a financial point of view, since it implied 12% and 57% premiums, respectively, to the mid-points of our valuation ranges respectively for Suape and Citepe (30% premium for the entire Offer)
• Offer for Suape: US$200 mm / Mid-point of G5/Evercore s valuation for Suape: US$179 mm (equity value)
• Offer for Citepe: US$180 mm / Mid-point of G5/Evercore s valuation for Citepe: US$114 mm (equity value)

Note: (1) As detailed in the Fairness Opinion Letter provided to Petrobras on this same date pursuant to this transaction, which, among other things, considered Petrobras Management s information that a broad and competitive sales process was run for PQS, the result of which was that Alpek s Offer was considered the most competitive for the consummation of the Transaction.

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Executive Summary
Valuation Methodologies

• G5 Evercore prepared this Valuation Memorandum based on information provided by PQS and Petrobras, using the following methodologies to derive the Company s equity value range:
• Discounted Cash Flow (DCF) Analysis
• Peer Group Trading Multiple (Trading) Analysis
• Peer Group Acquisition Multiple (M&A Comps) Analysis
• The DCF was considered the only valuation methodology that fully captures PQS ramp-up stage of operations. The absence of international traded peers of equivalent size and scope of operations undermined the quality of the results from the Trading and M&A Comps methodologies. The latter is shown in the next slide just for reference, not being reflected in the Fairness Opinion Letter
• Although the Acquisition Multiple derived valuation had the merit of considering only mid-sized EV companies that manufactured primarily PTA, PET and/or DTY (like PQS), its drawback was that the companies acquired had more mature businesses than PQS (higher utilization capacity) and more product diversification. As such, this methodology did not yield results as reliable as the DCF
•The Trading Multiple analysis was considered to be the weakest valuation methodology for PQS. Despite being part of the same broad global sector, the listed polyester companies have larger scale than the latter, more mature businesses, more product diversification, and cover a larger target market. As such, they should trade with a premium to PQS fundamental (DCF-based) value
• The DCF-derived Equity Value for PQS was determined to be between US$275 million and US$316 million (please refer to the next slide for a quantitative analysis), split as:
• Suape: US$168 million to US$193 million
• Citepe: US$107 million to US$123 million

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Executive Summary
Summary of Valuation Methodologies (as detailed in the previous and next slides)
DCF-derived EV/EBITDA 17E(1) range
Offer: $380
($330/ton)
Considerations
Considering a range of:
• WACC: 10.5% -11.5% (USD real terms)
• Terminal Growth: 0.0%
• Value range was derived from the median multiple of 5.8x +/-1.0x EV/EBITDA LTM
• Just for reference (see comments in slide 08)
• Value range was derived from the comparables median multiple of 7.8x +/-1.0x EV/EBITDA 2017E
• Just for reference (see comments in slide 08)
Discounted Cash Flow
(the only mnethodology that fully captures PQS value)
M&A Comps Analysis
Trading Comps Analysis (EV/EBITDA)
(1) Considers Adjusted EBITDA of US$55.1 million for 2017, please refer to the appendix for more details.
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Executive Summary
Discounted cash flow analysis was considered to be the only methodology that fully captures PQS fundamental equity value, in light of the ongoing ramp-up of its operations and the lack of international traded peers of equivalent size and scope of operations
Discounted Cash Flow Analysis based on the Company s Business Plan and information provided by Petrobras, including price, volume, capex and opex assumptions, among others
Discounts the projected cash flows by the weighted average cost of capital (WACC), in real terms
Description
Considerations
It captures changes in the sector and in the Company s short and long term performance through out the projected period
Free Cash Flow to Firm (FCFF) was considered as the most suitable valuation method, given the Company s capital structure changes over time
Discounted
Cash Flow
Analysis
(the only methodology
that fully captures PQS
value
Peer Group
Acquisition
Multiple
Analysis
(M&A Comps)
Peer Group
Trading Multiple
Analysis
Based upon the multiples observed in strategic transactions involving petrochemical producers and especially those primarily focused on the production of PTA, PET and/or DTY
As past transaction manufacturers were though not always limited to PTA, PET and/or DTY, their median multiple range resulted overstated to evaluate PQS
It reflects prices paid in M&A transactions for assets in the Company s sector globally, considering the lack of comparable domestic transactions
PQS projected 2020 EBITDA was considered (maturity of operations), discounted by WACC to 2017, which was compared to PQS EV in that year(1)
Based on the peer group trading multiples of global companies acting in petrochemicals (PTA, PET and DTY)
The companies identified, though, had a larger scale of operations, higher capacity utilization (in the initial years), broader product diversification and covered a large Market

spectrum than PQS
Multiples based on the average of equity research analysts projections for 2017
It reflects the multiples of publicly-traded companies
No adjustments to reflect control premium or liquidity
PQS projected 2020 EBITDA was considered (maturity of operations), discounted by WACC to 2017, which was compared to PQS EV in that year (1)
Discounted cash flow analysis was considered to be the only methodology that fully captures PQS fundamental equity value, in light of the ongoing ramp-up of its operations and the lack of international traded peers of equivalent size and scope of operations
(1 Please refer to the appendix for more details on the Adjusted EBITDA.
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II G5 Evercore Credentials

