

**CHANGFENG ENERGY INC.**

**Management's Discussion and Analysis for the  
Three-month and Six-month Ended June 30, 2016**

Dated August 23, 2016

## **Advisory**

The Management's Discussion and Analysis ("MD&A") provides an analysis to enable readers to assess material changes in financial condition and results of operations of Changfeng Energy Inc. ("Changfeng" or the "Company") for the three and six months ended June 30, 2016. This information should be read in conjunction with the Company's unaudited condensed consolidated interim financial statements and related notes for the three and six months ended June 30, 2016 and the audited consolidated financial statements and related notes and the MD&A for the year ended December 31, 2015. "Changfeng" includes Changfeng Energy Inc. and its subsidiaries, unless otherwise indicated. Additional information related to Changfeng is available on SEDAR at [www.sedar.com](http://www.sedar.com) or on its website at [www.changfengenergy.com](http://www.changfengenergy.com).

The preparation of financial statements in conformity with International Financial Reporting Standards ("IFRS") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of sales and expenses during the reporting period. Changfeng bases its estimates on historical experience, current trends and various other assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

This MD&A contains certain non-IFRS financial measures to assist users in assessing its performance. Non-IFRS financial measures do not have any standard meaning prescribed by IFRS and may not be comparable to similar measures presented by other issuers. These measures are identified and described under the section "Non-IFRS Financial Measures".

Amounts are stated in Canadian dollars unless otherwise indicated.

## **Caution Regarding Forward-Looking Information**

Certain statements in this MD&A may constitute "forward looking" statements which involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company and its subsidiaries, or the industry in which they operate, to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. When used in this report, the words "estimate", "believe", "anticipate", "intend", "expect", "plan", "may", "should", "will", the negative thereof or other variations thereon or comparable terminology are intended to identify forward looking statements. Such forward looking statements reflect the current expectations of the management of the Company with respect to future events based on currently available information and are subject to risks and uncertainties that could cause actual results, performance or achievements to differ materially from those expressed or implied by those forward looking statements, such as significant changes in market conditions, the inability of the Company to realize sales and the inability of the Company to attract sufficient financing and the risk factors summarized below under the heading "Risk Factors". New risk factors may arise from time to time and it is not possible for management of the Company to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance or achievements of the Company to be materially different from those expressed or implied in such forward looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward looking statements as a prediction of actual results. Although the forward looking statements contained in this MD&A are based upon what management believes to be reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. The forward looking statements contained in this MD&A speak only as of the date hereof. The Company does not undertake or assume any obligation to release publicly any revisions to these forward looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.

## **Overview**

Changfeng is a Canadian public company currently trading on the TSX Venture Exchange ("TSX-V") under the stock symbol "CFY". Changfeng is a natural gas distributor and complex energy utilization operator and investor (or energy service provider) in the People's Republic of China ("the PRC" or "China").

Currently the Company has four projects in operation: two piped natural gas distribution projects, and two compressed natural gas ("CNG") vehicle refueling stations. Changfeng has a 30 year concession right to operate gas distribution business in Sanya City, Hainan Province, and a 50 year operating right for gas distribution business in the Xiangdong District, Pingxiang City, Jiangxi Province. Its customer base and exclusive operation provide recurring revenue and operating cash flows to the Company and allow the Company to pursue future expansion of operations.

Changfeng has been actively exploring market opportunities which were brought by the PetroChina's Second West-East Pipeline ("WEP II"). Changfeng has grown with responsible development and reliable operation of natural gas distribution pipelines and associated facilities in China. Highlights include:

- ❖ **In Sanya City, Hainan Province, China**
  - 30-year exclusive concession rights (2007-2037) in Sanya City with wholly-owned gas distribution pipeline networks and associated facilities;
  - Secured gas supply through its annual gas quota of approximately 25 million cubic meters (m<sup>3</sup>) (883 million cubic feet (ft<sup>3</sup>)) until December 31, 2016 at a favorable price;
  - Serving more than 176,400 residential and 863 commercial/industrial customers (primarily hotels and restaurants);
  - Serving 15 hotels in Haitang Bay area, Sanya City;
  - Operating a new CNG/LNG refueling retail station in Sanya City.
  
- ❖ **In Xiangdong District, Pingxiang City, Jiangxi Province, China (Xiangdong Project)**
  - 50-year operation rights (2010-2060) in the administrative region of Xiangdong District, including the Pingxiang Industrial Ceramic Production Park (the "Park");
  - Sale of natural gas to five ceramics manufacturers and five other industrial customers in the Park;
  - Continuing to grow its residential customer base in the gated community.
  
- ❖ **In Changsha City, Hunan Province, China**
  - Managing to maintain its customer base.

The Company's primary goal is to become an important natural gas service provider in China. In pursuit of this goal, Changfeng continually strives to advance effective execution of its growth strategy by exploring strategic business development opportunities in mainland China along WEP II. The Company believes that its ongoing projects will add value, generate revenues and leverage its strength to create long-term sustainable value for its shareholders and clients.

## **2016 Accomplishments**

On March 31, 2016, the Company signed a new gas supply contract with CNOOC. CNOOC is committed to supply up to approximately 25 million cubic metres of natural gas annually until December 31, 2016 with a fixed contractual price and same terms stated in original contract. The price under the 2016 contract with approximately 25 million m<sup>3</sup>, while higher than under the previous 24 million m<sup>3</sup> gas quota, remains favorable compared with the market price.

On April 27, 2016, shareholder loans in the aggregate amount of \$7.8 million (RMB40.0 million) (December 31, 2015 - \$8.5 million (RMB40.0 million)) to the Company, through wholly owned subsidiaries, were renewed for one year with the same terms and conditions.

On May 12, 2016, the Company announced that the construction of a new CNG/LNG refueling retail station ("Sanya CNG/LNG Station") in Sanya City, Hainan Province has now been completed and it has commenced operation. Sanya CNG/LNG Station is designed to have a daily capacity of 30,000m<sup>3</sup> and mainly supplies gas to public buses and taxis owned by Sanya Public Transit Group.

