

香港交易及結算所有限公司及香港聯合交易所有限公司對本公告的內容概不負責，  
對其準確性或完整性亦不發表任何聲明，並明確表示，概不對因本公告全部或任  
何部份內容而產生或因倚賴該等內容而引致的任何損失承擔任何責任。



**Beijing Jingneng Clean Energy Co., Limited**

**北京京能清潔能源電力股份有限公司**

(於中華人民共和國註冊成立的股份有限公司)

(股份代號：00579)

## 海外監管公告

本公告乃根據香港聯合交易所有限公司證券上市規則第13.10B條作出。

茲載列北京京能清潔能源電力股份有限公司在上海證券交易所網站刊登的《北京  
京能清潔能源電力股份有限公司2019年公開發行公司債券(第一期)募集說明書摘  
要(面向合格投資者)》，僅供參閱。

特此公告

承董事會命  
北京京能清潔能源電力股份有限公司  
康健  
公司秘書

中國·北京

2019年11月8日

於本公告刊發日期，本公司的非執行董事為劉海峽先生、任啟貴先生、李娟女士及  
王邦宜先生；本公司的執行董事為張鳳陽先生、朱軍先生及曹滿勝先生；而本公司  
的獨立非執行董事為黃湘先生、張福生先生、陳彥聰先生及韓曉平先生。

# 北京京能清洁能源电力股份有限公司 2019年公开发行公司债券（第一期）

募集说明书摘要  
(面向合格投资者)

发行人：北京京能清洁能源电力股份有限公司

BJCE





AAA

AAA

2,243,237.15

2019 6 30

197,234.03

2016

2017

2018

1.5

			395,615.21	393,560.81	392,273.62	
				-343,544.03	-357,867.48	-
344,621.50	2019	1-6			193,836.57	
					-186,195.97	
						128,953.01
120,051.40		84,660.12	53,297.28			49.09%
48.43%	31.86%	30.61%				

		2018	68,449
8.49%		18.97	6.57%

2009



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<http://www.lianhecreditrating.com.cn/>

<http://www.sse.com.cn>

	2019	1-9		
<a href="http://www.shclearing.com">http://www.shclearing.com</a>			<a href="http://www.chinamoney.com.cn/">http://www.chinamoney.com.cn/</a>	
2019	9		561.77	227.63
	223.02	2019	1-9	117.80
	16.95			16.32
	39.78			-34.56
	-17.41			

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.....	9
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.....	13
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.....	<b>18</b>
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.....	18
.....	20
.....	<b>23</b>
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.....	116
.....	125
.....	126
.....	135
.....	<b>138</b>
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.....	139
.....	<b>140</b>
.....	140
.....	140

8,244,508,144.00

8,244,508,144.00

1993 2 3

91110000101718150E

1 118

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010-64469988

010-87407009

010-64469736

2010

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2018 6 28

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16                            2019   11   13        2022   11   12

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010-65608354

010-65608445

1012

010-88005445

010-88005419

1589

16/22/23

021-20639659

021-20639423

9

7

010-58137799

010-58137788

100020

16 2 4

010-88095588

010-88091190

100077

22

010-85665588

010-85665120

100004



38

508

010-85172818

010-85171273

100022

3

010-68311546

010-68311546

528

021-68808888

021-68804868

166

3





**2**

1

2

3

2019 6

133.91

554.63

420.72

%

1	16	SCP001		10	270	2016-01-27	2016-10-23	2.97	

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2	16	SCP002		10	270	2016-02-25	2016-11-21	2.70	
3	16	SCP003		10	270	2016-05-11	2017-02-05	3.02	
4	16	SCP004		10	270	2016-06-17	2017-03-14	3.08	
5	16	CP001							

8.92%

40%

	2019	2018	2017	2016
	0.75	0.75	0.48	0.35
	0.74	0.74	0.47	0.35
%	58.87	60.56	62.55	63.32
EBITDA	4.04	4.92	5.22	5.53
%	100.00	100.00	100.00	100.00
%	100.00	100.00	100.00	100.00

1 = /

2 = - /

3 = /

4 EBITDA= + +

+ +

5 EBITDA =EBITDA/ +

6 = /

7 = /

8,244,508,144.00

8,244,508,144.00

1993 2 3



1 1993 2

1993 2 3

1993 1 29

3,000

1993 2 6

05222411

3,000

2004 11 18

[2004]45

2 2006 6

2006 10 26

[2006]333

50,000

2006 11 16

11000012224112

3 2009 5

2009 5 12

40,000

10,000

50,000

100,000

2009 5 25

110000002224112



2019

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0.552%		5,368.0753		4.603%	
		383.6839		0.329%	
	1,533.5692			1.315%	
	5,112.6748			4.384%	
3,579.1056				3.069%	
2010	3	19			
			[2010]366	2010	
3	25				
			[2010]214		
			2010	4	29
					110000002224112

1		100,000	100,000	85.748%
2		5,368.0753	5,368.0753	4.603%
3		644.1224	644.1224	0.552%
4		383.6839	383.6839	0.329%
5		1,533.5692	1,533.5692	1.315%
6		5,112.6748	5,112.6748	4.384%
7		3,579.1056	3,579.1056	3.069%
			<b>116,621.2312</b>	<b>100%</b>

**2010**

2010 6 13

2010 6 30

[2010]99 2010 8 3

[2010]757 2010 8 12

[2010]822

2010 4 30

500,000

500,000

2010 8 18

2010 8 25

110000002224112

1		428,740	85.748%
2		23,015	4.603%
3		2,760	0.552%
4		1,645	0.329%
5		6,575	1.315%
6		21,920	4.384%
7		15,345	3.069%

H 1,032,200,000

H 103,220,000      2011 12 22      H

00579

2012 1 13      H

129,476,000      H 117,705,454

H 11,770,546      6,149,905,454

614,990.5454      6,149,905,454

2012 8 21

110000002224112

1			417,932.1592	67.958%
2			22,434.8291	3.648%
3			2,690.4249	0.437%
4			1,603.5322	0.261%
5			6,575	1.069%
6		H	21,920	3.564%
7		H	15,345	2.495%
8		H	126,489.6	20.568%
		/	<b>614,990.5454</b>	<b>100%</b>

**2013 10**

2013 5 24

[2013]99      2013 10 8

[2013]1278      327,508,000      H      2013

10 23      H      1,965,054,000      H

6,47,741.3454

6,477,413,454

2014 6 9

[2014]425

65,750,000

2013 12 17

2014 7 14

2014 7 14

110000002224112

1			417,932.1592	64.521%
2			22,434.8291	3.464%
3			9,265.4249	1.43%
4			1,603.5322	0.248%
5		H	196,505.4	30.337%
			<b>647,741.3454</b>	<b>100%</b>

**2014 10**

2014 6 16

[2014]98 2014 9 23

[2014]992

393,010,000 H

2014 10 7

H

2,358,064,000

H

687,042.3454

6,870,423,454

2016 9 22

91110000101718150E

1			417,932.1592	60.831%
2			22,434.8291	3.265%
3			9,265.4249	1.349%
4			1,603.5322	0.233%
5		H	235,806.4	34.322%
			<b>687,042.3454</b>	<b>100%</b>

