Beijing Jingneng Clean Energy Co., Limited

京京能清潔能源電力股份有限公司

(A joint stock company incorporated in the People's Republic of China with limited liability)

Stock Code：00579

ANNUAL REPORT

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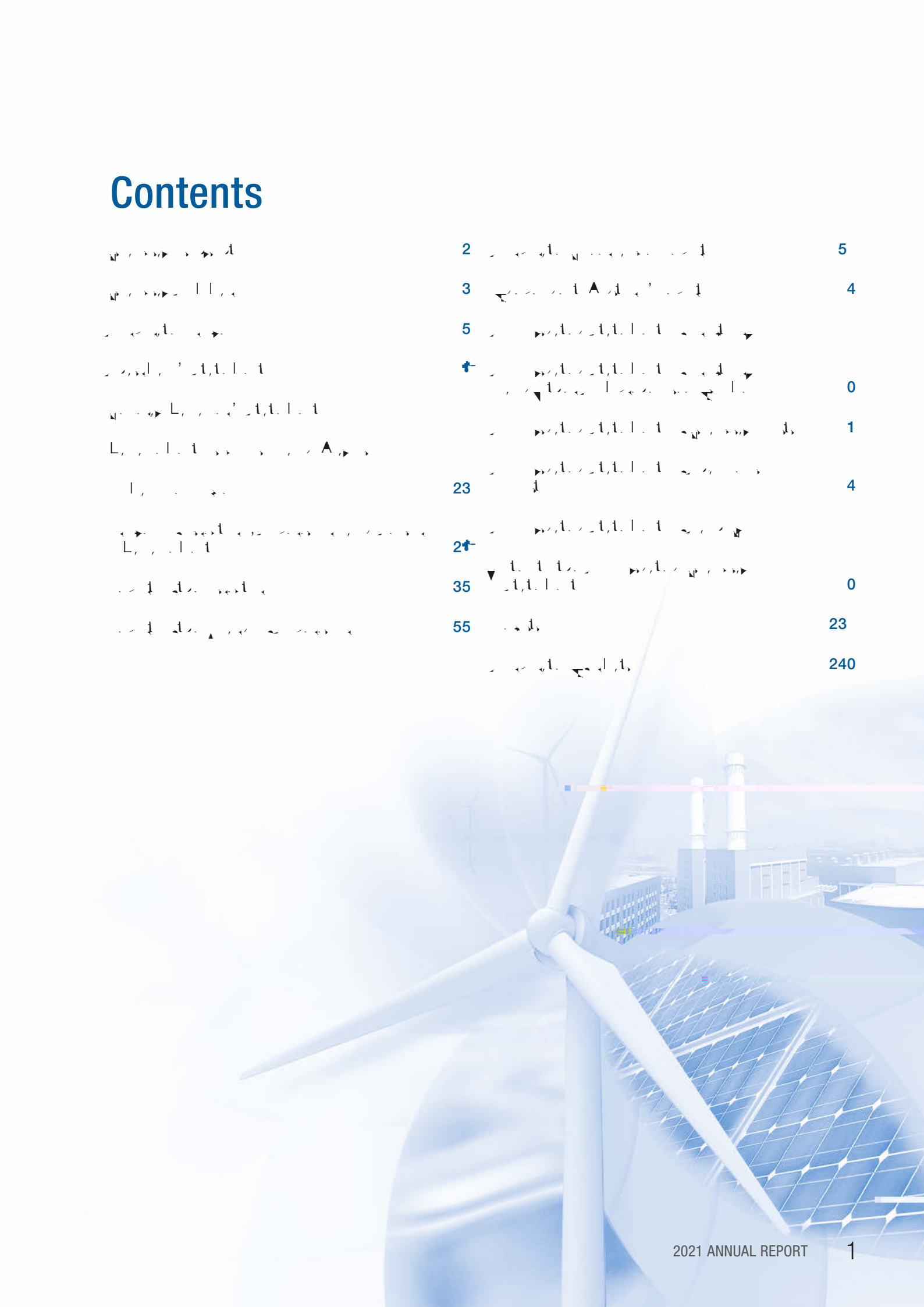
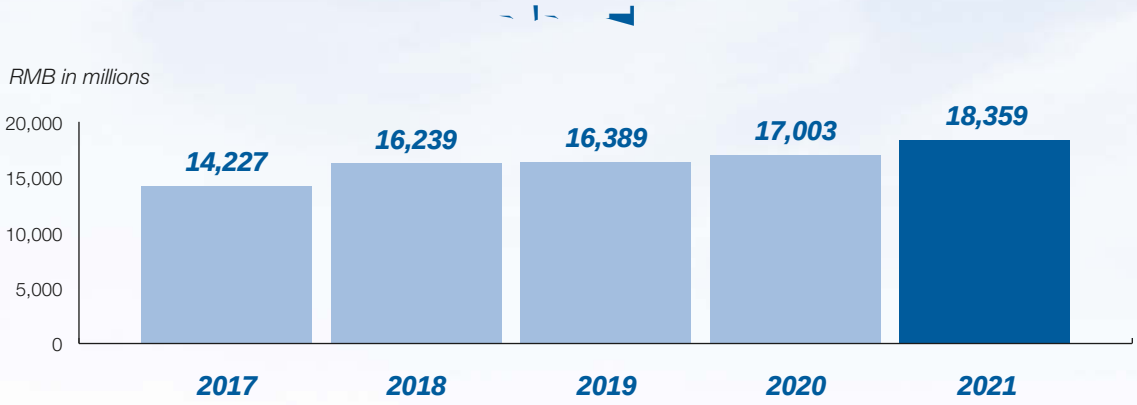
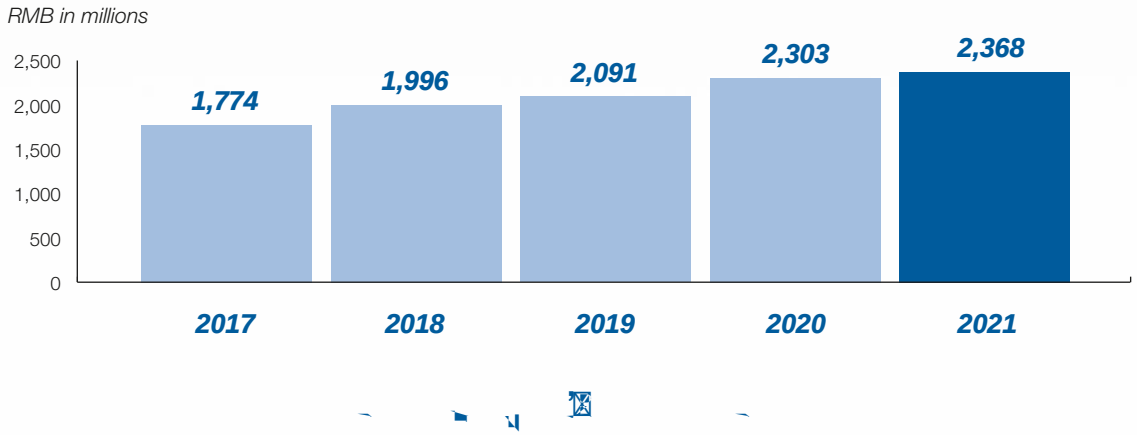
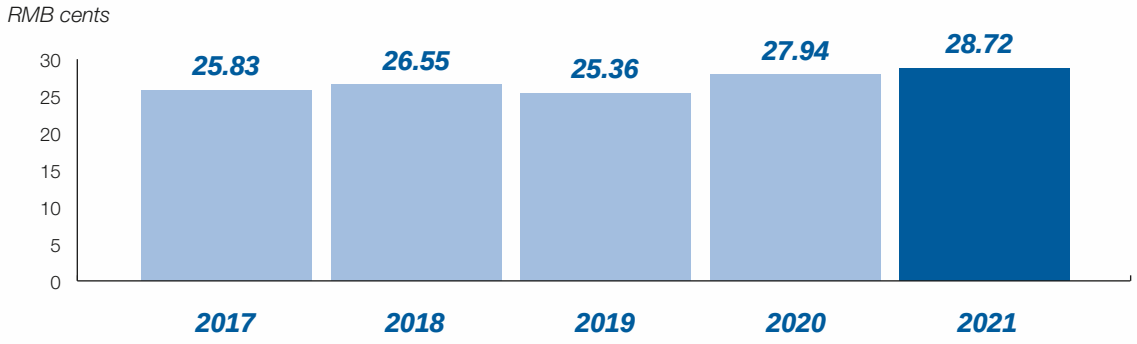