On May 31, 2016, the Company announced that, one of its wholly owned subsidiary has entered into a Statement of Intent for Cooperation (the "Statement") with EDF (China) Holding Ltd., a subsidiary of Electricité de France (the "EDF Group") to jointly pursue energy utilization and low carbon energy projects in Haitang Bay area ("Haitang Bay") of Sanya City, China. Based on the Statement, the Company and EDF Group will further discuss the feasibility to establish a Joint Venture Company (the "Joint Venture") and jointly invest and operate in energy utilization projects in Sanya City. The Company and EDF Group respectively will own 50% each of the Joint Venture. This Statement creates no new legal obligations for the Company or the EDF Group.

On August, 2016, the Company announced that, one of its wholly-owned subsidiary, further to its previously announced Statement of Intent dated on May 31, 2016 for Cooperation with EDF (China) Holding Ltd., a subsidiary of Electricité de France (the "EDF Group"), has entered into a Statement of Intent for Cooperation (the "Statement") with the Sanya Municipal Government and EDF Group to jointly pursue the integrated energy system program in Sanya City, Hainan Province. According to the Statement, the Sanya Municipal Government, EDF Group and Changfeng, will cooperatively develop the integrated energy system projects in order to promote a low carbon and energy intelligent urban city. The Sanya Municipal Government is also in support of an integrated energy project in Haitang Bay Area of Sanya City as proposed by EDF Group and Changfeng. Changfeng and EDF Group will further discuss the feasibility of establishing a joint-venture company (the "Joint Venture") and jointly invest and operate in the integrated energy program in Sanya City. The Statement creates no new obligations for any of the three parties.

## Selected Quarterly Financial Information

The following table provides selected financial information for the three and six months ended June 30, 2016 and 2015:

<i>In thousands of Canadian dollars except percentages and per share amounts</i>	Three month ended June 30,				Six month ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
<b>Revenue</b>	<b>15,488</b>	<b>13,717</b>	<b>1,771</b>	<b>13%</b>	<b>31,686</b>	<b>30,418</b>	<b>1,268</b>	<b>4%</b>
<b>Gross margin</b>	<b>6,069</b>	<b>6,786</b>	<b>(717)</b>	<b>-11%</b>	<b>14,575</b>	<b>16,361</b>	<b>(1,786)</b>	<b>-11%</b>
% of revenue	39.2%	49.5%	-10%		46.0%	53.8%	-7.8%	
General and administrative	2,770	1,897	873	46%	5,775	5,008	767	15%
% of revenue	17.9%	13.8%	4%		18.2%	16.5%	1.7%	
Travel and business development	761	912	(151)	-17%	1,952	1,812	140	8%
% of revenue	4.9%	6.6%	-1.7%		6.2%	6.0%	0.2%	
Stock based compensation	-	48	(48)	-100%	-	77	(77)	-100%
Other gains and losses	490	509	(19)	-4%	490	509	(19)	-4%
<b>Total expenses</b>	<b>4,021</b>	<b>3,366</b>	<b>655</b>	<b>19%</b>	<b>8,217</b>	<b>7,406</b>	<b>811</b>	<b>11%</b>
% of revenue	26.0%	24.5%	1.4%		25.9%	24.3%	1.6%	
<b>Income from operations</b>	<b>2,048</b>	<b>3,420</b>	<b>(1,372)</b>	<b>-40%</b>	<b>6,358</b>	<b>8,955</b>	<b>(2,597)</b>	<b>-29%</b>
% of revenue	13.2%	24.9%	-11.7%		20.1%	29.4%	-9.3%	
Finance costs	311	487	(176)	-36%	826	1,002	(176)	-18%
Interest income	(25)	(30)	5	-16%	(42)	(63)	21	-34%
Share of loss of an associate	0.3	0.3	-	0%	0.7	0.7	-	0%
Share of loss of a joint venture	793	-	793		918	-	918	
<b>Profit before income taxes</b>	<b>969</b>	<b>2,963</b>	<b>(1,994)</b>	<b>-67%</b>	<b>4,655</b>	<b>8,015</b>	<b>(3,360)</b>	<b>-42%</b>
% of revenue	6.3%	21.6%	-15.3%		14.7%	26.3%	-11.6%	
Income taxes	1,312	1,368	(56)	-4%	2,762	3,510	(748)	-21%
% of revenue	8.5%	10.0%	-1.5%		8.7%	11.5%	-2.8%	
<b>Net Income (loss)</b>	<b>(343)</b>	<b>1,595</b>	<b>(1,938)</b>	<b>-122%</b>	<b>1,893</b>	<b>4,505</b>	<b>(2,612)</b>	<b>-58%</b>
% of revenue	-2.2%	11.6%	-13.8%		6.0%	14.8%	-8.8%	
<b>EBITDA (1)</b>	<b>2,848</b>	<b>4,660</b>	<b>(1,812)</b>	<b>-39%</b>	<b>7,986</b>	<b>11,294</b>	<b>(3,308)</b>	<b>-29%</b>
% of revenue	18.4%	34.0%	-15.6%		25.2%	37.1%	-11.9%	
Non-controlling interest	45	126	(81)	-64%	132	208	(76)	-37%
<b>Basic EPS</b>	<b>0.00</b>	<b>0.03</b>	<b>(0.03)</b>	<b>-100%</b>	<b>0.03</b>	<b>0.07</b>	<b>(0.04)</b>	<b>-57%</b>
<b>Diluted EPS</b>	<b>0.00</b>	<b>0.03</b>	<b>(0.03)</b>	<b>-100%</b>	<b>0.03</b>	<b>0.07</b>	<b>(0.04)</b>	<b>-57%</b>
<b>Weighted average number of common shares outstanding - Basic</b>	<b>61,338</b>	<b>63,099</b>	<b>(1,761)</b>	<b>-2.8%</b>	<b>61,379</b>	<b>63,099</b>	<b>(1,720)</b>	<b>-3%</b>
<b>Weighted average number of common shares outstanding - Diluted</b>	<b>61,618</b>	<b>64,244</b>	<b>(2,626)</b>	<b>-4.1%</b>	<b>61,815</b>	<b>64,070</b>	<b>(2,255)</b>	<b>-4%</b>

Note: (1) EBITDA is identified and defined under the section "Non-IFRS Financial Measures".