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G5 Evercore Credentials
Sell Side
Advising Advised
Advising Abengoa on
the sale of
transmission assets
On the valuation
memorandum of Nansei
Sekiyu K.K.
Exclusive Financial Advisor to
BR Properties Board of
Directors in the analysis of
GP Investments and ADIA
non-solicited acquisition offer
On the economic-financial
analysis of: (i) Parnaíba Gás
Natural S.A. (PGN), (ii)
Cambuhy s PGN stake (iii)
and mandatory convertible
debentures in Cambuhy s
On its sale to
shares
On the sale of
On the fairness opinion of
Bacia de Bijupirá and
Salema
On an appraisal report for
Parnaíba I, Parnaíba II, and
Parnaíba IV
On the sale of its equity
interests in Natal and Brasília
airports to
On the sale of its
Brazilian operations of
Arjo Wiggins for
On the fairness opinion concerning
the fair value of the 3 gas-fired plants
Parnaíba I, Parnaíba II, and
Parnaíba IV
On the sale of its coffee
assets to
On the sale of its hotel
assets to
On its sale to
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G5 Evercore Credentials
Buy Side Restructuring Fund Raising Joint Venture
Advised
Subsidiary of
On the acquisition of
2015 Advising
On the acquisition of a
minority stake in
On its ~R$3.9 billion
debt restructuring
On its ~R$2.3 billion
debt restructuring
On the fund raising for
the development of a
real estate project
In forming a joint
venture with
On the acquisition of
On its ~R$4.1 billion
debt restructuring
On its ~R$150 million debt
restructuring
On the fund raising for
the acquisition of
In forming a joint venture
and fund raising with
On its ~R$10 billion
debt restructuring
On its debt restructuring
and sale to
On the fund raising for
the development of
Bossa Nova Mall Rio de
Janeiro
On its strategic
partnership with
Ongoing
2015
2012
2016
2013
2014
2010
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Industry Overview

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Industry Overview
Overview of Polyester Production Chain
Overview Product Descriptions
Purified Terephthalic acid (PTA) is obtained from the oxidation of paraxylene with acetic acid, and is used primarily in the manufacture of polyester (either resin called PET, fiber or film)
PET resin is clear, shatter resistant polyester resin mainly used in packaging. Although it differs in terms of the final processing and enduse applications, the production process is similar to that of polyester fibers
Polyester Fibers are polymers made from PTA and Ethylene Glycol (MEG) (Continuous Process) or Dimethyl Terephthalate (DMT) and MEG (Discontinuous Process), further processed into textile fibers.
Polyester is the most used synthetic fiber in the world due to its low production cost and large range of uses
Raw material of textile polyester, PET and resins for several types of packaging, in addition to industrial fibers used in manufacturing tires, materials and equipment for the electrical, automotive and petroleum industries.
Partially Oriented Yarn (POY) is the first yarn in the production of a polyester filament, mainly used as a raw material for the production of others Polyester Fibers, such as DTY
Draw Textured Yarn (DTY) processed POY which yields volume. Widely used in the clothing segment
Fully Drawn Yarn (FDY) possesses production process similar to POY. Smooth filament with specific applications in the textile industry, such as curtains and car seats
PET clear, lightweight and shatter-resistant plastic for use in bottles and packaging of medication, cosmetics, personal hygiene and cleaning products
Terephthalic Acid
(PTA)
Polyester
Polymers
and
Filament
POY
FDY
DTY
Polyethylene
Terephthalate
(PET)
PTA PET DTY
Others
Polybutylene
Terephthalate &
Cosmetics
Others
1% 1% Food
Clothing

22%
15% Others
6%
43% Bed&Bath 7%
Mattress
Beverages
11%
78% Polyester
Decoration 99%
17%
Sources: Petrobras and IHS Energy Consulting.
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Industry Overview
Global Polyester Industry
Overview Global Polyester Production Growth (mm ton)
• Global PTA production has witnessed strong growth in the period following the 2008 financial crisis with operating rates peaking above
90% levels. The global oversupply of PTA is expected by Petrobras
Management to be narrowed to a non-meaningful level over time
• PET is forecasted to grow at approximately 4% per year throughout the next decade as the resin continues to gain ground in the food packaging and bottles industries, replacing other packaging formats
• World consumption is expected to maintain 6% annual growth as polyester fibers (namely DTY) continue to gain market share
• PTA, PET and DTY are considered to be very fragmented industries worldwide (please refer to the graphs below)
Principal Producers by Installed Capacity (2015E)
PTA PET DTY
Yisheng PC 11%
Tongxiang
DAK Americas
7%
Tongkun
M&G
6%Xianglu PC 8%
Zhejiang Xin Feng Ming Indorama
5%
Hengli 8%
Jiangsu Shenghong
Jiangsu
5%
Yisheng Dahua 8%
Reliance
5% Industries
Reliance
5%
Octal Holdings
4%Industries Hengyi
JBF Rak
4% BP 5% Jiangsu Hengli
Ibn Rushd
4%
Others 55% Others
Others
61%
7%
5% 4% 4% 3% 3%
2011A 2012A 2013A 2014A 2015E 2016E 2020E 2024E
Sources: Petrobras and HIS Energy Consulting.
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Industry Overview
Global PET Capacity Landscape
PET Capacity (mm ton)
Total: 6.9 21.6% 2.6 8.3% 1.6 5.1% 5.9 18.5% 14.8 46.5%
100%
100%
75%
50%
25%
Americas Western Central Africa, India, Middle East Rest of Asia (excl. India) Europe Europe
Nan Ya, 405
Alpha PET, 432
Indorama, 1,019
DAK Americas, 1,971
M&G, 2,625
Other, 500
M&G, 193
CEPSA
Quimica, 220
Novapet, 225
Equipolymers, 336
Lotte Chemicals
UK, 360
JBF RAK LLC,
390
Indorama, 420
Egyptian Indian Poly, 420
Koeksan PET, 432
Indorama, 466
IVL Dhunseri PC, 626
Ibn Rushd, 750
Octal Holdings, 950
Reliance Industries, 980
Yizheng Chem., 490
Far Eastern Group, 533
Lotte Chemical, 541
Shanghai Far Eastern, 573
Yisheng Dahua, 750
Indorama, 993
Yisheng Hainan, 1,000
Zhejiang Zhink, 1,100
Jiangsu Chenxing, 1,200
China Resources, 1,600
Jiangsu San Fang Xiang., 1,960
Sources: IHS Energy Consulting.
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Explanation of Responses:

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Industry Overview
Brazilian Polyester Industry
Overview Brazilian Polyester Market Demand Growth (000 tpy)
• Demand for PTA, PET and DTY continues to grow in the Brazilian market, with growth rates projected to accelerate in the 2020-2024 period
• The only local PTA producer installed in Brazil, PQS quickly assumed leadership in market share for the product, with the remaining demand satisfied by imports (mainly from Mexico, as a result of no import tariffs)
• In the PET space, Italian Mossi & Ghisolfi (M&G), also present in the Port of Suape, leads with 76% market share in 2015
• Local DTY demand continues to be met in large part by imports
Market Share by Product (2015)
PTA
59%
Imports
41%
PQS start of PTA production in
Brazil (2013) followed
Petrobras strategic decision to
foster the revamp of the local textile industry (DTY, 2010), through a competitive vertically integrated operation.
The PTA production capacity was then dimensioned to also stimulate competition and foster growth of the local PET market,
reason why PQS PET business
started operations only in 2014
PET
76%
M&G s leading position reflects the Company s
earlier entry into the market (2007)
DTY
Other Local Players
23% 10%
Imports 67%
The relevance of DTY imports in Brazil mirror the local textile industry dynamics, which production base historically moved out from Brazil to China, and, more recently, India and Vietnam. PQS inaugurated its first DTY production line in Brazil in 2010
Sources: Petrobras and IHS.
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Company Overview

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Overview of PQS
Overview
•Founded in 2006 and originally included in the Growth Acceleration Program (PAC), launched by Federal Government, PQS is South America s only integrated (PTA-PET) polyester producer and is a wholly-owned subsidiary of Petrobras
• PQS in turn is composed of two companies located in the Suape port in Pernambuco: Petroquímica Suape, which encompasses PQS terephthalic acid (PTA) production, and Companhia Integrada Têxtil de Pernambuco (Citepe), which manufactures polyethylene terephthalate (PET) and drawn textured yarn (DTY)
• Across its three industrial production units, PQS possesses installed capacities of 700 ktpy for PTA, 450 ktpy for PET and 90 ktpy for DTY
• PQS was envisioned, together with Petrobras original partner, the Companhia Industrial Têxtil do Nordeste (Citene), as a means to stimulate the development of the polyester value chain in Brazil, initiating with the production of polyester for clothing (DTY) and subsequently integrating it backwards with PTA operations. Petrobras later acquired Citene s 50% stake in PetroquímicaSuape and a 60% stake in Citepe
Company Timeline Geographical Footprint
2006 Creation of PQS Project Envisioned as a JV with Citene, SOA scheduled for 2009 2011 Citepe begins operations Company imports DTY input (POY) as PTA unit and polymer lines remain incomplete 2014/15 Principal Write-off and PET and PTA Production Petrobras records PQS write-off of R$3.7 billion for PQS(1)
2008 2013 PTA Production Begins PTA industrial unit enters into operations in January Exit of Citene Petrobras acquires Citene s stake as partner withdraws from project. 2016 Sales Process Announced Petrobras confirms beginning of exclusive negotiations with Alpek
Source: Petrobras
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(1): Suape R$1.0 bn and Citepe R$2.7 bn

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Overview of PQS
Company Overview
Operational Overview PetroquímicaSuape and Citepe Facilities
• The PQS complex began operations in 2011 with the start-up of the DTY unit. PTA operations began at the beginning of 2013, with PET line C and B starting up in mid 2014 and 2015, respectively
• The PET industrial facility possesses lines B , and C , which are operational
• DTY: Line A is at approximately 45% completion1 , but according to Petrobras management, it will not be concluded. The absence of line A will prevent the Company from realizing the full vertical integration originally envisioned at the time of projects planning (see slide 19)
• This explains the difference in pattern of capacity utilization forecast for PTA and DTY facilities (see graphs below)
Production Phase-in and Capacity Utilization (%)
2013 2014 2015 Installed
Capacity
(1)As of March, 2016
(2)Not yet operational
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Company Overview
Integration of PQS Operations1
Ethylene glycol
(MEG)
PTA
700 ktpy
Paraxylene
(PX)
50% Intercompany
40% Domestic
10% International
Input from Suppliers
PQS Product
Contingent on completion of Line A
Imported Inputs
Polymer Line A
240kty
Chips
30kty
FDY
20 kty
POY2
190 kty
Polymer Line B & C
DTY
90kty
PET
450kty
100% Domestic
70% Domestic
30% International
Source: Company
(1) Breakdown of products by market are estimates based upon the Company s business plan
(2) Currently imported for DTY production
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Company Overview
Combined Historical Financials1
Net Revenues (R$ mm)1
Gross Profit (R$ mm)1
EBITDA (Exc. Impairment)(1) (R$ mm)
1.638
857 1.005 1.100 633
525 633 603 243
8 44 78 243 52 525 78 857 1.005
844
2012A 2013A 2014A 2015A 2012A 2013A 2014A 2015A 2012A 2013A 2014A 2015A
Gross Profit (R$ mm)1
1 3
1 3 (2)
-2 (7) (6) (41) (7) (6) (202) (144) (41) (43)
-202 -144 (6) (141)
(209)
9.3% (38.5%) (16.8%) (0.2%) (15.1%) (8.2%) 1.1% (6.5%)
2012A 2013A 2014A 2015A 2012A 2013A 2014A 2015A 2012A 2013A 2014A 2015A
EBITDA (Exc. Impairment)(1) (R$ mm)
(157) (238) (191) (67) (120) (143) (153) (165) (157) (120) (277) (238) (143) (381) (191) (153) (344) (67) (165) (231)
(2093.3%) (45.3%) (22.3%) (6.6%) (271.2%) (183.8%) (62.8%) (26.0%)
2012A 2013A 2014A 2015A 2012A 2013A 2014A 2015A
Source: Petrobras
(1) Includes intercompany sales transactions
23