2018 7

2017 8 9

[2017]105 2017 12 27

[2017]2448 902,471,890

471,612,800 H 2018 7 12

8,244,508,144

824,450.8144

8,244,508,144

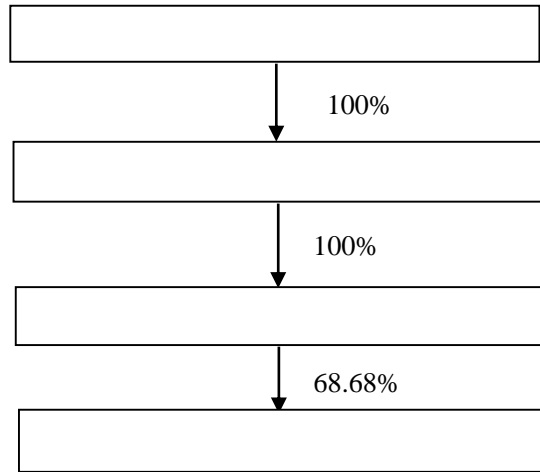
2018 8 29

9111000010171850E

1			508,179.3482	61.639%
2			22,434.8291	2.721%
3			9,265.4249	1.124%
4			1,603.5322	0.194%
5		H	47,161.28	5.720%
6		H	235,806.4	28.602%
			<b>824,450.8144</b>	<b>100%</b>

2019 6

**2019 6**



2019 6

**1**

2004 12 8

21,338,060,000

110000007832879

2

A 9

100022

010-85218888

010-85218832

[www.powerbeijing.com](http://www.powerbeijing.com)



[2004]4

2004 12 8

			4
			2018 12
31	27,530,070.77	17,494,220.20	
2018	6,647,765.66	299,489.00	2019
6 30	28,285,685.75	17,664,980.78	
2019 1-6	3,083,411.72	235,194.25	

2

[2009]2

2008 12

[2008]76

74.24%

20%

5,000

/



3		32,577.00	15	100.00	
4		76,051.20		100.00	
5		101,000.00	1	100.00	
6		76,800.00		59.64	
7		79,235.00		100.00	
8		25,924.80		100.00	
9		41,132.70		100.00	
10		28,514.00	188	100.00	
11		9,000.00	1	100.00	
12		13,000.00		100.00	
13		29,189.86		100.00	
14		33,005.00		100.00	

1

2005 10 13

74,729.73

74% 26%

2 350MW

2018		211,313.01		82,335.56
128,977.45	2018		223,357.81	
30,402.74				
2019 6		199,112.89		51,460.73
147,652.16	2019 1-6		103,568.27	
18,674.71				

2

2003 9 10 TETBT/F2 12 Tf 0 0 1 30C40D7488.71 Tm



2019 6 337,419.18 145,895.95  
 191,523.23 2019 1-6 182,092.31  
 26,920.34

**6**

2013 4 23  
 29,189.86  
 100%  
 2018 171,190.72 119,049.65  
 52,141.07 2018 67,809.77 2,532.08

2019 6 171,220.93 118,903.07  
 52,317.86 2019 1-6 34,260.97  
 176.79

**7**

2012 6 15  
 2019 6 76,800  
 59.64%  
 2018 193,725.66 120,290.80  
 73,434.87 2018 16,754.21 117.49

2019 6 191,481.25 116,950.61  
 74,530.64 2019 1-6 25,414.96  
 1,020.81

**8**

2002 10 11  
 13,000.00

100%

2018		60,600.41	25,605.61
34,994.80	2018	16,997.32	8,077.83

2019	6	63,162.24	24,133.13
39,029.11	2019	7,783.64	4,034.31
	1-6		

**9**

2002 3 20

9,000.00

100%

2018		26,622.39	6,448.35
20,174.04	2018	9,568.09	4,009.93

2019	6	27,657.13	6,050.10
21,607.03	2019	3,695.55	
	1-6		

1,432.99

**10**

2008 5 12

79,235.00

100%

2018		251,913.41	150,828.31
101,085.10	2018	36,355.51	

14,503.98



2019	6		256,882.84	149,313.84
	107,569.00	2019	1-6	17,604.81
6,483.90				

**11**

		2010	10	10
41,132.70				
100%				
2018		144,462.63		94,452.04
50,010.59	2018		19,839.92	6,284.57

2019	6		143,962.62	91,334.85
52,627.77	2019	1-6	9,037.18	2,617.19

**12**

		2010	5	19
25,924.80				100%
2018		98,397.35		65,112.42
33,284.93	2018		14,583.32	4,997.70

2019	6		97,158.26	61,803.87
35,354.39	2019	1-6	6,512.20	
2,069.47				

**13**

		2011	3	15
28,514.00				

100%

2018		69,712.04		37,048.37
32,663.67	2018		9,741.59	4,116.42
2019	6	81,291.40		41,828.17
39,463.23	2019	1-6	5,822.32	2,799.57

**14**

		2014	3	25
33,005.00				
100%				
2018		140,493.13		99,987.93
40,505.20	2018		17,323.19	6,185.22
2019	6	155,943.12		111,822.08
44,121.04	2019	1-6	8,915.22	
3,615.84				

**2019 6**

					%	
	32	2	806	63,000.00		24.21
			11	2,500.00		40.00
		2		6,000.00		50.00



	2007	1	16	
340,000				20.00%
2018				6,783,259.17
4,095,086.84	2,688,172.33		2018	
1,267,436.48	80,639.92			

3

1

30%

3%

3%

**2**

1

2

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**3**

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**4**

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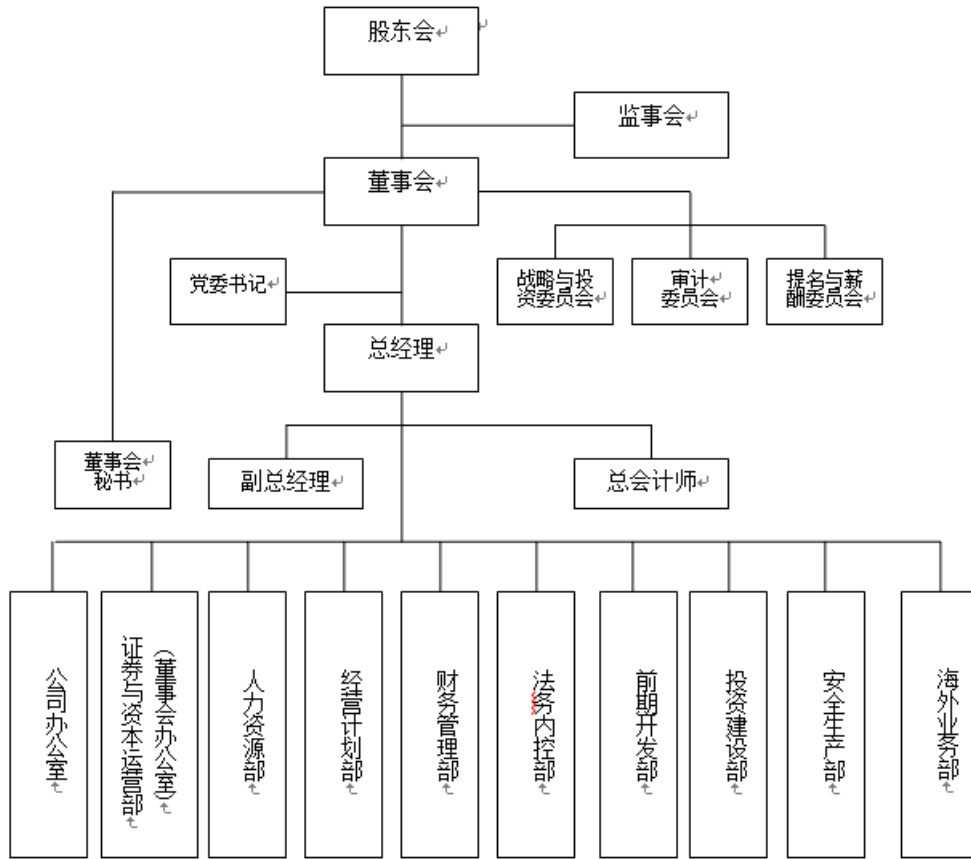
2