Financial Highlights







Financial Summary

Financial Summary

	2021 *RMB'000*	2020 L ,'000	201 L ,'000	201 L ,'000	2017 L ,'000
i , i	**2,035, 4**	70,53 ,30	5 ,723,15	54, 41,460	50, 55,6 4
i , i	**3,53 ,544**	55,656,303	4 ,542,2 3	42, 0 , 3	42,160,577
i , i	**1 ,4 ,302**	14, 2,005	10,1 0, 66	12,131,522	,7 5,107
i , i	**52,3 2,4**	44,171,461	36,647, 50	33,42 , 60	32,050,5 3
i , i	**2 ,32 , 2**	25,244,624	1 ,437,526	1 ,3 1, 17	1 , 23,16
i , i	**24,044, 04**	1 , 26, 37	17,210,324	14,037, 43	12,227,415
i , i	**2 ,3 3,3 0**	26,366, 47	23,075,30	21,511,600	1 , 05,101
i , i	**,244,50**	,244,50	,244,50	,244,50	6, 70,423
i , i	**1 ,031, 0**	16,24 ,142	14,42 ,160	12, 6 , 70	, 3 ,16
i , i	**2 ,2 ,2**	24,4 3,650	22,672,66	21,114,37	16, 0 ,5 1
i , i	**3,02 , 2**	1,525,5 2	,	,	1,527, 2
i , i	**35 ,110**	347,615	402,641	3 7,222	56 ,52
i , i	**2 ,3 3,3 0**	26,366, 47	23,075,30	21,511,600	1 , 05,101

Corporate Profile

A t 2010, 北京能源集團有限責任公司 ( ) ( ). 22 2011.

A 31 2021, 12,444 L\ . 4,702 L\ 40% 40% . A 4,110 L\ 3,213 L\

Chairman's Statement

General Manager's Statement

2021 [illegible] '14 [illegible]

A [illegible] 2021, [illegible] L 2.036 [illegible] 12.444 [illegible] 32.6 3, [illegible] 26.2 5 [illegible] L 1 .35 [illegible] L 3.0 4 [illegible] 2021, [illegible] 60. 1 [illegible] 100% [illegible] 5.555 [illegible] 37 [illegible]

2022, [illegible]

[illegible]

Management Discussion and Analysis

2021

2021, '14 2021 10 '14 2021,

1.

2021, A 31 2021, 12.444 1.5 3 14.6%, 7 4.702 37. % 4.110 33.0% 1.313 46. %, 30 3.213 25. % 0.301 10.3% 0.41 3.4%

A 31 2021, 32.6 3, .4%, 1 .254 2.2% 4,0 5

2.

3.

AAA

4.

5.

200 2021, 1.2 26 100%

1.

2021, L 2,4 .2 3. % L 2,3 6.0 2020. L 2,36 .1 2. 1% L 2,303.4 2020.

2.