## Results of Operations

### Total Revenue

Total Revenue in RMB	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Gas distribution utility								
- Gas Sales	35,543,849	29,810,432	5,733,417	19%	82,677,095	73,108,782	9,568,313	13%
- Pipeline Installation and Connection	32,269,601	28,338,187	3,931,414	14%	54,547,594	57,908,254	(3,360,660)	-6%
CNG vehicle refueling	10,643,149	11,090,136	(446,987)	-4%	18,327,406	22,145,189	(3,817,783)	-17%
<b>Total Revenue in RMB</b>	<b>78,456,599</b>	<b>69,238,755</b>	<b>9,217,844</b>	<b>13%</b>	<b>155,552,095</b>	<b>153,162,225</b>	<b>2,389,870</b>	<b>2%</b>

Total Revenue in CAD	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Gas distribution utility								
- Gas Sales	6,938,629	5,903,033	1,035,596	18%	16,841,324	14,519,404	2,321,920	16%
- Pipeline Installation and Connection	6,430,740	5,616,136	814,604	15%	11,111,345	11,500,579	(389,234)	-3%
CNG vehicle refueling	2,118,830	2,198,079	(79,249)	-4%	3,733,293	4,398,035	(664,742)	-15%
<b>Total Revenue in CAD</b>	<b>15,488,199</b>	<b>13,717,248</b>	<b>1,770,951</b>	<b>13%</b>	<b>31,685,962</b>	<b>30,418,018</b>	<b>1,267,944</b>	<b>4%</b>

Revenue for the three months ended June 30, 2016 was \$15.5 million, an increase of \$1.8 million, or 13%, from \$13.7 million for the same period of 2015. Revenue for the six months ended June 30, 2016 was \$31.7 million, an increase of \$1.3 million, or 4%, from \$30.4 million for the same period of 2015.

Sales Volume (m3)	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Sanya region	9,162,345	7,980,000	1,182,345	15%	21,792,345	20,120,000	1,672,345	8%
Xiangdong Region	1,827,732	593,210	1,234,522	208%	2,795,856	879,356	1,916,500	218%
<b>Total Gas Sales Volume (m3)</b>	<b>10,990,077</b>	<b>8,573,210</b>	<b>2,416,867</b>	<b>28%</b>	<b>24,588,201</b>	<b>20,999,356</b>	<b>3,588,845</b>	<b>17%</b>
<b>Total CNG Sales Volume (m3)</b>	<b>2,589,015</b>	<b>3,139,364</b>	<b>(550,349)</b>	<b>-18%</b>	<b>4,636,090</b>	<b>5,987,828</b>	<b>(1,351,738)</b>	<b>-23%</b>

This increase is mainly attributable to the continuously growing total gas sales volume in Sanya and Xiangdong regions, with a gross gas sales volume increase of 28% and 17% respectively for the three months and six months ended June 30, 2016, though offset by the declining CNG sales volume from CNG vehicle refueling stations which dropped at 18% and 23% respectively for the three months and six months ended June 30, 2016. Revenue from pipeline connection increased at 15% for the three months ended June 30, 2016 while still was in a drop of 3% for the six months ended June 30, 2016. The increase was also offset by the decrease of exchange rate between Chinese RMB and Canadian dollar.

Further analysis is presented below for the Company's two business segments: Natural Gas Distribution Utility and CNG Vehicle Refueling Stations.

### **Natural Gas Distribution Utility**

Natural Gas Distribution Utility segment consists of two components: Gas Sales and Pipeline Installation and Connection. With the stable growth in customers newly connected and in gas volume consumed, revenue from gas sales has been growing steadily in recent periods.

#### Gas Sales

##### Gas Volume Sold – Sanya Region

Sanya Region	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Gas volume sold (m3)								
Residential customers	1,913,913	1,510,000	403,913	27%	5,683,913	4,990,000	693,913	14%
Commercial customers	7,248,432	6,470,000	778,432	12%	16,108,432	15,130,000	978,432	6%
<b>Subtotal (Sanya Region)</b>	<b>9,162,345</b>	<b>7,980,000</b>	<b>1,182,345</b>	<b>15%</b>	<b>21,792,345</b>	<b>20,120,000</b>	<b>1,672,345</b>	<b>8%</b>

Currently, the Company has an annual gas quota of approximately 25.0 million m<sup>3</sup> for its Sanya Region operation. And an uncertain amount of extra gas quota made available each year through coordination with the local government in Sanya region. During the six months ended June 30, 2016, the Company utilized approximately 21.0 million m<sup>3</sup> of its gas quota.

For the three and six months ended June 30, 2016

Gas sales volume for Sanya Region during the three months ended June 30, 2016 was 9.2 million m<sup>3</sup>, an increase of 1.2 million m<sup>3</sup> or 15%, compared to 8.0 million m<sup>3</sup> for the same period of 2015, of which 1.9 million m<sup>3</sup> was for residential customers at a growth rate of 27% and 7.3 million m<sup>3</sup> was for commercial customers at a growth rate of 12%. Gas sales volume for Sanya Region during the six months ended June 30, 2016 was 21.8 million m<sup>3</sup>, an increase of 1.7 million m<sup>3</sup> or 8%, compared to 20.1 million m<sup>3</sup> for the same period of 2015, of which 5.7 million m<sup>3</sup> was for residential customers at a growth rate of 14% and 16.1 million m<sup>3</sup> was for commercial customers at a growth rate of 6%.