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2019 6

**2019 6**



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378 [2003]  
[2009]

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2019

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			2015 6 25	-
			2016 12 29	

2014 10 28

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2018 5 25

2018

2018 6 28

2019 1 30

2019 6 20

**1**

**1**

1961 7

2018 6

1983 7 1985 8

1985 8 1991 5

1991 5 1994 3

1994 3 1998 8

1995 9 1998 7

1998 8 2000 2

2000 2 2000 4

2000 4 2004 3

2004 3 2004 12

2004 12 2009 5

2009

5 2014 12

2014 12

2000 4 2018 3

991

601991

1962 5 1986 8 1995 6

1995 6 2006 7

2006 7

2010 6

2010 6

2011 6

2011 6 2012 8

2012 8 2012

9

2012 9 2013

11

2013

11 2017 3

2017 3 2017 7

2017 7 2017 11

2017

11 2019 3

2019

3

1986 7

2008 6

1985 3

2018 6

2010 1 2015 1

2015 1 2016 11

2016 11 2017 8

2017 8 2018 3

2018 3

2007 9

2009 6

1973 8

2019 1 30

2000 8 2001 8  
2005 7 2008 9  
2008 9 2010 9  
2010 9 2011 6  
2011 7 2012 3  
2012 4 2013

1998 12 2003 4

2003 4 2004 12

2004 12 2009 3

2009

3 2010 3

2010 3

2017 11

2017 11 2018 1

2018

1 2018 5

2018 5 2018 6

2018 6

1990 6

2010 12

1970 8 1993 7 2001 12

2001 12

2005 2

2005 2 2012 8

2012 8 2017 11

2017 11 2018 1

2018 1 2018 5

2018 5

1993

7

2003 6

**3**

1956 6 2016 12  
1982 7 1991 1  
1991 1 1993 8  
1993 8 2001 11  
2001 11 2014 3  
2004 3 2016 6  
2016 6 1982 7  
1955 5 2015 6  
1990 6 1994 6  
1994  
1994 7 1997 4  
1997 4 2001 1 2001 1  
2004 9 2004 9 2006 9  
2006 9 2008 9  
2008 9 2013 5  
1979 11  
2016 12  
2003 11 2010 7  
2010 10 2011 4  
2011 6 2012 7  
2012 7 2013 8  
02700 2014 2 2016  
5 8019



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2016 11

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2001 11

2011 11

1957 9

2014 10

1986 1988

1988

2000

2016 6

1281

2018 4

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2019 6 18

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1964 8

1986 7

1988 7

1987 6

1988 6

1988 7

1994 9

1994 9

1997 5

1997 5

1998 12

1998 12

1999 9

1999 9

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2000 3

2001 10

2001 10

2002 5

2002 5 2004 11  
2004 12 2009 12  
2009 12 2013 6  
2013 6 2013 9  
2013 9 2018 5 2018  
5 2018 9 2018 9  
1986 7  
2004 7  
2008 1  
1972 11 1995 7 1998 1  
1998 1 2007 7  
2007 7 2010 3  
2010 3 2010 6  
2010 6 2013 4  
2013 4 2018 6  
2014 10  
2015 5 2018 7  
2015 6  
2017 12 2018 6 2019  
1 2019 1  
1995 7  
2007 7  
1968 8 16  
2010 1 1993 12  
2010 8



1999 7    2000 2  
 2000 4    2003 3    Tucows  
 2004 1    2009 7  
  
 2009 8    2009 12    2009 12

2016-2018    2019 1-6    1,484,882.35  
 1,452,084.89    1,658,446.04    821,535.01  
  
 90.49%    88.95%    88.61%  
  
 9.38%    10.63%    11.07%

	2016		2017		2018		2019 1-6	
	1,343,622.14	90.49	1,291,609.75	88.95	1,469,497.77	88.61	712,219.89	86.69
	139,222.48	9.38	154,310.60	10.63	183,647.87	11.07	106,183.36	12.92
	496.70	0.03	154.73	0.01	388.91	0.02	81.30	0.01

2019

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	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>1-6</b>
--	-------------	-------------	-------------	-------------	------------

	2016		2017		2018		2019 1-6	
	621.13	40.31	4,831.88	80.40	3,702.91	75.39	2,972.24	97.44
	<b>282,435.08</b>	<b>19.05</b>	<b>293,750.08</b>	<b>20.23</b>	<b>383,890.17</b>	<b>23.15</b>	<b>195,669.20</b>	<b>23.82</b>

## 2019 6

		2019 1-6	2019 1-6	%
	4,702	9,506,127.32	516,827.08	72.57
	2,348	2,530,394.23	110,426.54	15.50
	450	641,036.41	15,292.56	2.15
	1,363	902,828.17	69,673.71	9.78
	<b>8,863</b>	<b>13,580,386.13</b>	<b>712,219.89</b>	<b>100.00</b>

1

7

1

80%

2017 9 1

0.1 /

2.41 /

2017 11 15 2018 3 15

0.16 /

2.57 /

2017

2016

2.50 /

2018 7 10

2.39 /

2018 11 15

2019 3 15

0.23 /

2.62 /

2018

2017

2.47 /

2019 1-6

2.49 /

/

	2016	2017	2018	2019 1-6
	39.52	36.44	40.45	20.01
	2.51	2.50	2.47	2.49

**2018**

				/
	410	4,005	160,679	0.65
	780	4,315	326,225	0.65
	838	4,323	354,125	0.65
	255	4,281	106,048	0.65

0.495 /





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18,970,194.26			1,672,104.39
	4,078		3,364,295
4,313		3,610,765.95	4,309
	1,080,922.59		4,239
	3,630,252.78		4,296
5,611,853.55		4,290	
	2017		4,436
17,091,025.05			2017
	3,866		1,547,874.90
			2,959,418
3,917		3,495,374.85	4,262
	946,942.15		3,833
	3,165,805.5	3,835	4,975,609.65
	3,896		
	2018		4,702
18,871,155			2018
	4,005		1,606,787
		3,262,248	4,315
	3,541,250		4,323
	1,060,477		4,281
3,459,994		4,191	5,574,257
	4,363		366,142
			1,407