7. 7% L 17,003.3 2020 L 1 ,35 . 2021,

Gas-fired Power and Heat Energy Generation Segment

2.15% L 12,146.2 2020 L 12,407.5 2021, 2.67% L 10,1 2. 2020 L 10,455.0 2021, 0.55% L 1, 63.3 2020 L 1, 52.5 2021,

Wind Power Segment

2 . 5% L 2,314.2 2020 L 2, 4.2 2021,

Photovoltaic Power Segment

20.04% L 2,145.3 2020 L 2,575.3 2021,

Hydropower Segment

2.25% L 3 5.3 2020 L 3 6.4 2021,

Other Segment

13 .13% L 2.3 2020 L 5.5 2021,

3.

13.27% L 7 7.4 2020 L 03.2 2021,

4.

5. 5% L 13, 3.6 2020 L 14,6 6.3 2021,

Gas Consumption

2. 3% L , 04.3 2020 L ,053. 2021,

Depreciation and Amortization Expense

10. % L 2, 11.3 2020 L 3,11 . 2021,

Personnel Cost

24.06% L 6 . 2020 L 1,07 .2 2021,

Repairs and Maintenance

.05% L 5 4.7 2020 L 642.6 2021,

Other Expenses

(1) (2) (3) (4) (5) (6) (7)

4. % L 7 . 2020 L 27.3 2021,

Other Gains and Losses

L 13.2 2020, L 25.4 2021,

5.

16.56% L 3, 17.1 2020 L 4,565.7 2021.

Gas-fired Power and Heat Energy Generation Segment

5.0 % L 1,76 .6 2020 L 1,67 .5 2021,

Wind Power Segment

4.3% L 1,201.0 2020 L 1,7 7.5 2021,

Photovoltaic Power Segment

21.62% L 1,124.1 2020 L 1,367.1 2021,

Hydropower Segment

5.14% L 5 .2 2020 L 10 .6 2021,

Other Segment

5 .63% L 236. 2020 L 37 .0 2021,

13.77% L 1,150. 2020 L 1,30 .3 2021,

0.13% 3. 7% 2020 3.74% 2021.

L 145.7 2020 L 207.0 2021,

4.45% L 2, 53.0 2020 L 3,0 4.3 2021.

6. 2% L 557.0 2020 L 5 5.0 2021. 1 .2 % 2021.

10.

A 3. % L 2,3 6.0 2020 L 2,4 .2 2021.

11.

2. 1% L 2,303.4 2020 L 2,36 .1 2021.

1.

1.

A 31 2021, L 2,035. L 52,372.5 L 2 ,663.3 L 26,276.3 .

2.

16.30% L 70,53 .3 31 2020 L 2,035. 31 2021, 1 .57% L 44,171.5 31 2020 L 52,372.5 31 2021, 12.50% L 26,366. 31 2020 L 2 ,663.3 31 2021, 7.2 % L 24,4 3.7 31 2020 L 26,276.3 31 2021, 2021.

Management Discussion and Analysis

1.

4 l , 2021,t . L 2,000.0 l
17 - , - . 2021 , . 2.65%

1 L, 2021,t . L 2,000.0
l 23 - , - . 2021 , . 2. 0%

23 A 2021,t . L 2,000.0 l
270- , - . 2021 , . 2. %

24 l 2021,t . L 2,000.0 l
266- , - . 2021 , . 2.6 %

27 A t 2021,t . L 1,500.0 l
270- , - . 2021 , . 2.50%

4 l , 2021,t . L 2,000.0
l 266- , - . 2021 , . 2.52%

15 l 2021,t . L 500.0 l
l , l . 2021, , 2 , t , . 3.23%

16 l , 2021,t . L 1,000.0
l l , l . 2021, , 3 , t , .
3.30%.

t , l , - l . t , , , t . L 3
l .

2.

2021,t ' , t , l t . t L 11,17 . l , L 363.1
l t , t , i , t , t . , - , , t ,
. l . t , L 7,05 .1 l t , t , i , t , t . . l . t ,
L 3,704. l t , t , i , t , t . , . l . t ,
L 46.7 l t , t , i , t , t . . l . t , , L 6.1
l t , t , i , t , t . l .

3.