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V
Discounted Cash Flow Analysis

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V.a
Summary Projections

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PRIVATE AND CONFIDENTIAL MATERIAL
Summary Projections for Suape
Macroeconomic Assumptions
GDP Growth Forecast (%)
• Forecast based on Brazilian Central Bank estimates as of December 31, 2015
3,0%
FX Rate Forecast (BRL/USD, average of year)
• FX projected in real terms as of December 31, 2015
3,90 3,98 4,01 3,89
3,77 3,77 3,77 3,77 3,77 3,77
3,77
Source: Brazilian Central Bank as of December 31, 2015.
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PRIVATE AND CONFIDENTIAL MATERIAL
Summary Projections for Suape
Projected PTA Volumes and Average Prices
PTA Volume Projections (000 tons)
• With the expansion of M&G   s Corpus Christi, Texas – based unit by year-end 2016, Mexican PTA exports currently destined to both the American and Brazilian markets will likely be absorbed by the former, leaving M&G Brazil more dependent on PQS   s domestically produced PTA
• Prices for PTA exports destined for DAK Argentina   s Zarate facility are expected to become competitive in 2018, supporting in ternational volumes
• M&G   s share in the PET business should be eroded up to a certain point, as local clients avoid overdependance upon a single PET supplier. This should drive PTA demand
Additional volumes related to the maturing of Citepe   s PET business drive intercompany segment growth, with total volumes nearing capacity by 2025
PTA Average Prices (US$ / ton)
672
72
242
2040
• Both international and domestic PTA pricing follow foreign indexes, and a gradual improvement in international spreads is ass umed according to market intelligence provided by PQS and Petrobras
• Positive price trend is driven principally by the gradual recovery in crude oil prices, as well as improved economics as the market   s current oversupply gradually shades
1.081 953 958 943 946 956
956
924
889840797993 737707 854848 852 840 845 854
822
793769
703 700681 658
PTA Average Prices (US$ / ton)
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040 Domestic International Intercompany
Source: Petrobras
27

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PRIVATE AND CONFIDENTIAL MATERIAL
Summary Projections for Suape
Net Revenues and EBITDA
Projected Net Revenues (US$ million)
Domestic
International
Intercompany
Resale
Projected EBITDA (US$ million)
2023 and 2024 impacted by transfering of tax benefit (Prodepe) from Citepe to Suape
Utilization
2040
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
Source: Petrobras
28

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PRIVATE AND CONFIDENTIAL MATERIAL
Summary Projections for Citepe
Projected PET Volumes and Average Prices
PET Volume Projections (000 tons)
Assumed steady growth in market share, reaching 50% (ex - resin imports) by year-end 2018, principally as a function of eroding competitor M&G s
share
Company defends growth rates by referencing PQS rapid expansion to 36% market share since initiating operations and the opportunity to attract
several clients whose contracts with competitors are set to expire
Exports are mainly to Colombia (35%), Argentina (30%) and Uruguai (12%)
Domestic
International
Others
• Both international and domestic PET pricing follow foreign indexes, and a gradual improvement in international spreads is assumed in conformity with
market intelligence provided by PQS and Petrobras
1.341 1.351 1.351 1.344 1.349
1.349
1.304
1.305
903
1.011
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
2040
Domestic International
Source: Petrobras
29

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PRIVATE AND CONFIDENTIAL MATERIAL
Summary Projections for Citepe
Projected DTY Volumes and Average Prices
DTY Volume Projections (000 tons)
• Moderation of DTY volumes due to: (i) challenging pressure from lower-cost exports originating in Asia; (ii) originally planned price-efficient production method will not be achieved, since the vertical integration with the PTA production will not be completed. As a result, Citepe should keep importing POY (see slide 19), which basically eliminates Citepe s competitive advantage on DTY
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
DTY Average Prices (US$ / ton)
• Citepe only markets DTY in Brazil
2.340 2.366 2.354 2.338 2.320 2.334
2.334 2.279 2.189 1.993 1.728
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
DTY Average Prices (US$ / ton)
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
Citepe only markets DTY in Brazil
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
Source: Petrobras
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PRIVATE AND CONFIDENTIAL MATERIAL
Summary Projections for Citepe
Net Revenues and EBITDA (PET and DTY)
Projected Net Revenues (US$ million)
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
Domestic International
Projected EBITDA (US$ million)
• EBITDA decrease in 2023 could be explained by the end of tax benefit (Prodepe)
95% 95%
78% Utilization1 Utilization1 Utilization1
5528% 48 52
42 -51 -65
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2040
Source: Petrobras
(1) Refers to PET capacity utilization. DTY utilization was 21.1% in 2015 and is approximately13.8% after 2016
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V.b
Discounted Cash Flow