60 °C

130 °C

24

11 15

3 15

24

11 15

3 15

**2**

2005

2007

2009

2018

2018

2,348.25

2018

50.43

2,177

82

2019 1-6

25.00

8.08%

	2018		2017		2016	
	225,693.80	120,599.59	205,388.58	115,700.26	187,113.75	103,665.96
	20.51	50.36	6.89	9.00	11,395.05	35.95
	<b>225,714.31</b>	<b>120,649.95</b>	<b>205,395.47</b>	<b>115,709.26</b>	<b>198,508.80</b>	<b>103,701.91</b>

3

2010 2020

2018

370

1,168

2018 15.00

33.33%

1,441

229

**2018**

%

		1,096,710.00	66.13
		170,148.21	10.26
		106,473.52	6.42
		59,386.40	3.58
		37,288.66	2.25
		<b>1,470,006.79</b>	<b>88.64</b>

**1**

2018 4,702  
 1,308 845 838  
 780 410 255  
 266 2019 1-6

**1**

90%

		/
2016-01-01	2017-08-31	2.51
2017-09-01	2017-11-14	2.41
2017-11-15	2018-03-15	2.57
2018-03-16	2018-07-09	2.41
2018-07-10	2018-11-14	2.39
2018-11-15	2019-03-15	2.62
2019-03-16	2019-04-30	2.39
2019-05-01	2019-06-30	2.31

2

2005

2011 5 27

2011 4 10 528.00

/MW 538.00 /MW 2011 11 29

2011 12 1 573.00 /MW 2014 1 20

2014 1 20

0.65 650.00 /MW

2



2020			2019 1 1	2020
	2021			2021 1
1				
2				
				2011 11
		0.004 /		100.00
2011 11 30		0.008 /	2013 9 30	
9 25				
0.8	1.5		0.015 /	
2015 12 27			2016 1 1	
				1.9
0.019 /				



2019 6

1

1

GDP  
GDP

2008~2009

2010  
14.56% 2011

2016 2017  
1.6

6.31

6.6%

	40%			
		2017		6.31
	6.6%		2017	
17.8	7.6%	2016	0.6	2017
		13,372		1,287
	3.41		4,578	2015
1,822				
2018	68,449		8.49%	
728	9.80%		47,235	
7.17%	10,801		12.75%	
9,685	10.35%	2018		

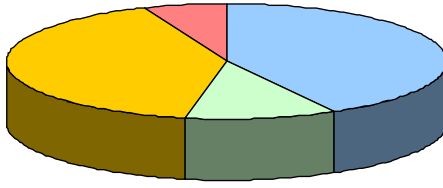
GDP

3

94%

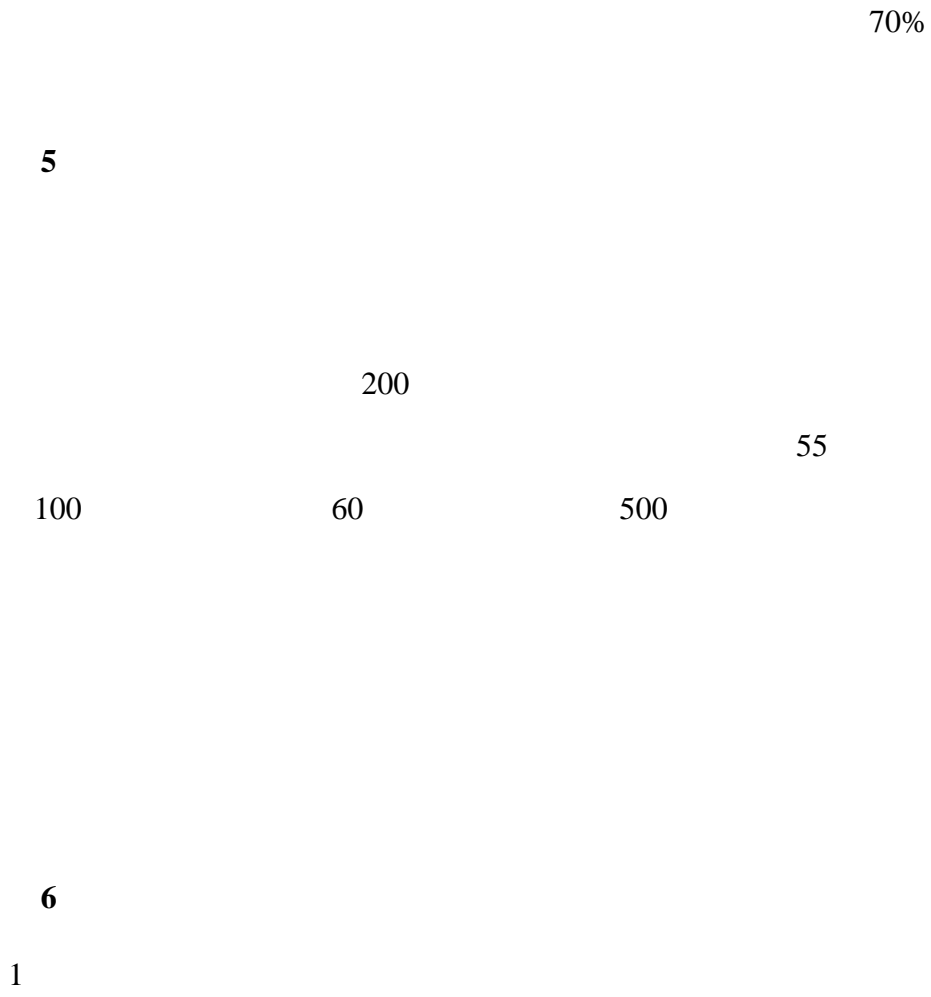
42%

53%



Wind

4



2

7

2020

15%

**8**

1

2

2020

2020

2020

60

10

20



2019

I

0.34	0.39	0.43	0.52	2020
0.29	0.34	0.38	0.47	

2018

2020

2019 1 1 2020

2021

2021 1 1

2

1

42%

20%

33% 54%

90%

2

2004  
2007 8  
2016 280  
33.70% 3.84 11 40.50%  
2020  
2015 5.9% 10%  
2020 3600  
125.00 2018 2020  
1610.2 7.5% 2018  
2800 2017 19.05%  
3

2016 12

2

3

4

5

6

7

2017 6

1

2020

7600

2.1%

2

2020

500

95%

8%

2017

2020

3

2020

2020

2015

17%

4

500

3,500

100%

15%

5

99.995%

27

5

10

9.5

7,000

95%

5

280

14

99.99%

7

9

类别	指标名称	单位	2015年	2020年	年均增长(%)	属性
总量与结构	★能源消费总量	万吨标准煤	6852.6	7600	2.1	约束性
	★煤炭消费量	万吨	1105.2	500	-15.6	约束性
	★煤炭消费比重	%	13.7	4.7	[-9]	约束性
	油品消费量	万吨	1583.8	1600	0.2	预期性
	油品消费比重	%	33.5	30.5	[-3]	预期性
	天然气消费量	亿立方米	145.4	190	5.5	预期性
	天然气消费比重	%	29	31.6	[2.6]	预期性
	★可再生能源消费量	万吨标准煤	450	620	6.6	约束性
	★可再生能源消费比重	%	6.6	8以上	—	约束性
	全社会用电量	亿千瓦时	952.7	1100	2.9	预期性
电力发展	电力装机容量	万千瓦	1071	1300	3.95	预期性
	其中,燃气装机容量	万千瓦	846.7	994.4	3.3	预期性
	可再生能源装机容量	万千瓦	47	200	33.6	预期性
	全市供电可靠率	%	99.9886	99.995	[0.0064]	预期性
节能减排	★单位地区生产总值能耗降幅	%	—	—	[17]	约束性
	★单位地区生产总值二氧化碳排放降幅	%	—	—	[20.5]	约束性
	电网综合线损率	%	6.89	6.73	[-0.16]	预期性
能源惠民	居民人均生活用电量	千瓦时	808.7	1000	4.3	预期性
	农网户均变电容量	千伏安	2左右	7	[5]	预期性
	农网供电可靠率	%	99.95	99.99	[0.04]	预期性