A , i i , , l i , d , , 2021 , - , , , , l , i . (寧夏博陽新能源有限公司) , , l , i . (寧夏愷陽新能源有限公司) , ' , \ , i . (平羅縣旭清新能源有限公司) , ' , , \ , i . (河北融智新源電力有限公司) , ' i i , , i . (鄂托克前旗晟日新能源科技有限公司) , ' , i , l i . (張家口風沐新能源有限公司) , , ' , , i l . i . i . (廣東輝宇新能源投資有限公司) , , , , i , i , , , i , , , i , , , ,

Management Discussion and Analysis

2022

2022

1.

2022,

2. [illegible]

In 2022, [illegible]

Human Resources

[illegible] 2021 [illegible]

[illegible] 2, 51 [illegible] 31 [illegible] 2021. [illegible] 35 [illegible] 47. % [illegible] 65.2% [illegible]

1. [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible] 35	1,412	47. 5%	47. 5%
36[illegible] 45	676	22. 1%	70.76%
46[illegible] 55	734	24. 7%	5.63%
[illegible] 56	12	4.37%	100.00%
[illegible]	2, 51	100.00%	[illegible]

2. [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	4	0.14%	0.14%
L, [illegible]	165	5.5 %	5.73%
[illegible]	1,755	5 .47%	65.20%
[illegible]	1,027	34. 0%	100.00%
[illegible]	2, 51	100.00%	[illegible]

Human Resources

Human Resources

Profiles of Directors, Supervisors and Senior Management

(張鳳陽), 52, (北京勘測設計研究院) 2000. 2000 2003 (北京國際電力開發投資公司) 2003 2004 (北京國際電力新能源有限公司) 2004 2007 2007 200 200 2013 2013 201 201 2020, ( ) 201 (北京京能國際能源股份有限公司) 201 2020, 2021.

(陳大宇), 51, (北京能源投資(集團)有限公司) 2004 2007 (內蒙古上都發電有限責任公司) 2007 200 (寧夏京能寧東發電有限責任公司) 200 2010 (北京京能高安屯燃氣熱電有限責任公司) 2010 2017 2017 201 201 201 201 2020 (北京能源集團有限責任公司), 2020 2020 2020 2020 2020 2021 2021 2021. (華北電力學院), 1 2, (清華大學), 2014,

(高玉明), 57, (北京石景山發電總廠) 2000 12.1 2 0 222 51.

o1engineeriCo., Ltd./al Power

Profiles of Directors, Supervisors and Senior Management

(任啟貴), 5 L A (中國農業機械化科學研究所能源動力所) A 1 6t 1 5 (北京市能源投資公司) 1 5t 2006 (北京京能能源科技投資有限公司) 2006t 2010 2010 2011 2011t A t 2012 (北京華源熱力管網有限公司) A t 2012t 2012 2012t 2013 2013t L 2017 L 2017t 2017 2017 2017t 201 (北京能源集團有限責任公司) (北京市熱力集團有限責任公司) L 201 (北京京煤集團有限責任公司) A 201 60057) 201 * (北京京能熱力發展有限公司) 2020. L A (北京農業工程大學), 1 6 200

(宋志勇), 31, A L (北京國有資本經營管理中心) A 2016t L 2021t L 2021t 2021 (北京市財政局) 2020t 2021) L 2021 L 2022. L 2016.

*

(王邦宜), 4 [illegible] A 2000 A 2001. 2005 200 200 2010, 2010 2011. 2011 L 2012, A L 2012 2013, A L 2013 2017. 2014 2015, A L 2015 2017. A L 2017 A 201 A 2017, 201 (1606) 201 2021. L 1 5, 2000, 2005, L 200 .

(黄湘), 65, A 1 2 1 1 1 1 3 A 1 3 2001 ( ) 2001 L 2014. L ( ) L 2004 2016. L 2016. L 2016. L 2016. L 1 2.