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PRIVATE AND CONFIDENTIAL MATERIAL
Discounted Cash Flow Analysis
Initial
Methodology
Discounted cash flow methodology
Projection of the Company s future cash flows, in real US$ terms, based on the assumptions provided by PQS and Petrobras
Projection of unlevered cash flows (FCFF), discounted by the weighted average cost of capital to calculate the net present value
Explicit projection period (up until 2040) in addition to terminal value
Valuation considering the Company as a stand-alone entity, i.e. excluding any potential benefits or impacts, be them of an operating, financial, tax, environmental, or any other nature, if any, after the conclusion of the acquisition
Discounted Cash Flow
Currency: United States Dollars (US$)
Valuation date base: December 31, 2015
Explicit period of projection: 25 years (December 31, 2015 to December 31, 2040)
Operating assumptions: Base case and guidance provided by Management
Cash flow: Midpoint of each period (mid-year convention) and discounted in real US$ terms
Weighted Average Cost of Capital: 11.03% in real US$ terms
Terminal Value: Perpetuity calculation based on the Gordon Method. No real growth assumed in perpetuity, as no further expansion in installed capacity is forecasted
Considerations
Slight improvement in technical indexes of chemical inputs across all three product groups (PTA, PET, DTY)
Approximately 50% market share in PET in Brazil by the end of 2018, in conformity with the identifiable strategic commercial opportunities associated to the expiry of significant PET supply contracts currently held by competitor M&G
Continuity of DTY business
Projections assume:
The Brazilian PET market would not be sizeable enough to absorb an additional player1, while the developed economies in South America s Pacific Coast (Chile, Colombia, and Peru) are efficiently served by Asian imports
The main entry barriers for the polyester market in Brazil are: (i) scale (if scale is capped by market size/potential, on the other hand a minimal scale2 is required to yield a profitable textile operation); (ii) product approvals (particularly for PET) and potential clients own internal approval processes, which were informed to be restrictive and long lasting
Notes: (1) Current Brazilian market demand is estimated by Petrobras management to be equivalent to approximately 520 ktpy. PQS, which holds only 19% market share (see slide 18), possesses 450 ktpy of installed capacity; (2) Not yet achieved by PQS.
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PRIVATE AND CONFIDENTIAL MATERIAL

Discounted Cash Flow Analysis

Main Assumptions

Main Fiscal Benefits

Repequim

Company pays reduced PIS/Cofins rates applicable to acquisition of Paraxylene (PX) (1% until 2015 end, 3% in 2016, 5% in 2017 and 5.6% from 2018 on) and receives a tax credit of 9.25%

Company can compensate its credits receiving cash or other tax deductions (IRPJ, IRRF, CSLL, PIS/COFINS and IPI)

Prodepe

Company receives credit for ICMS every year based on a percentage of its ICMS payables according to the table below:

Suape, 2023 and 2024 and 70% of tax credit

Citepe, until 2022 and 85% of tax credit

Sudene

Company has the right to use SUDENE tax benefit, which grants a 75% reduction over Company s Income Rate. In order to use this benefit, PQS should file a request until 31/12/2018 (benefit s term is 10 years)

General Assumptions

Sales and Pricing

Sales and production volume assumptions were based on management guidance through 2025, and subsequently held constant;

Pricing methodology was based on management guidance, with the exception of FX rate projections, which was considered based
on current Brazilian Central Bank estimates;

Capex

Minimum capex, no facility modification / capex for improvements, only essential repairs associated to planned production stops

Working Capital

Accounts receivable, payable and inventories cycles, as per management guidance and in line with historical figures;

Corporate Tax and NOLs

PQS has a large stock of Accumulated Losses in its Balance Sheet, which, according to the Brazilian Law, is deductible for tax purpose