The Company's non-residential customers include commercial and industrial customers, mainly comprised of hotels, resorts and restaurants in Sanya City. Approximately 74% of the gas sold in Sanya City during the six months ended June 30, 2016 was to those non-residential customers. Sanya municipal government's approval of the sales price increase related to the implementation of the long-term Budget Process (the "Budget Process"), which was implemented as part of the solution to address the ongoing gas deficit issue in the Sanya region. The Budget Process is intended to provide (a) potential subsidy for the loss, if any, on the gas sales to its residential customers; and (b) periodic sales price adjustments for its commercial customers enabling the sales prices to reflect the interaction between supply and demand; however, there is no guarantee that the Budget Process will be successfully implemented by the government in the future.

### Gas Sales

#### Gas Volume Sold – Xiangdong Region

Xiangdong Region Gas volume sold (m3)	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Residential customers	56,435	45,905	10,530	23%	148,191	90,189	58,002	64%
Commercial customers	1,771,297	547,305	1,223,992	224%	2,647,665	789,167	1,858,498	236%
<b>Subtotal (Xiangdong District)</b>	<b>1,827,732</b>	<b>593,210</b>	<b>1,234,522</b>	<b>208%</b>	<b>2,795,856</b>	<b>879,356</b>	<b>1,916,500</b>	<b>218%</b>

Gas sales volume for Xiangdong district during the three months ended June 30, 2016 was 1.8 million m<sup>3</sup>, an increase of 1.2 million m<sup>3</sup> or 208%, compared to 0.6 million m<sup>3</sup> for the same period of 2015, of which 97% of gas volume was sold to non-residential customer. Gas sales volume for Xiangdong district during the six months ended June 30, 2016 was 2.8 million m<sup>3</sup>, an increase of 1.9 million m<sup>3</sup> or 218% compared to 0.9 million m<sup>3</sup> for the same period of 2015.

### Gas Sales

#### Gas Sales Revenue

Gas sales revenue in RMB	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Sanya	30,824,689	27,964,701	2,859,988	10%	75,153,884	70,187,361	4,966,523	7%
Xiangdong	4,719,160	1,845,731	2,873,429	156%	7,523,211	2,921,421	4,601,790	158%
<b>Total</b>	<b>35,543,849</b>	<b>29,810,432</b>	<b>5,733,417</b>	<b>19%</b>	<b>82,677,095</b>	<b>73,108,782</b>	<b>9,568,313</b>	<b>13%</b>

Gas sales revenue in CAD	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Sanya	5,995,282	5,536,901	458,381	8%	15,308,846	13,939,210	1,369,636	10%
Xiangdong	943,347	366,132	577,215	158%	1,532,478	580,194	952,284	164%
<b>Total</b>	<b>6,938,629</b>	<b>5,903,033</b>	<b>1,035,596</b>	<b>18%</b>	<b>16,841,324</b>	<b>14,519,404</b>	<b>2,321,920</b>	<b>16%</b>

Gas sales revenue for the three months ended June 30, 2016 was \$6.9 million, an increase of \$1.0 million or 18%, from 5.9 million for the same period of 2015. Gas sales revenue for the six months ended June 30, 2016 was \$16.8 million, an increase of \$2.3 million or 16%, from 14.5 million for the same period of 2015. The increase is mainly attributable to:

- the gas sales volume growth of 15% and 8% in Sanya region for the three and six months periods ended June 30, 2016
- the gas sales volume growth of 208% and 218% respectively in Xiangdong district for the three and six months periods ended June 30, 2016

Pipeline Installation and Connection

Pipeline connection revenue in RMB	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Sanya	31,620,071	27,683,067	3,937,004	14%	53,866,123	56,970,255	(3,104,132)	-5%
Xiangdong	649,530	655,120	(5,590)	-1%	681,471	937,999	(256,528)	-27%
<b>Total</b>	<b>32,269,601</b>	<b>28,338,187</b>	<b>3,931,414</b>	<b>14%</b>	<b>54,547,594</b>	<b>57,908,254</b>	<b>(3,360,660)</b>	<b>-6%</b>

Pipeline connection revenue in CAD	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Sanya	6,298,634	5,486,143	812,491	15%	10,972,529	11,314,293	(341,764)	-3%
Xiangdong	132,106	129,993	2,113	2%	138,816	186,286	(47,470)	-25%
<b>Total</b>	<b>6,430,740</b>	<b>5,616,136</b>	<b>814,604</b>	<b>15%</b>	<b>11,111,345</b>	<b>11,500,579</b>	<b>(389,234)</b>	<b>-3%</b>

Sanya Region	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
<b>Customers newly connected</b>								
Residential customers	2,017	4,462	(2,445)	-55%	7,124	10,322	(3,198)	-31%
Commercial customers	14	1	13	1300%	30	23	7	30%
<b>Total customers connected</b>								
Residential customers	176,400	152,570	23,830	16%	176,400	152,570	23,830	16%
Commercial customers	863	812	51	6%	863	812	51	6%

Xiangdong Region	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
<b>Customers newly connected</b>								
Residential customers	148	66	82	124%	295	184	111	60%
Commercial customers	12	-	12	100%	15	2	13	650%
<b>Total customers connected</b>								
Residential customers	1,646	1,275	371	29%	1,646	1,275	371	29%
Commercial customers	25	9	16	178%	25	9	16	178%

Pipeline installation and connection revenue for the three months ended June 30, 2016 was \$6.4 million, an increase of \$0.8 million or 15%, from \$5.6 million for the same period of 2015. Pipeline installation and connection revenue for the six months ended June 30, 2016 was \$11.1 million, a decrease of 0.4 million or 3%, from 11.5 million for the same period of 2015. The changes are results of:

- higher number of new commercial customers connected during the three months ended June 30, 2016 in Sanya region, partly offset by the declining of new residential customers connected;
- higher number of new residential and commercial customers connected during the three months ended June 30, 2016 in Xiangdong region;
- new residential customers connected in Sanya region remained declining during the six months ended June 30, 2016;
- less pipeline installation completed during the six months ended June 30, 2016 in Sanya and Xiangdong region