Profiles of Directors, Supervisors and Senior Management

(陳彥璁), 42, [illegible] 2003[illegible] 2010, [illegible] & [illegible] 2010[illegible] 2011 [illegible] 2011[illegible] 2012 [illegible] 1220) [illegible] 2014[illegible] 201 [illegible] 2023) 2016 [illegible] 2016 [illegible] 106) [illegible] 2020. [illegible] 2001 [illegible] 2011 [illegible] 2022 [illegible]

(徐大平), 7 [illegible] 1 67[illegible] 1 7 [illegible] 1 3, [illegible] 1 31[illegible] 1 5, 1 5[illegible] 200 [illegible] 200 [illegible] 2020. [illegible]

(趙潔), 65, [illegible] (華北電力設計院), [illegible] 1 3[illegible] 1 1 [illegible] & [illegible] (電力規劃設計總院) [illegible] 2011, (中國電力建設工程諮詢公司) [illegible] 2003, [illegible] (中國電力工程顧問集團公司) [illegible] 2003[illegible] 2011. [illegible] (中國能源建設集團有限公司), [illegible] & [illegible] 2011[illegible] 2015. [illegible] 3 6) [illegible] 2015[illegible] 2017, [illegible] 2017. [illegible] 60057) [illegible] 2021. [illegible] 1 3, [illegible]

(王祥能), 57, (中國社會科學院機關事務管理局基建處) (中央國家機關講師團) (國家農業投資公司) (國家開發投資公司) (國家測繪局中測審計事務所) (國家測繪局中測審計事務所)

Profiles of Directors, Supervisors and Senior Management

(孫力), 56, L . (北京能源投資(集團)有限公司) 2004 2014 . (北京能源集團有限責任公司) 2014 L 201 . (北京源深節能技術有限責任公司) L 201 2020 2020 .* (京能錫林郭勒能源有限公司) . (北京昊華能源股份有限公司) 2020 . (投資北京國際有限公司) 2020 . (北京汽車股份有限公司) 2021 . (京能置業股份有限公司) L 2021 . (北京京能融資租賃有限公司) 2021 . (北京市熱力集團有限責任公司) . (北京京能熱力發展有限公司) . (北京京能國際能源股份有限公司) 2022. L 1 2001.

(厚伯龍), 4 L .3 (北京第三熱電廠) 1 6 2002 (北京國際電力開發投資公司) 2002 L 2005 . (北京能源投資(集團)有限公司) 2005 2006 . (北京京能熱電股份有限公司) 2006 200 . (內蒙古岱海發電有限公司) L 200 2010 . (北京京能熱電股份有限公司) 2010 2013 . (北京京能電力股份有限公司) 2013 201 . (北京能源集團有限責任公司) 201 2021 . (北京京能清潔能源電力股份有限公司) 2021. L . (北方工業大學) 2013, 2014, .

*

(張鳳陽), 52,

(陳大宇), 51,

(高玉明), 57,

(曹滿勝), 51,

(王剛), 54, 20 (北京火電建設公司薊縣電廠) 1 2 A 2003 (北京國際電力開發投資公司) 2003 2004 2004 2007, . (北京國際電力新能源有限公司) 2007 200 . (山西京玉發電有限責任公司) 200 L, 2012 (L, 200 L, 2012,) . (北京京能高安屯燃氣熱電有限責任公司) L, 2012 2014 . (山西京能左雲熱電有限責任公司) 2014 A 2016 ( ) . (京能(錫林郭勒)發電有限公司), . (山西京同熱電有限公司) A 2016 L, 2017, ( ) . L, 2017 I, 201 .

Profiles of Directors, Supervisors and Senior Management

(方秀君), 51, 20 (北京市綜合投資公司), (北京多倫多國際醫院) 1 6t 2004 2004t 201 . (北京京能國際能源股份有限公司) . (北京京能煤電資產管理有限公司) 2013t 201 201 5t 201 201 (A) (北京京能清潔能源澳洲控股公司), .(澳洲新格倫風電場項目公司), . (格倫光伏項目公司) .(拜亞拉風電場項目公司) 201 . (深圳京能清潔能源融資租賃有限公司) 201 . (京能集團財務有限公司) 2020 - 2020.