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PRIVATE AND CONFIDENTIAL MATERIAL
Discounted Cash Flow Analysis
PetroquímicaSuape -DCF
Unlevered Free Cash Flow 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2030E 2035E 2040E T. Value
(All in US$mm, except where noted)
Revenues US$mm 291 322 459 492 540 568 577 599 610 618 618 618 618 618
% Growth % (71.0%) 10.4% 42.7% 7.3% 9.7% 5.1% 1.7% 3.7% 1.8% 1.3% 0.0% 0.0% 0.0% 0.0%
EBITDA US$mm (10) (3) 15 24 27 30 33 63 62 37 37 37 37 37
% Margin % (3.4%) (0.9%) 3.3% 4.8% 5.1% 5.4% 5.7% 10.5% 10.2% 6.0% 6.0% 6.0% 6.0% 6.0%
EBIT US$mm (38) (30) (12) (5) (2) 1 3 33 32 7 6 34 33 33
(-) Taxes US$mm 0 0 0 0 0 (0) (0) (4) (3) (1) (1) (4) (4) (4)
NOPAT US$mm (38) (30) (12) (5) (2) 1 3 29 29 6 5 30 30 30
(+) D&A US$mm 28 27 27 28 30 30 30 30 30 30 31 4 4 4
(-) WC US$mm (2) (3) (22) (4) (6) (3) (1) (3) (1) (1) 0 0 0 0
(-) Capex US$mm (2) (9) (2) (4) (2) (5) (2) (5) (2) (5) (4) (4) (4) (4)
FCFF US$mm (14) (15) (9) 15 20 23 29 51 55 30 33 30 30 30
% Growth % 6.8% (38.5%) (263.9%) 32.7% 15.6% 30.8% 74.0% 7.4% (45.4%) 0.1% (0.5%) (0.2%) 0.0%
DCF Summary USD Million Discount Rate (USD real terms)
Projected Flow 159.5 WACC 11.03%
Terminal Value 19.8 Terminal Growth 0.00%
Enterprise Value 179.3
(-) Net Debt 0.0
Equity Value 179.3
EV/Capacity (PTA) US$/ton 256.2
(1) Perpetuity calculation based on the Gordon Method. No real growth assumed in perpetuity.
(2) Assuming debt free and cash free deal.
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PRIVATE AND CONFIDENTIAL MATERIAL
Discounted Cash Flow Analysis
Citepe -DCF
Unlevered Free Cash Flow 2016E 2017E 2018E 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2030E 2035E 2040E T. Value
(All in US$mm, except where noted)
Revenues US$mm 263 314 401 472 526 557 572 583 596 601 601 601 601 601
% Growth % 19.5% 27.6% 17.7% 11.5% 5.9% 2.7% 1.8% 2.3% 0.8% 0.0% 0.0% 0.0% 0.0%
EBITDA US$mm (31) (2) 23 42 48 52 55 31 25 28 28 28 28 28
% Margin % (11.7%) (0.7%) 5.7% 8.9% 9.1% 9.3% 9.6% 5.4% 4.2% 4.7% 4.7% 4.7% 4.7% 4.7%
EBIT US$mm (51) (22) 3 21 26 30 33 9 3 6 5 4 24 24
(-) Taxes US$mm 0 0 (1) (8) (10) (11) (12) (3) (1) (2) (2) (1) (9) (9)
NOPAT US$mm (51) (22) 2 13 17 19 21 6 2 4 3 3 16 16
(+) D&A US$mm 20 20 20 21 22 22 22 22 22 22 23 24 4 4
(-) WC US$mm (8) (10) (5) (17) (8) (4) (3) 1 (2) (0) 0 0 0 0
(-) Capex US$mm (2) (9) (2) (4) (2) (5) (2) (5) (2) (5) (4) (4) (4) (4)
FCFF US$mm (41) (21) 15 13 29 32 38 24 20 21 22 23 16 16
% Growth % (49.4%) (172.3%) (12.3%) 119.5% 12.0% 17.2% (37.3%) (15.1%) 2.5% 0.3% 0.3% (0.3%) 0.0%
DCF Summary USD Million Discount Rate (USD real terms)
Projected Flow 103.9 WACC 11.03%
Terminal Value 10.4 Terminal Growth 0.00%
Enterprise Value 114.3
(-) Net Debt 0.0
Equity Value 114.3
EV/Capacity (PET) US$/ton 254.0
(1) Perpetuity calculation based on the Gordon Method. No real growth assumed in perpetuity.
(2) Assuming debt free and cash free deal.
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PRIVATE AND CONFIDENTIAL MATERIAL
Discounted Cash Flow Analysis
Analysis of EV/EBITDA Multiple
Build up analysis for the EBITDA considered in the EV/EBITDA Multiple Analysis
US$mm
Enterprise Value US$mm
Suape 179.3
Citepe 114.3
Total EV 293.6
NPV Adj. EBITDA 55.1
EV / NPV EBITDA 2017 5.3x
5.3x EV/EBITDA
2017E
WACC
11.03%
(1) EBITDA 2020 discounted by the WACC rate (3 years period)
(1)
Enterprise Value US$mm
Suape 179.3
Citepe 114.3
Total EV 293.6
NPV Adj. EBITDA 55.1
EV / NPV EBITDA 2017 5.3x
27
48 75 (20)
55
EBITDA 2020 (Suape) EBITDA 2020 (CItepe) Total EBITDA Adj. EBITDA 2020 NPV Adj. EBITDA 2017
(1) EBITDA 2020 discounted by the W ACC rate (3 years period)
37

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VI

Trading and Acquisition Comparables

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Trading and Acquisition Comparables
PRIVATE AND CONFIDENTIAL MATERIAL
Peer Group Trading Multiple Analysis (1)
Peer Trading Group
% of 52-Week High
Equity Value USD mm
Enterprise Value USD mm
Share Price EV/
31/12/2015 EBITDA
(In USD, except for local per share figures) Country Local $ LTM 2016E 2017E
PTA, PET, and Polyester-focused
ALPEK, S.A.B. de C.V. Mexico MXN 24.2 1.4 90% 2,974 3,858 5.5x 5.1x 4.8x
Far Eastern New Century Corporation Taiwan TWD 25.8 0.8 75% 4,179 10,286 10.5x 10.8x 9.5x
Indorama Ventures Public Company Limited Thailand THB 21.3 0.6 75% 2,846 5,159 9.5x 7.7x 6.7x
Reliance Industries Limited India INR 1,014.6 15.3 95% 49,630 64,521 9.0x 9.6x 8.9x
Mean 8.6x 8.3x 7.5x
Median 9.3x 8.7x 7.8x
Diversified Chemicals
Braskem S.A. Brazil BRL 26.2 8.1 88% 6,119 15,074 4.3x 4.2x 4.5x
Formosa Petrochemical Corp. Taiwan TWD 100.5 3.2 91% 30,440 30,049 9.9x 10.6x 12.4x
LyondellBasell Industries N.V. United States USD 78.5 78.5 81% 31,970 39,435 6.5x 5.8x 6.0x
Eastman Chemical Co. United States USD 71.3 71.3 90% 10,457 17,009 8.0x 8.0x 7.6x
Lotte Chemical Corporation South Korea KRW 291,500.0 255.2 82% 8,746 10,416 4.8x 4.1x 4.3x
Mitsui Chemicals, Inc. Japan JPY 470.0 4.6 86% 4,562 8,559 7.4x 7.2x 6.6x
The Dow Chemical Company United States USD 53.1 53.1 93% 59,579 79,296 8.9x 8.2x 7.7x
Mean 7.1x 6.9x 7.0x
Median 7.4x 7.2x 6.6x
Mean 7.7x 7.4x 7.2x
Median 8.0x 7.7x 6.7x
Source: Capital IQ, Company Filings Note: (1) Although we indentified above the main listed chemical companies in the world, we considered only the PTA, PET and 39 polyester enterprises as relevant Trading Comparables, since their product portfolios are the ones that best resemble PQS .