**CNG vehicle refueling stations**

CNG Sales Volume (m3)	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Changsha CNG	1,920,174	3,139,364	(1,219,190)	-39%	3,967,249	5,987,828	(2,020,579)	-34%
Sanya CNG/LNG	668,841	-	668,841		668,841	-	668,841	
<b>Total Sales Volume (m3)</b>	<b>2,589,015</b>	<b>3,139,364</b>	<b>(550,349)</b>	<b>-18%</b>	<b>4,636,090</b>	<b>5,987,828</b>	<b>(1,351,738)</b>	<b>-23%</b>

CNG Sales Revenue	Three months ended June 30,				Six months ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Revenue in RMB								
Changsha CNG	7,189,144	11,090,136	(3,900,992)	-35%	14,873,401	22,145,189	(7,271,788)	-33%
Sanya CNG/LNG	3,454,005	-	3,454,005		3,454,005	-	3,454,005	
<b>Total Revenue in RMB</b>	<b>10,643,149</b>	<b>11,090,136</b>	<b>(446,987)</b>	<b>-4%</b>	<b>18,327,406</b>	<b>22,145,189</b>	<b>(3,817,783)</b>	<b>-17%</b>
Revenue in CAD								
Changsha CNG	1,415,250	2,198,079	(782,829)	-36%	3,029,712	4,398,035	(1,368,323)	-31%
Sanya CNG/LNG	703,580	-	703,580		703,581	-	703,581	
<b>Total Revenue in CAD</b>	<b>2,118,830</b>	<b>2,198,079</b>	<b>(79,249)</b>	<b>-4%</b>	<b>3,733,293</b>	<b>4,398,035</b>	<b>(664,742)</b>	<b>-15%</b>

Total revenue from CNG refueling retail stations for the three months ended June 30, 2016 was \$2.1 million, a slight decrease of \$0.1 million, or 4%, from \$2.2 million for the same period of 2015. Total revenue from CNG refueling retail stations for the six months ended June 30, 2016 was \$3.7 million, a decrease of \$0.7 million, or



For the three and six months ended June 30, 2016

15%, from \$4.4 million for the same period of 2015. The decrease was mainly due to market competition and dropped sales volume of 1.2 million and 2.0 million m<sup>3</sup>, or 39% and 34% respectively for Changsha CNG refueling station during the three and six months ended June 30, 2016 with compared to the same period of 2015. Total revenue from new Sanya CNG/LNG refueling retail station for the six months ended June 30, 2016 was \$0.7 million.

### **Foreign exchange rates**

Changfeng reports its financial results in Canadian dollars but earns all of its revenues and incurs most of its expenses in Chinese Renminbi ("RMB"). Accordingly, any fluctuation in the exchange rate between these two currencies will affect the reported financial information.

<b>One Chinese RMB to Canadian dollars</b>	<b>Q2'2016</b>	<b>Q2'2015</b>	<b>% change</b>	<b>Q1' 2016</b>	<b>Q1'2015</b>	<b>% change</b>
Spot rate at the end of the quarter	0.1957	0.2012	-2.7%	0.2011	0.2044	-1.6%
Average rate for the quarter	0.1972	0.1982	-0.5%	0.2101	0.1990	5.6%

### **Gross margin**

Gross margin for the three months ended June 30, 2016, decreased \$0.7 million, or 11%, compared to the same period in 2015, decreased 1.8 million or 11% for the six months ended June 30, 2016 compared to the same periods in 2015. The gross margin percentage of 46% for the first half of 2016 is a decrease of 8% from 54% for the first half of 2015.

As a percentage of revenue, the gross margin of the gas distribution utility of 49% for the first half of 2016 is a decrease of 10 % from 59% for the first half of 2015. As a percentage of revenue, the gross margin of the CNG refueling stations for the first half of 2016 was 27%, an increase of 3% from 24% in the same period of 2015.

### **Operating expenses**

**General and administrative expenses** for the three months ended June 30, 2016 were \$2.8 million, an increase of \$0.9 million, or 46%, from \$1.9 million in the same period of 2015. For the six months ended June 30, 2016, general and administrative expenses were \$5.8 million, an increase of \$0.8 million, or 15%, from \$5.0 million in the same period of 2015. General and administrative expenses as a percentage of sales for the three and six month periods ended June 30, 2016 were both 18%, compared to 14% and 16% for the same periods of 2015, respectively.

**Travel and business development expenses** for the three months ended June 30, 2016 were \$0.8 million, a decrease of \$0.1 million, or 16%, from \$0.9 million in the same period of 2015. Travel and business development expenses for the six months ended June 30, 2016 were \$2.0 million, an increase of \$0.2 million, or 8%, from \$1.8 million in the same period of 2015. As a percentage of sales, travel and business development expenses for the six months ended June 30, 2015 was 6.2%, increased from 6.0% in the same periods of 2015. These expenses normally fluctuate with travel and business development activities in mainland China as the Company seeks to develop new projects in close proximity to the new national pipelines.

### **Finance Costs**

Finance costs of \$0.3 million for the three months ended June 30, 2016 was a decrease of 0.2 million compared to 0.5 million for the same period of 2015. Finance costs of \$0.8 million for the six months ended June 30, 2016 was a decrease of 0.2 million compared to 1.0 million for the same period of 2015.

### **Share of loss of a joint venture**

Share of loss of a joint venture increased \$0.8 million (2015 – nil) and \$0.9 million (2015 – nil) for the three months and six months ended June 30, 2016, respectively. Share of loss of a joint venture is not tax deductible.

On July 21, 2015, Changfeng entered into a joint venture agreement with Tangshan Caofeidian Development Investment Group Co., Ltd. ("CFD Group") to establish Caofeidian Evergrowth Energy Co., Ltd. ("Evergrowth") to jointly operate liquefied natural gas ("LNG") trading, natural gas distribution, transportation, and related

infrastructure construction. Evergrowth is based in Tangshan City, Hebei province. Under the joint venture agreement, Evergrowth would operate and manage an energy resource exchange in Northern China.