注:1.[ ]内为五年累计数;2.主要指标共计20项,其中“★”为约束性指标,共计7项。

2020

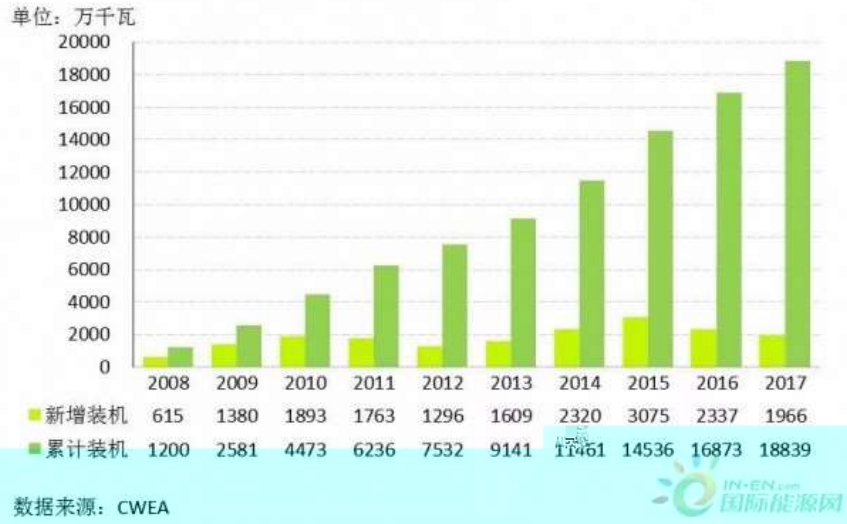
年份 能源品种	2015 年			2020 年		
	实物量	标准量 (万吨标准煤)	比重(%)	实物量	标准量 (万吨标准煤)	比重(%)
煤炭 (万吨)	1165.2	937.7	13.7	500	360	4.7
调入电 (亿千瓦时)	537	1504.1	21.9	770(含外调 绿色电力 100 亿千瓦时)	2300	30.3
天然气 (亿立方米)	145.4	1984.9	29	190	2400	31.6
油品 (万吨)	1583.8	2298.3	33.5	1600	2320	30.5
其他能源 (万吨标准煤)		127.6	1.9		220	2.9
合计		6852.6	100		7600	100