(康健), 5 22 1 2000 2000 2003 & 2004t 200 A t 200 t 200 200 200 . (北京京能高安屯熱電有限責任公司) 2017 ( ) 201 . (北京京豐熱電有限責任公司) 201 (香港明曦基金會) 201 .

(康健),

Report of the Directors

[illegible] 2021 [illegible] [illegible] 31 [illegible] 2021 [illegible].

[illegible]

As 31 [illegible] 2021, [illegible] L ,244,50 ,144, [illegible] ,244,50 ,144 L 1.00 [illegible] 5,414, 31,344 [illegible] 2, 2 ,676, 00 [illegible] 411 [illegible].

[illegible]

Report of the Directors

[illegible]

[illegible] 31 [illegible] 2021.

[illegible]

As at 31 [illegible] 2021, [illegible] HK$3,6 3.4 [illegible] HK$1,426.2 [illegible] HK$44.0 [illegible] 461 [illegible]

[illegible]

[illegible] 31 [illegible] 2021, [illegible] 13.16 [illegible] 31 [illegible] 2021.

[illegible]

[illegible] 31 [illegible] 2021.

[illegible]

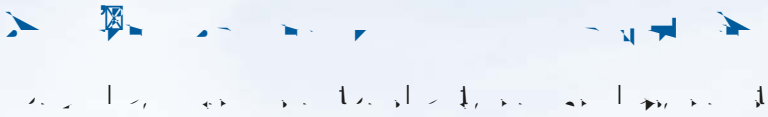
[illegible]

[illegible]

[illegible] 22, 521 [illegible]

Report of the Directors

Report of the Directors



31 2021 (')i 2 2022, L 7.037, ( ) 31 2021 (' **2021**) 12 2022, L 5 0.2 2021 L L A L 2021 12 A i 2022.

1 200 2021 10%. A

20% A 13 L 1 4 (' **1 4**) A 2010 1 4 2021 2021

31 2021.

Report of the Directors

[illegible] 2021 [illegible] 24 [illegible] 2022 [illegible] 7 [illegible] 12 [illegible] 2022 [illegible]

[illegible] 1712-1716, 17[illegible] 13 [illegible] 4 30 [illegible] 23 [illegible] 2022.

[illegible] 2021 [illegible] 4 30 [illegible] 6 [illegible] 2022.

[illegible] 17[illegible]

[illegible] 31 [illegible] 2021 [illegible] L[illegible],000 [illegible] (2020 L[illegible] 6,525 [illegible]).

[illegible] L[illegible] 15 [illegible]

		2 L, 2020/ 20 . . l , . , 2020
	(1)	1 , , , 2021/ 10 . . l , . , 2020
	(2)	1 , , , 2021/ 12 l, , , 2021
		2 L, 2020/ 25 L, 201
		2 L, 2020
	(3)	2 L, 2020
		2 L, , , 2022
		2 L, 2020
		2 L, 2020
		2 L, 2020
	(4)	2 L, 2020
		20 . . l , . , 2020
	(5)	24 l . 2021
		2 L, 2020
		25 . . l . l , . , 2020
	(6)	2 L, 2020
	(7)	25 l, , , 2022
		25 L, 201
		25 L, 201
		11 L, , , 2010/ 14 . . l , . , 200

Notes:

(1) [illegible] 1 [illegible] 2021.

(2) [illegible] 1 [illegible] 2021.

(3) [illegible] 2 [illegible] 2022.

(4) [illegible] 24 [illegible] 2021.

(5) [illegible] 24 [illegible] 2021.

(6) [illegible] 25 [illegible] 2022.

(7) [illegible] 25 [illegible] 2022.