### **Income taxes**

Income taxes for the three months ended June 30, 2016, decreased \$0.1 million, or 4%, compared to the same period in 2015, decreased 0.7 million or 21% for the six months ended June 30, 2016 compared to the same period in 2015. However, as a percentage of profit before income taxes, the percentage of 59% for the first half of 2016 is an increase of 15% from 44% for the first half of 2015. The increase is mainly due to the share of loss of a joint venture of \$ 0.9 million for the first half of 2016, which is not tax deductible and increased withholding tax expense of \$0.4 million of first half of 2016 compared to nil of same period of 2015.

### **EBITDA**

EBITDA (non-IFRS measure as identified and defined under section "Non-IFRS Measures") for three months ended June 30, 2016 was \$2.8 million, a decrease of \$1.9 million, or 39% from \$4.7 million for the same period of 2015. EBITDA for the six months ended June 30, 2016 was \$8.0 million, a decrease of \$3.3million, or 29%, from \$11.3 million for the same period of 2015.

### **Net income (loss)**

Net loss for the three months ended June 30, 2016 was \$0.3 million, compared to a net income of \$1.6 million or \$0.03 per share (basic and diluted) for the same period in 2015. Net income for the six months ended June 30, 2016 was \$1.9 million, or \$0.03 per share (basic and diluted) compared to \$4.5 million or \$0.07 per share (basic and diluted) for the same period in 2015.

## **Selected Quarterly Results**

The following sets out the Company's consolidated quarterly results for the most -recently completed quarters:

Quarterly data (\$000's) except per share amounts	2016		2015				2014	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Foreign exchange rate one Chinese RMB to Canadian dollars	0.1972	0.2101	0.2034	0.2076	0.1982	0.1990	0.1793	0.1767
Revenue	15,488	16,198	18,551	13,158	13,717	16,701	16,878	12,094
Gross profit	6,070	8,506	6,429	6,197	6,786	9,575	5,888	5,580
Profit (loss)	(343)	2,237	604	997	1,596	2,909	809	696
EPS								
- basic	0.00	0.03	0.01	0.02	0.03	0.04	0.01	0.01
- diluted	0.00	0.03	0.00	0.02	0.03	0.04	0.01	0.01

Seasonality can impact the Company's natural gas distribution sales. The Company's current operations are primarily located in Sanya City, an international tourist destination in the PRC's only tropical province. Sanya City attracts more tourists in the winter than the rest of the year. The Company's natural gas sales are higher during this high tourism season, as a large portion of the Company's natural gas sales are made to hotels and restaurants. Seasonality can also impact the Company's CNG retail stations sales due to vehicles being in need of more gas during the warmer seasons for air-conditioning.

## **Financial Condition and Liquidity**

<b>Key Financial Data and Comparative Figures</b>		
<b>(\$000's)</b>	<b>30-Jun-16</b>	<b>31-Dec-15</b>
Cash	13,451	14,183
Working capital (deficit)	(27,285)	(24,885)
Adjusted working capital deficit (note1)	(46)	2,250
Plant and equipment	71,767	75,105
Total assets	106,552	115,361
Long term liabilities	19,523	23,818
Shareholders' equity	34,663	36,370

Note 1: This financial measure is identified and defined under the section "Non-IFRS Financial Measures".

Cash decreased by \$0.7 million to \$13.5 million at June 30, 2016 from \$14.2 million at December 31, 2015, primarily resulting from cash provided by operating activities of \$3.5 million, cash from bank indebtedness of \$4.8 million and cash received as released pledged bank deposit of \$1.9 million, but offset by \$1.9 million repayment of long-term debt and 2.0 million repayment of bank indebtedness, repurchase of shares of \$0.2 million, as well as cash used for acquisition of property and equipment of \$4.8 million.

### **Adjusted Working Capital**

The adjusted working deficit (see "Non-IFRS Financial Measures") was \$0.05 million at June 30, 2016. Adjusted working capital excludes \$16.7 million of deferred revenue in connection with gas connection fees and \$10.5 million of line of credit.

### **Liquidity and Capital Resources**

#### *Overview*

The Company's principal sources of short-term funding are its existing cash balances, operating cash flows and borrowing under its line of credit. Its principal sources of long-term funding are its three term loans into which Changfeng entered in January 2010, December 2012 and January 2013, respectively.

The Company's principal sources of liquidity are cash provided by operations, including advance payments from residential and commercial and industrial customers related to construction contracts for gas connection, and access to credit facilities and capital resources.

The Company's primary short-term cash requirement is to fund working capital, and repay the remainder of its outstanding withdrawal on its line of credit.

The Company's medium and long-term cash goals are to fund construction of its pipeline networks and gas distribution facilities, to acquire capital and intangible assets for its growth initiatives in mainland China and to repay its long-term loans from the BOC, Sanya and BOC, Pingxiang.

In the short term, management does not expect to face any liquidity problems considering its ability to generate sustainable cash flow from operations. The Company has not experienced any difficulties in collecting its outstanding receivables from its customers and expects no such difficulties in the foreseeable future.

#### *Long-term bank loans*

On January 5, 2010, the PRC subsidiary of the Company, Sanya Changfeng Offshore Natural Gas Distribution Co. Ltd ("CF China"), entered into a RMB100.0 million term loan with the Bank of China, Sanya Branch ("BOC, Sanya"), maturing in January 2019 and bearing interest at the benchmark lending rate of the People's Bank of China, which is reset every six months (the "Term Loan 2010"). It is secured by 60% of the equity interest in CF China held by the Company's wholly owned subsidiaries, Hainan Energy Ltd., certain gas connection and gas supply rights, and a maximum of \$6.0 million (RMB30.0 million) guarantee from and trade receivables during 2012 to 2022 owned by Sanya Changfeng Offshore Natural Gas Engineering Construction Co., Ltd. During the six-month period ended June 30, 2016, CF China made payments in the amount of \$1.5 million (RMB 7.5 million (2015 – \$1.5 million (RMB 7.5 million))) in accordance with the semi-annual repayment provisions of the term loan agreement.

At June 30, 2016, CF China had \$71,964 (RMB 367,726) unamortized transaction cost (December 31, 2015 -\$99,382 (RMB 466,363)), which has been offset against the term loan.