注：根据国家第三次经济普查统计口径平衡测算。

3

1





2

1

900

100 /

32.26

2.53

7.5

10

2,000

5,000

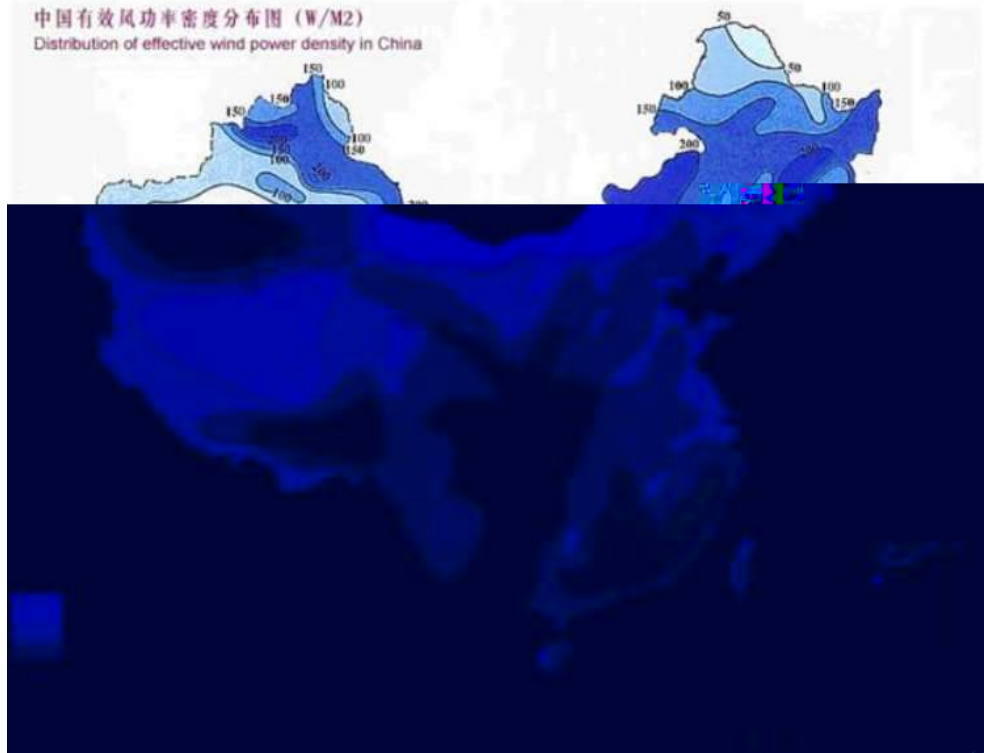
2,500

1.8

2.3

50

3,000



200-300 / 500 / 200  
2 79%

1,800 6,000

200 /  
500 /

7,000-8,000

50

100 /

3,000

10 7

20% 70% 20

25 30

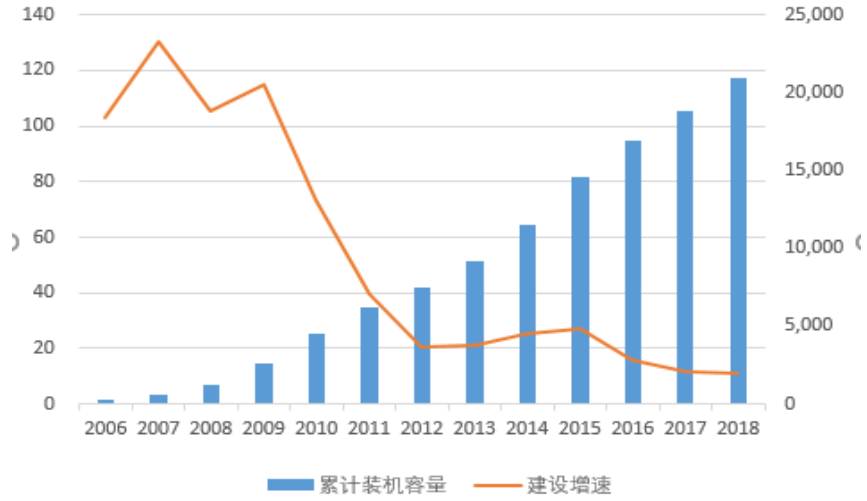
2

2018 1.84

2018 2,059 9.7%

**2006-2018**





Wind

3

2016 11

2020

2.1

500

4,200

6%

2005

2006 1

1

2

2011 11 30

12 1

3

2 6

2019

---

0.4

0.8

2014 12 31

[2014]3008

2015 1 1

2015 1 1

2016 1 1

2

0.49 0.52 0.56 0.61

	<b>2016</b>	<b>2018</b>	
	0.47	0.44	
	0.50	0.47	
	0.54	0.51	
	0.60	0.58	

[2015]3044

2016 12

26

[2016]2729

2018 1 1

0.4

0.45 0.49 0.57

2019 5 21

[2019]882

1

2 2019 I

0.34 0.39 0.43

0.52

2020

0.29 0.34

0.38 0.47

3

4 2018

2020

2019 1 1 2020

2021

2021 1 1

3

50%

2016

81

2020

2015	14%	10%	2015	26%	33%	92%
		50%			8%	

**1**

2017	2352	17%	2010	75	2010
13%	20%				

**2**

63

2015

3

4

2015 8.5  
20% 70%

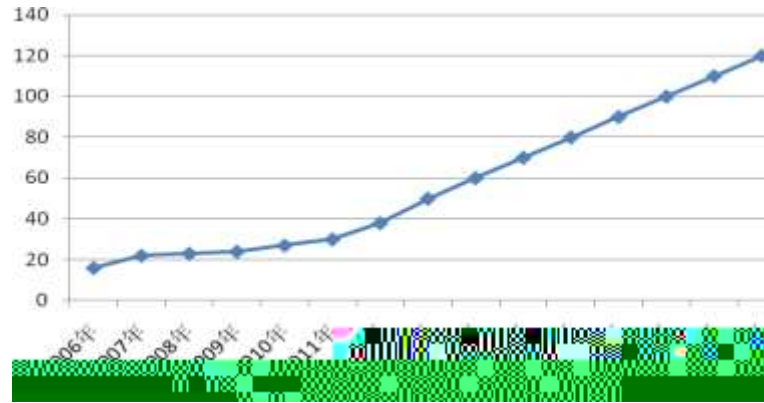
3%

2012 3

2015 2020

4,000

5,000  
2015 2020  
100 300



1

2

		2018		4,702
		1,308		845
838		780		410
	255	266		
				2018
		2,348.25	2018	
50.43		2,177		82
2019 1-6		25.00		8.08%

3

2015

20% 2020

25%

**4**

9F

**5**



**6**

**1**

1

20% 2020

25%

2015

2

3

2

[2010]30

1:1

63

105

2015

5.3

2

2019 6

53.75

2019

33.96

2019 6

**2019 6**

					<b>2019 6</b>
	50	3.92	0.78	3.14	0.51
	150	8.46	1.69	<del>0.87</del>	0.96
	200	10.45	2.09	8.36	1.03
50MW	50	2.84			

					<b>2019 6</b>
	100	6.34	1.27	5.07	4.25
	100	5.99	1.20	4.79	4.14
	110	7.04	1.41	5.63	6.16
	30	1.78	0.36	1.42	0.71
	<b>370</b>	<b>23.65</b>	<b>4.74</b>	<b>18.91</b>	<b>16.89</b>
	<b>869.50</b>	<b>53.75</b>	<b>10.76</b>	<b>42.99</b>	<b>19.79</b>




2019

---

	2018		2017		2016	

	2018		2017		2016	
	4,923.19	21.60	4,557.64	21.01	2,105.49	11.27
	6.87	0.03	78.23	0.36	5.08	0.03
	242.15	1.06	592.45	2.73	-	-
	109.05	0.48	192.37	0.89	-	-
	-	-	11.61	0.05	14.86	0.08
	153.27	0.67	-	-	-	-
	<b>22,792.16</b>	<b>100.00</b>	<b>21,695.34</b>	<b>100.00</b>	<b>18,685.00</b>	<b>100.00</b>

2

%

	2018		2017		2016	
	2,837.46	1.64	964.48	0.67	-	-
	170,286.95	98.36	142,849.47	99.33	129,181.03	100.00
	<b>173,124.41</b>	<b>100.00</b>	<b>143,813.95</b>	<b>100.00</b>	<b>129,181.03</b>	<b>100.00</b>

%

	2018		2017		2016	
	-	-	58.67	4.82	-	-
	14.99	57.63	1,157.84	95.18	1,345.24	95.51
	-	-	-	-	49.53	3.52
	-	-	-	-	13.70	0.97
	11.02	42.37	-	-	-	-
	<b>26.01</b>	<b>100.00</b>	<b>1,216.51</b>	<b>100.00</b>	<b>1,408.47</b>	<b>100.00</b>

2

1

**2016**

		220,000.00	2013/8/15	2017/8/15
		80,000.00	2012/12/21	2017/12/20
		120,000.00	2012/7/3	2017/6/30

**2017**

		676.00	2015/3/23	2025/12/23
		1,332.00	2014/12/4	2025/12/23
		520.00	2015/6/8	2025/12/23
		1,016.00	2015/8/10	2025/12/23
		908.00	2015/11/12	2025/12/23
		680.00	2015/12/3	2025/12/23
		2,376.00	2016/6/6	2025/12/23
		560.00	2016/6/7	2025/12/23
		1,656.00	2016/12/1	2025/12/23

**2018**

		8,548.00	2014/12/4	2025/12/23

2

%



	2018		2017		2016	
	12,700.00	75.15	13,000.00	75.58	-	-
	3,000.00	17.75	-	-	-	-
	1,200.00	7.10	1,200.00	6.98	-	-
	-	-	3,000.00	17.44	-	-
	<b>16,900.00</b>	<b>100.00</b>	<b>17,200.00</b>	<b>100.00</b>	-	-

%

	2018		2017		2016	
	-	-	50,300.00	19.03	50,300.00	29.75
	169,925.00	90.91	198,025.00	74.92	106,800.00	63.16
	10,000.00	5.35	9,000.00	3.40	9,000.00	5.32
	7,000.00	3.74	7,000.00	2.65	3,000.00	1.77
	<b>186,925.00</b>	<b>100.00</b>	<b>264,325.00</b>	<b>100.00</b>	<b>169,100.00</b>	<b>100.00</b>

3

			2018	2017	2016
			3,906.61	4,392.09	-
			27.27	27.02	49.53

1



		2018	12	31	2017	12	31	2016	12	31
		-	-	-	1,377.57	2.96	-	-	-	-
		-	-	-	1.15	0.00	-	-	-	-
		775.72	4.71	4.71	252.05	0.54	471.22	1.27	1.27	1.27
		-	-	-	131.61	0.28	18.19	0.05	0.05	0.05
		1.75	0.01	0.01	-	-	-	-	-	-
		<b>16,458.41</b>	<b>100.00</b>	<b>100.00</b>	<b>46,584.40</b>	<b>100.00</b>	<b>37,129.97</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