PRIVATE AND CONFIDENTIAL MATERIAL
Peer Group Acquisition Multiple Analysis
2015 Indorama United States 1mtpy PET Facility located in Decatur, Alabama
460
2014 Indorama Thailand 105ktpy PTA facility Bangkok Polyester N/A 5.3x N/A
2014 Indorama Turkey 130 ktpy facility Artenius 45 5.6x 346
2014 M&G International S.a.r.l Brazil Acquisition of the remaining 2.89% stake M&G Poliéster S.A N/A 9.6x N/A
2011 Alpek United States PTA/PET facilities with 1,275 ktpy capacity in USA Eastman Chemical Co. 622 6.6x 488
2011 Alpek United States 430 ktpy PET facility in USA Wellman 185 5.3x 430
2011 Alpek Argentina 16ktpy rPET facility located in Argentina Cabelma N/A N/A N/A
2011 Indorama Ireland Wellman International rPET facility Aurelius AG 57 6.4x N/A
2011 Indorama and Sinterama Germany and Poland 75% stake in 120 ktpy polyester facility Trevira GmbH 56 N/A
463
2010 Indorama Poland and Indonesia
Polish and Indonesian PET and Polyester Capacity of 226 and 110
ktpy
SK Chemicals 60 N/A N/A
2010 Indorama United States and Mexico PET (880 ktpy) and Polyester (125ktpy) Assets INVISTA 246 N/A N/A
2010 Indorama China PET (276 ktpy) and Polyester (130ktpy) Assets Guangdong Shinda 48 N/A N/A
2010 Indorama Thailand Increased stake in TPT Petrochem from 54.7% to 99.9% TPT Petrochemicals 215 N/A N/A
Average 204 6.2x 422
Median 185 5.8x 445
Implied EV (US$ Date
Sources: Capital IQ, Company Filings
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VII
Appendix

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PRIVATE AND CONFIDENTIAL MATERIAL
Appendix – WACC
Long Term Inflation (2.2%)5
Target Capital Structure
10% Debt / 90% Equity8
WACC
(US$ real)
11.03%
Long Term
Inflation
(2.2%)5
WACC
(US$ nominal)
13.47%
Cost of Equity
US$ (Ke)
13.93%
Target Capital Structure 10% Debt / 90% Equity8
Cost of Debt US$ (Kd)
Risk Free Rate[1]
2.20%
Market Premium[2]
7.00%
Country Risk
4.84%6
Relevered Beta[3]
0.98x
Unlevered Beta4
0.90x
Cost of Debt
US$ (Kd)
9.32%
Tax Rate
15.25%7
Pre-tax Cost
of Debt8
11.0%
Notes:
1 12-month-average yield to maturity of the 10-year US Treasury Bond, as of January 4, 2016
2 Differential of the historical arithmetic mean of returns from 1926 to 2014 between the S&P 500 and US Treasury Bonds. Source : Ibbotson 2015
3 Relevered beta assuming a tax rate of 34.0% and the Company s target capital structure (Debt / Total Capitalization) identified above
4 Based on the average unlevered adjusted Betas from peer companies. Source: Thomson Reuters
5 Considering long term inflation of 2.20% in the USA (source: US Bureau of Labor Statistics)
6 Considering the 5-year Sovereign (Brazil) Credit Default Swap (CDS) as of December 31, 2015
7 Considering SUDENE impact of 75% decrease in the Corporate Tax (25%) and no impact in CSLL
8 Please refer to next slide for details.

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PRIVATE AND CONFIDENTIAL MATERIAL
Appendix Financing Cost
Rating Overview Expected Cost of Debt for PQS (USD)

Additionally to 8.5% (USD), was assumed some adjusments to reflect the current leverage capabilities of PQS:

+0.5% due to rating downgrade to benchmark Petrobras (i.e.: B area)

+0.5% new issuer premium (first time accessing Debt Capital Markets)

+1.0% size and illiquidity premium (issuance below US$ 500mn)

+ 0.5% no rating for PQS (issuance estimated to be an unrated privated placement)

Final cost of debt: 11.0% (USD) area

Based on this estimated long term marginal cost of debt, and the forecasted positive EBIT for Suape (starting in 2021) and Citepe (starting in 2018), we estimate that PQS could raise new debt, in the future (not in the short term), on the basis of its own balance sheet. This results in 10% of debt in the target capital structure.