On January 15, 2013, CF China entered into an agreement with the BOC, Sanya to secure a bank loan facility in the amount of RMB 50 million (the "Term Loan 2013"). The bank loan facility provides that the proceeds of the Term Loan 2013 would be used to fund continued construction of pipeline and associated facilities of the Haitang Bay project in Sanya City. It has a 10-year term from the date of the first initial withdrawal, and bears interest of 110% of the benchmark lending rate set by the People's Bank of China. The Term Loan 2013 is secured and guaranteed by the same securities of the Term Loan 2010. During the six - month period ended June 30, 2016, CF China made no payments (2015 – nil) in accordance to the repayment terms stated in the agreement.

On December 21, 2012, the PRC subsidiary, Pingxiang Changfeng Natural Gas Co., Ltd ("CF Pingxiang"), entered into a term loan with the Bank of China, Pingxiang Branch ("BOC, Pingxiang") for RMB 20.0 million, maturing six years from the date of the first withdrawal, and bearing both fixed and variable interest at 120% of the benchmark lending rate of the People's Bank of China. The variable component of interest will be calculated initially on the date of withdrawal and will be reset every three months. This term loan is guaranteed

For the three and six months ended June 30, 2016

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by CF China. The proceeds from this term loan will be used to fund the construction of pipelines and related property and equipment in the Xiangdong district, Pingxiang City, Jiangxi province. During the period, CF Pingxiang made payments in the amount of \$407,400 (RMB 2.0 million) (2015 - \$301,800 (RMB 1.5 million)).

The Company believes that its ability to obtain funding from these long-term debt bank loans and solid operating cash flows will continue to provide the cash flows necessary to satisfy our working capital and capital expenditure requirements, as well as meet its debt repayments and other financial commitments.

#### *Credit Agreement*

On November 10, 2015, CF China entered into an agreement with the BOC, Sanya to secure a one-year loan in the amount of \$2.0 million (RMB10.0 million) (December 31, 2015 - \$2.1 million (RMB10.0 million)) relating to CF China's line of credit with BOC, Sanya. The loan has fixed interest rate at 4.4% (2015 - 4.4%) per annum. This line of credit contains a financial covenant, which requires CF China's debt-to-total-assets ratio to be maintained below 80%, respectively.

On December 8, 2015, CF China entered into an agreement with the Minsheng Bank, Sanya to secure a one-year loan in the amount of \$4.3 million (RMB20.0 million) relating to the CF China's credit line with Minsheng Bank, Sanya. This credit line bears fixed interest rate of 5.4% per annum and is guaranteed by a personal guarantee provided by Mr. Lin. During the period, CF China made payments in the amount of \$2.0 million (RMB 9.8 million) (2015 - nil). At June 30, 2016, the balance of the loan is \$2.0 million (RMB10.2 million).

On January 26, 2016 and June 28, 2016, CF China entered into two agreements with Guangda Bank, Sanya to secure one-year loans in the total amount of \$4.8 million (RMB23.7 million) (December 31, 2015 - nil) relating to CF China's credit line with Guangda Bank, Sanya granted during the period. This credit line bears fixed interest rate of 4.35% per annum.

On September 22, 2015, the Company entered into an agreement with the Bank of China (Canada) to secure a one-year loan in the total amount of \$2.0 million (December 31, 2015 - \$2.1 million) relating to a US\$1.5 million term loan from the Bank of China (Canada) granted to the Company pursuant to a credit facility letter agreement effective on October 6, 2015 (the "US Term Loan"). The US Term Loan is secured by a Standby Letter of Credit provided by the Company. The US Term Loan has a one-year term from the date of the withdrawal and bears annual interest of six-month LIBOR rate plus 250 basis points. The effective interest rate of the loan was 3.1%.

As at June 30, 2016, the Company was in compliance with all of its debt covenants.

#### *Cash flow from operations*

Net cash provided by operations was \$3.5 million for the six months ended June 30, 2016 compared to \$5.2 million for the same period of 2015.

#### *Cash Flow from Financing Activities*

Cash provided by financing activities for the six months ended June 30, 2016 was \$0.7 million, which included cash inflow from bank indebtedness of \$4.8 million and cash outflow bank indebtedness repayment of \$1.9 million as well as cash outflow of \$1.9 million repayment of long-term debt and \$0.2 million for share buyback.

#### *Investing Activities*

Cash used for acquisition of property and equipment totaled \$4.8 million for the six months ended June 30, 2016 compared to \$3.0 million in the same period of 2015. And additional \$0.2 million has been paid as deposit for acquisition of property and equipment during the six months ended June 30, 2016. The acquisition was mainly related to the purchase of equipment for the on-going construction of pipeline networks to connect new customers in the Sanya region and Xiangdong district. There was cash received as released pledged bank deposit of \$1.9 million and cash receipt from government of \$0.3 million for pipeline relocation.

Changfeng will finance the majority of the upcoming construction of projects under development in mainland China through its long-term bank loans with BOC Sanya and BOC Pingxiang, as well as operating cash flow from its existing operations.

## **Contractual Obligations and Commitments**

As of June 30, 2016, there have been no significant changes to contractual obligations and commitments since December 31, 2015.

## **Off-Balance Sheet Arrangements**

As a policy, Changfeng does not enter into off-balance sheet arrangements with special purpose entities, nor does it have any unconsolidated affiliates that have not been accounted for in these financial statements.

## **Share Capital**

As at the date of this MD&A, the Company has 61,337,700 common shares outstanding, 5,490,000 stock options outstanding and exercisable at a weighted average exercise price of \$0.31 per share. The Company has no warrants outstanding.

## **Non-IFRS Financial Measures**

This MD&A contains certain financial measures that do not have any standardized meaning prescribed by IFRS. Therefore, these financial measures may not be comparable to similar measures presented by other issuers. Investors are cautioned that these measures should not be construed as alternatives to net income or to cash provided by operating, investing, and financing activities determined in accordance with IFRS, as indicators of its performance. Changfeng provides these measures to assist investors in determining its ability to generate income and cash provided by operating activities, and to provide additional information on how these cash resources are used. These measures are listed and defined below:

### **EBITDA**

EBITDA is defined herein as income before income tax expense, interest income and interest on borrowing, amortization, share of loss of investment in associate, as well as non-cash stock-based compensation expense. EBITDA does not have any standardized meaning prescribed by IFRS and therefore may not conform to the definition used by other companies.