2019

2016 2017 2018

	2019 6 30	2018 12 31	2017 12 31	2016 12 31
	408,273.94	556,907.79	339,210.07	186,931.11
			24,717.48	26,575.02
	26,379.23	22,731.34		
	570,491.11	551,296.50	431,347.93	373,787.23
	62,087.66	44,917.84	68,007.40	24,841.28
	21,770.86	24,580.66	23,209.53	30,200.31
	13,375.30	11,580.87	13,035.11	12,834.41
	1,500.00	-	-	937.56
	75,632.55	58,673.34	52,410.16	53,497.15
	<b>1,179,510.64</b>	<b>1,270,688.34</b>	<b>951,937.68</b>	<b>709,604.05</b>
	-	-	12,802.75	12,802.75
	13,624.09	13,624.09	-	-
	223,064.84	217,124.26	204,986.29	208,493.68
	3,401,233.69	3,408,249.98	3,232,770.34	3,215,023.06
	330,320.35	290,871.21	393,033.34	372,135.98
	55,739.87			
	11,469.41	37,641.86	35,915.68	29,523.60
	3,667.65	2,280.76	1,617.14	4,110.80
	122,692.60	122,692.60	133,633.45	133,633.45
	15,695.70	18,268.30	15,234.10	7,731.77
	25,804.03	29,539.92	23,688.37	24,320.83
	71,307.87	74,970.79	98,168.11	70,245.64
	<b>4,274,620.09</b>	<b>4,215,263.77</b>	<b>4,151,849.59</b>	<b>4,078,021.56</b>
	<b>5,454,130.74</b>	<b>5,485,952.11</b>	<b>5,103,787.27</b>	<b>4,787,625.61</b>
	425,420.52	532,570.52	788,437.96	248,900.00

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	<b>2019 6 30</b>	<b>2018 12 31</b>	<b>2017 12 31</b>	<b>2016 12 31</b>
	298,066.28	325,108.36	296,680.40	354,085.47
	-	310.10	8,923.32	5,150.11
	6,005.95	8,889.94	-	-
	7,377.06	9,071.21	9,103.39	8,142.85
	12,096.92	30,616.66	26,583.59	23,589.76
	91,167.12	42,331.97	25,500.89	25,947.29
	137,794.99	147,025.61	225,621.58	750,044.66
	601,711.65	600,790.53	600,623.43	600,569.51

2

	2019	1-6	2018	2017	2016
	<b>821,535.01</b>		<b>1,658,446.04</b>	<b>1,452,084.89</b>	<b>1,484,882.35</b>
	625,865.81		1,274,555.87	1,158,334.81	1,202,044.16
	9,431.42		21,897.83	17,094.30	11,216.68
	-		-	-	-
	21,625.45		53,295.84	46,379.94	41,217.03
	-		97.10	26.71	-
	56,767.36		119,903.52	105,162.53	99,813.17
	-		11,333.41	2,396.11	9,732.11
	-		1,387.62	-	-
	3,499.09		-6,074.52	-120.98	-10,199.25
	7,374.01		11,438.81	5,420.20	23,574.17
	5,940.58		7,887.97	4,795.86	21,283.53
	53,239.47		82,549.64	117,963.82	-
	81.97		13.33	6.01	0.05
	<b>172,039.52</b>		<b>263,902.12</b>	<b>245,986.26</b>	<b>134,234.11</b>
	3,706.51		2,379.25	2,312.96	129,260.01
	1,615.88		528.00	390.37	794.72
	-		-	-	302.98
	<b>174,130.15</b>		<b>265,753.38</b>	<b>247,908.85</b>	<b>262,699.40</b>
	38,212.80		63,370.42	50,890.76	44,031.95
	<b>135,917.34</b>		<b>202,382.96</b>	<b>197,018.09</b>	<b>218,667.45</b>
	130,710.78		193,942.39	188,600.73	209,158.98
	5,206.57		8,440.57	8,417.35	9,508.47
	-		0.26	0.27	0.30
	-		0.26	0.27	0.30

3



	2019	2018	2017	2016
	918,173.02	1,797,664.09	1,640,270.43	1,687,323.95
	5,092.98	11,966.84	14,066.03	11,541.08
	41,903.71	98,659.06	134,056.75	108,406.89
	<b>965,169.71</b>	<b>1,908,289.99</b>	<b>1,788,393.22</b>	<b>1,807,271.92</b>
	573,283.18	1,054,089.20	1,031,718.53	1,096,392.85
	33,517.63	76,920.74	69,423.23	61,404.94
	111,842.03	209,128.35	167,158.09	139,702.90
	15,950.99	38,202.17	28,136.62	27,168.21
	<b>734,593.83</b>	<b>1,378,340.47</b>	<b>1,296,436.48</b>	<b>1,324,668.90</b>
	<b>230,575.88</b>	<b>529,949.52</b>	<b>491,956.74</b>	<b>482,603.02</b>
	-	14,200.00	600.00	27,000.00
	1,352.99	5,977.08	9,967.83	13,202.28
	1,507.96	192.11	95.51	14.67
	-	-	-	-
	4,779.64	27,282.93	25,030.00	11,854.23
	<b>7,640.60</b>	<b>47,652.12</b>	<b>35,693.34</b>	<b>52,071.18</b>
	185,045.48	349,790.82	354,576.10	374,558.06

	<b>2019 1-6</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>844,319.69</b>	<b>3,053,952.73</b>	<b>2,970,301.04</b>	<b>1,763,350.22</b>
	959,177.62	2,718,745.67	2,753,466.00	1,726,512.81
	66,314.57	159,020.83	180,276.87	167,148.72
	12,032.72	89,272.37	80,124.77	45,059.14
	<b>1,037,524.91</b>	<b>2,967,038.87</b>	<b>3,013,867.65</b>	<b>1,938,720.66</b>
	<b>-193,205.22</b>	<b>86,913.86</b>	<b>-43,566.61</b>	<b>-175,370.44</b>
	<b>-1,514.72</b>	<b>6,388.31</b>	<b>162.97</b>	<b>813.25</b>
	<b>-150,340.03</b>	<b>278,630.18</b>	<b>90,685.62</b>	<b>-35,498.20</b>
	551,187.02	272,556.84	181,871.22	217,369.42
	<b>400,846.99</b>	<b>551,187.02</b>	<b>272,556.84</b>	<b>181,871.22</b>

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	<b>2019 6 30</b>	<b>2018 12 31</b>	<b>2017 12 31</b>	<b>2016 12 31</b>
	63,546.29	168,047.75	151,365.77	24,344.34
	55,138.21	50,083.47	37,279.17	22,624.77
	770.78	1,284.04	338.26	301.76
	430,263.90	526,186.10	344,843.80	236,699.65
	233.02	283.71	78.85	88.35
	1,500.00	2,000.00	114,000.00	134,600.00