Maturity above 10 years Average YTW: 8.5% (p.y. USD)
YTM -Petorbras USD Bonds
8,7%
8,5% 8,6% 8,5%
8,1%
7,8% 8,0%
7,3% 7,4%
6,7% 6,7%
6,1% 6,1%
4,4%
3,8%
3,2% 3,0%
Fev/17 Mar/18 Jan/19 Jan/20 Jan/21 May/23 May/26 Jan/41 Mai/44
Mar/17 Dec/18 Mar/19 Mar/20 May/21 Mar/24 Jan/40 Mai/43
Maturity Date
Speculative Grade Investment Grade
Sources: Bloomberg as of November 11, 2016.
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PRIVATE AND CONFIDENTIAL MATERIAL
Appendix
Petroquimica Suape Historical Financial Highlights Balance Sheet
Assets Liabilities
(R$mm, except where mentioned)
2013 2014 2015 2013 2014 2015
Current Assets Current Liabilities
Cash and Equivalents 136 4 8 Suppliers 63.0 95.5 107.4
Accounts Receivable 117 120 207 Short - Term Debt 264.5 324.2 408.6
Recoverable Taxes 43 124 261 Taxes Payable 1.9 1.9 1.9
Inventory 90 139 135 Other Current Liabilities 68.5 56.8 150.6
Other Current Assets 7 13 85 Total Current Liabilities 398 478 669
Total Current Assets 392 400 696
Non-Current Liabilities
Non-Current Assets Long - Term Debt 1,921.6 1,665.9 1,415.5
PP&E 3,282 2,448 1,943 Advance for Capital Increase 210.0 165.0 257.1
Intangibles 36 19 11 Provisions 0.6 1.9 7.8
Recoverable Taxes 258 218 101 Total Non-Current Liabilities 2,132 1,833 1,680
Other Non-Current Assets 60 2 2
Total Non-Current Assets 3,637 2,687 2,057 Shareholders Equity
Total Assets 4,029 3,087 2,752 Common Stock 2,441.5 2,968.9 3,403.9
Retained Earnings (942.7) (2,193.0) (3,000.6)
Total Liabilities & Equity 4,029 3,087 2,752
Source: Financial Statements as audited by PwC.
(1) Impairment in 2014: R$677 mm and 2015: R$412 mm
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PRIVATE AND CONFIDENTIAL MATERIAL
Appendix
Petroquimica Suape Historical Financial Highlights Income Statement

Income Statement	2013	2014	2015
(All in R$ mm, except where mentioned)			
Net Revenues	525	857	1,005
Growth (%)		63.1%	17.4%
Cost of Goods Sold	(727)	(1,001)	(1,008)
Gross Profit/(Loss)	(202)	(144)	(2)
Gross Margin (%)	(38.5%)	(16.8%)	(0.2%)
OPEX	(187)	(243)	(174)
Impairment	-	(713)	(412)
EBIT	(389)	(1,100)	(588)
EBIT Margin (%)	(74.0%)	(128.4%)	(58.5%)
D&A	151	196	109
EBITDA	(238)	(904)	(478)
EBITDA Margin (%)	(45.3%)	(105.5%)	(47.6%)
Financial Result, net	(166.0)	(150.5)	(219.9)
Non-Operating Income/(Loss)	0.0	0.0	0.0
Pre-Tax Income	(555)	(1,250)	(808)
Income Tax	0.0	0.0	0.0
Net Income	(555)	(1,250)	(808)
Net Margin (%)	(105.6%)	(146.0%)	(80.3%)

Source: Financial Statements as audited by PwC
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PRIVATE AND CONFIDENTIAL MATERIAL
Appendix
Citepe Historical Financial Highlights   Balance Sheet
Assets Liabilities
(R$mm, except where mentioned)
12/2013 31/12/2014 31/12/2015 31/12/2013 31/12/2014 31/12/2015
Current Assets Current Liabilities
Cash and Equivalents 241.3 0.2 69.7 Suppliers 52.4 40.5 130.8
Accounts Receivable 25.8 47.5 123.9 Short - Term Debt 136.0 393.1 217.7
Recoverable Taxes 24.1 49.105 120.4 Taxes Payable 1.4 3.4 4.3
Inventory 79.2 246.7 209.2 Other Current Liabilities 24.2 37.5 178.2
Other Current Assets 19.2 33.1 68.1 Total Current Liabilities 214 475 531
Total Current Assets 390 377 591
Non-Current Assets Non-Current Liabilities
PP&E 4,358.9 2,117.3 1,725.9 Long - Term Debt 1,394.1 1,046.0 928.8
Intangibles 5.3 1.1 0.8 Advance for Capital Increase 945.0 196.0 474.3
Recoverable Taxes 271.4 272.6 178.6 Provisions 1.0 1.8 6.3
Other Non-Current Assets 32.7 3.0 9.7 Total Non-Current Liabilities 2,340 1,244 1,409
Total Non-Current Assets 4,668 2,394 1,915
Total Assets 5,058 2,771 2,506 Shareholders Equity
Common Stock 3,045.9 4,250.9 4,581.9
Retained Earnings1 (542.2) (3,198.4) (4,016.0)
Total Liabilities & Equity 5,058 2,771 2,506
Source: Financial Statements as audited by PwC.
(1) Impairment in 2014: R$2.3 bn and 2015: R$370 mm
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PRIVATE AND CONFIDENTIAL MATERIAL
Appendix
Citepe Historical Financial Highlights Income Statement

Income Statement	2013	2014	2015
(All in R$ mm, except where mentioned)			
Net Revenues	78	243	633
Growth (%)		212.3%	160.5%
Cost of Goods Sold	(84)	(240)	(674)
Gross Profit/(Loss)	(6)	3	(41)
Gross Margin (%)	(8.2%)	1.1%	(6.5%)
OPEX	(146)	(228)	(208)
Impairment	-	(2,359)	(370)
EBIT	(153)	(2,584)	(620)
EBIT Margin (%)	(196.4%)	(1063.4%)	(97.9%)
D&A	10	73	85
EBITDA	(143)	(2,512)	(535)
EBITDA Margin (%)	(183.8%)	(1033.6%)	(84.6%)
Financial Result, net	(68.5)	(85.9)	(209.7)
Non-Operating Income/(Loss)	5.7	13.6	12.0
Pre-Tax Income	(216)	(2,656)	(818)
Income Tax	0.0	0.0	0.0
Net Income	(216)	(2,656)	(818)
Net Margin (%)	(277.1%)	(1093.2%)	(129.2%)

Source: Financial Statements as audited by PwC
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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: December 30, 2016

PETRÓLEO BRASILEIRO S.A PETROBRAS

By: /s/ Ivan de Souza Monteiro
Name: Ivan de Souza Monteiro

Title: Chief Financial Officer and Investor Relations Officer