A reconciliation of net income to EBITDA for each of the periods presented in this MD&A follows:

<b>In thousands (except for % figures)</b>	<b>Three months ended June 30,</b>				<b>Six months ended June 30,</b>			
	<b>2016</b>	<b>2015</b>	<b>Change</b>	<b>%</b>	<b>2016</b>	<b>2015</b>	<b>Change</b>	<b>%</b>
Net Income	(343)	1,597	(1,940)	-121%	1,893	4,505	(2,612)	-58%
Add (less):								
Income tax	1,312	1,368	(56)	-4%	2,762	3,510	(748)	-21%
Interest (income) expense	(25)	(30)	5	-17%	(42)	(63)	21	-33%
Share of loss of investment in associate	0.3	0.3	-	0%	0.7	0.7	-	0%
Share of loss of investment in joint venture	793	-	793		918	-	918	
Stock-based compensation	-	48	(48)	-100%	-	77	(77)	-100%
Amortization	800	1,192	(392)	-33%	1,628	2,262	(634)	-28%
Interest on borrowing	311	487	(176)	-36%	826	1,002	(176)	-18%
<b>EBITDA</b>	<b>2,848</b>	<b>4,662</b>	<b>(1,814)</b>	<b>-39%</b>	<b>7,986</b>	<b>11,294</b>	<b>(3,308)</b>	<b>-29%</b>

### **Adjusted working capital**

Adjusted working capital is calculated as current assets less adjusted current liabilities. Adjusted current liabilities is calculated as current liabilities, excluding deferred revenue in connection with gas connection fees, which are deferred when Changfeng receives payments from customers in advance of work having commenced and are recognized on the percentage of completion method, as well as the credit line. As is the practice with lines of credit in China, typically, they are renewed when due.

Changfeng believes that adjusted working capital is a useful supplemental measure as it provides an indication of its ability to settle its debt obligations as they come due.

The calculation of adjusted working capital is provided in the table below:

<b>In \$ thousands</b>		
<b>As at</b>	<b>30-Jun-16</b>	<b>31-Dec-15</b>
Current assets	25,081	30,288
Less: Current liabilities	52,366	55,173
Working capital (deficit)	(27,285)	(24,885)
Add: Deferred revenue	16,702	18,666
Line of credit	10,537	8,469
<b>Adjusted working capital (deficit)</b>	<b>(46)</b>	<b>2,250</b>

## **Financial Instruments**

The Company does not have complex financial instruments, and the various risks related to these financial instruments, including foreign currency risk, commodity price risk, interest rate risk, concentration of credit risk and liquidity risk have been disclosed in our audited Consolidated Financial Statements and MD&A for the year ended December 31, 2015 and the notes thereto that are available at [www.sedar.com](http://www.sedar.com).

## **Transactions With Related Parties**

Amounts are non-trade nature, unsecured and repayable on demand.

- (a) As at June 30, 2016, Qinglong (Hengtai Industrial Co., Ltd., a joint venture) owed the Company \$391,400 (RMB 2.0 million) (December 31, 2015 - nil), while the Company owed Qinglong \$1,763 (RMB 9,007) (December 31, 2015 - nil).
- (b) In 2007, Mr. Lin, advanced loans in the aggregate amount of \$7.8 million (RMB40.0 million) (December 31, 2015 - \$8.5 million (RMB40.0 million)) to the Company, through wholly owned corporations, in accordance with a Subordination and Forbearance Agreement dated April 27, 2007, Consignment Loan Agreements dated May 23, 2007 and June 26, 2007, and other ancillary documentation. These loans are unsecured, non-interest bearing, are subordinated to the claims of all other creditors, including unsecured creditors of the Company and were due on demand only after April 27, 2010.  
  
On April 27, 2010, these loans were renewed for another three years with the same terms and conditions. On April 27, 2013, these loans were renewed for another two years with the same terms and conditions. On April 27, 2015, these loans were renewed for another year with the same terms and conditions. On April 27, 2016, these loans were renewed for another year with the same terms and conditions.
- (c) As at June 30, 2016, the Company owed Mr. Lin \$57,801 (December 31, 2015 - \$366,962) for unpaid salary.
- (d) Included in current due to related parties as at June 30, 2016 amounted to \$587,100 (RMB3.0 million) (2015 - \$639,300 (RMB3.0 million)) was relating to an advance made by Shin-Ko Energy. Also included in current due to related parties, as at June 30, 2016, was \$244,361 (RMB1.2 million) (2015 - \$266,173 (RMB 1.2 million)) relating to a loan made to the Company by Shin-Ko Energy. The loans are interest-free unsecured and payable on demand.
- (e) During the six-month period ended June 30, 2016, the Company has settled the unpaid director's fees to certain directors \$71,009 (December 31, 2015 - nil).

## **Outlook**

The Company expects to continue to add both residential and commercial and industrial customers to its existing pipeline networks in the Sanya Region and Xiangdong district, and the volume of gas sold during 2016 will continue to increase especially from its operations in the Sanya Region.

The construction of Gas to Electricity Exchange Program was completed in 2015 and a 5 million m<sup>3</sup> exchanged gas had been sold to the Company in 2015. The Company expects another 5 million m<sup>3</sup> exchanged gas from Gas to Electricity Exchange Program will be provided to the Company in 2016 as well. The Company will continue to negotiate with CNOOC to purchase extra quota of natural gas with favorable price in addition to the company's current 25 million m<sup>3</sup> annual gas quota and exchanged gas from the company's Gas to Electricity Exchange Program.

In 2016, Changfeng will continue to implement its long-term growth strategies for the pipelined gas project in the Western Guangdong Area of the Guangdong Province and for the integrated energy system program and energy comprehensive utilization with EDF Group in Sanya City.