	2019 6 30	2018 12 31	2017 12 31	2016 12 31
	3,683.37	3,662.51	2,833.57	75,934.53
	703.87	736.74	474.02	512.81
	-	-	-	1,156.23
	4,131.91	4,131.91	4,389.62	1,795.32
	228,486.00	234,314.07	156,084.44	134,830.09
	<b>2,203,683.67</b>	<b>2,190,257.79</b>	<b>2,024,725.97</b>	<b>1,990,258.13</b>
	<b>3,666,795.97</b>	<b>3,703,543.36</b>	<b>3,099,449.72</b>	<b>2,885,787.97</b>
	296,970.52	406,970.52	393,000.00	104,000.00
	2,195.53	3,303.76	4,444.73	3,202.83
	-	-	-	-
	986.96	1,244.12	735.64	626.86
	199.04	1,924.79	1,859.74	530.02
	74,508.74	17,995.34	7,819.83	11,248.07
	-	8,300.00	21,000.00	426,455.27
	600,000.00	600,000.00	600,000.00	600,000.00
	<b>974,860.79</b>	<b>1,039,738.54</b>	<b>1,028,859.95</b>	<b>1,146,063.04</b>
	304,275.00	220,075.00	59,300.00	50,300.00
	349,009.43	349,009.43	200,000.00	-
	27,670.21	27,670.21	27,670.21	27,670.21
	205.33	205.33	-	-
	2,503.19	2,886.62	3,416.75	10,342.86
	<b>683,663.17</b>	<b>599,846.60</b>	<b>290,386.96</b>	<b>88,313.07</b>
	<b>1,658,523.96</b>	<b>1,639,585.14</b>	<b>1,319,246.90</b>	<b>1,234,376.11</b>
	824,450.81	824,450.81	687,042.35	687,042.35
	-	-	148,650.00	148,650.00
	545,832.52	545,832.52	382,750.03	382,207.23
	8,719.73	8,719.73	8,103.72	8,103.72
	99,879.37	99,879.37	80,892.92	62,211.49

	2019 6 30	2018 12 31	2017 12 31	2016 12 31
	529,389.58	585,075.79	472,763.81	363,197.08
	2,008,272.01	2,063,958.22	1,780,202.82	1,651,411.86
	<b>2,008,272.01</b>	<b>2,063,958.22</b>	<b>1,780,202.82</b>	<b>1,651,411.86</b>
	<b>3,666,795.97</b>	<b>3,703,543.36</b>	<b>3,099,449.72</b>	<b>2,885,787.97</b>

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	2019 1-6	2018	2017	2016
	<b>14,515.72</b>	<b>36,429.91</b>	<b>32,736.30</b>	<b>26,928.69</b>
	5,908.41	12,646.91	11,102.86	8,637.98
	202.15	543.56	498.40	460.97
	-	-	-	-
	3,002.87	8,216.24	7,601.61	6,711.68
	34,862.08	71,343.48	55,349.40	49,553.32
	-	392.56	-	126.75
	-	-	-	-
	26,525.80	242,601.29	221,608.40	218,189.96
	5,940.58	7,887.97	4,795.86	21,283.53
	2,472.31	4,234.45	4,427.70	-
	-	-	-	-
	<b>-461.69</b>	<b>190,122.88</b>	<b>184,220.13</b>	<b>179,627.94</b>
	9.68	0.00	1.89	3,535.74
	243.33	0.60	2.02	262.61
	3.33	-	2.02	-
	<b>-695.34</b>	<b>190,122.28</b>	<b>184,220.00</b>	<b>182,901.07</b>
	-	257.70	-2,594.29	94.82
	<b>-695.34</b>	<b>189,864.58</b>	<b>186,814.29</b>	<b>182,806.26</b>
	-695.34	189,864.58	186,814.29	182,806.26

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	2019 1-6	2018	2017	2016
	10,975.83	28,037.42	33,754.52	21,634.74
	889.09	1,672.92	1,713.74	1,766.45
	1,954.65	3,423.69	3,283.32	2,742.80
	<b>13,819.57</b>	<b>33,134.02</b>	<b>38,751.58</b>	<b>26,143.99</b>
	507.22	1,770.03	1,985.60	1,190.12
	2,550.53	5,871.40	5,139.16	4,316.24
	3,699.04	6,288.25	5,343.55	5,941.33
	1,859.07	3,263.60	3,856.75	3,539.46

	<b>2019 1-6</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
	1,007.68	119,178.24	64,201.61	2,540.95
	<b>798,048.21</b>	<b>2,278,242.89</b>	<b>2,439,628.38</b>	<b>1,359,236.73</b>
	<b>-68,048.21</b>	<b>403,393.84</b>	<b>-85,228.38</b>	<b>-42,355.41</b>
	1.39	1,056.78	-27.10	24.14
	<b>-104,501.46</b>	<b>77,941.98</b>	<b>66,021.43</b>	<b>4,940.62</b>
	168,047.75	90,105.77	24,084.34	19,143.71
	<b>63,546.29</b>	<b>168,047.75</b>	<b>90,105.77</b>	<b>24,084.33</b>

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		84,294,957.79
		-84,294,957.79
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	88,899,423.12
	-88,899,423.12



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		247,174,808.69			247,174,808.69
		-			-
		-			-
		128,027,500.00			-
					142,347,500.00
		4,313,479,265.31			4,313,479,265.31
					-
		232,095,284.26			-
					232,095,284.26
		-			-
					-

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2018 1 1

	2017 12 31			2018 1 1
	247,174,808.69	-247,174,808.69	-	-
	-	247,174,808.69	-	247,174,808.69
	4,313,479,265.31	-	-	4,313,479,265.31
	232,095,284.26	-	-	232,095,284.26
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	524,101,608.36	-	-	524,101,608.36
	128,027,500.00	-128,027,500.00	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	128,027,500.00	14,320,000.00	142,347,500.00

2019

	<b>2017 12 31</b>			<b>2018 1 1</b>
	-	-	-	-
	-	-	-	-
	-	-	-	-
	31,227,846.88	-	10,740,000.00	41,967,846.88
	808,929,170.12	-	-	808,929,170.12
	7,112,094,654.64	-	-	7,112,094,654.64
	569,121,375.72	-	-	569,121,375.72

2017

2018

	<b>2017 12 31</b>			<b>2018 1 1</b>
	-	-	-	-
	3,319,878.77	-	-	3,319,878.77
	10,814,017.56	-	-	10,814,017.56
	-	-	-	-

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42 2017 5 28		1,970,180,860.93 0.00
16 2017 1 1	2017 2017 6 12 2017	1,179,638,208.34
2017 30		60,073.60 23,129,594.46 3,903,697.05

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	<b>2019</b> <b>2019</b>	<b>1-6</b> <b>6</b> /	<b>2018</b> <b>2018</b> /	<b>2017</b> <b>2017</b> /	<b>2016</b> <b>2016</b> /
		545.41	548.60	510.38	478.76
		321.09	332.25	319.24	303.17
		270.38	282.50	275.35	257.98
		224.32	216.35	191.14	175.60
		82.15	165.84	145.21	148.49
		17.41	26.58	24.79	



	2019 2019	1-6 / 6	2018 2018	/	2017 2017	/	2016 2016	/
		0.75		0.75		0.48		0.35
		0.74		0.74		0.47		0.35
%		58.87		60.56		62.55		63.32
%		54.66		56.63		59.03		59.50
%		23.82		23.15		20.23		19.05
%		6.37		7.06		7.08		7.49
%		12.34		9.93		10.74		12.96
%		11.96		10.09		10.64		13.39
<b>EBITDA</b>		22.93		60.05		57.61		54.55
<b>EBITDA</b>		0.08		0.21		0.21		0.21
<b>EBITDA</b>		4.04		4.92		5.22		5.53
		2.93		3.40		3.65		4.24
		100.31		103.56		89.55		91.58

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