[illegible] 3.13 [illegible]

[illegible] 26 [illegible] 34 [illegible] A [illegible]

[illegible] (1) [illegible] (2) [illegible] A [illegible]

[illegible] A [illegible]

[illegible]

[illegible]

[illegible] 141 [illegible]

[illegible]

[illegible] 2021 [illegible]

2021

/ $1,000,001	/ $1,500,000	3

[illegible]

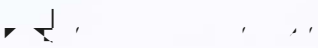
[illegible] 2021 [illegible]

[illegible]

[illegible]

Report of the Directors

In 2021,



A 31 2021, ( ) 2, 3 \! 336

Note: ( ),

				(%)	(%)
(Note 1 and Note 2)			5,1 0,4 3,053( )	5. 6	62. 6
			471,612, 00( )	16.67	5.72
L (Note 1 and Note 2)			5,414, 31,344( )	100.00	65.6
			471,612, 00( )	16.67	5.72
(Note 2)			471,612, 00( )	16.67	5.72
(Note 3)			173,532,000( )	6.13	2.10
(Note 3)			173,532,000( )	6.13	2.10
(Note 3)			173,532,000( )	6.13	2.10
(Note 3)			173,532,000( )	6.13	2.10
(Note 4)			1 6, 64,000( )	6. 6	2.3
(Note 4)			1 6, 64,000( )	6. 6	2.3
( ) (Note 4)			1 6, 64,000( )	6. 6	2.3
(Note 5)			653,136,000( )	23.0	7. 2
(Note 5)			653,136,000( )	23.0	7. 2
& (Note 5)			1 6,704,000( )	6. 5	2.3

Report of the Directors

Notes:

1. [illegible] 2,654,24 [illegible] A [illegible] 2,654,24 [illegible]

[illegible] 16,035,322 [illegible] A [illegible] 16,035,322 [illegible]

[illegible] 5,0 1,7 3,4 2 [illegible] 5,1 0,4 3,053 [illegible]

[illegible] 224,34 ,2 1 [illegible] A [illegible] 5,414, 31,344 [illegible]

2. [illegible] 471,612, 00 [illegible] A [illegible] 471,612, 00 [illegible]

3. A [illegible] 173,532,000 [illegible] A [illegible] 173,532,000 [illegible]

4. [illegible] 1 6, 64,000 [illegible] A [illegible] 1 6, 64,000 [illegible]

5. [illegible] 1 6,704,000 [illegible] 456,432,000 [illegible] A [illegible] 71.56% [illegible] 653,136,000 [illegible]

2021.

A ( )

16 201 11 3, 5, 6, 7, 2020, 2021, 2022.

1 201 4 7 2020, 2021, 2022.

22 2021, 6 2021, 2022.

	2021 (RMB million)	2021 (RMB million)
1.	320.0	27 .7
2.	135.5	10 .1
	6 .5	63.4
	66.0	44.7
3.	46.5	16.
4.	2,271.	1,735.5
5.	263.0	115.6
6.	2,000.0	,
7.	4,000.0 (Note 1)	3, 6.4
	30.0	14.4
	60.1	44.5

Note 1

6.6 %

31 2021.

Finance Lease Framework Agreement between BEH and the Company

25 2016. 1 1, 2017, 31 201 .

) 16 201 . 1 1, 2020, 31 2022.

L 450 L 2 31 2021, L 3 31 2022.

22 2021.

Property Lease Framework Agreement between BEH and the Company

A 1 L, 2014.

16 201 31 2022.

Framework Equipment Maintenance Agreement between BEH and the Company

25 2016. 11 2017 31 201 31 201 16 201 11 2020 31 2022.

Framework Service Agreement between BEH and the Company

25 2016. 11 2017 31 201 31 201 16 201 11 2020 31 2022.

EPC Framework Agreement between BEH and the Company

25 2016. 11 2017 31 201 31 201 16 201 11 2020 31 2022.

Framework Heat Sale and Purchase Agreement between BEH and the Company

25 2016. 11 2017 31 201 16 201 11 2020 31 2022.

Equipment Purchase Framework Agreement between BEH and the Company

25 2016. 11 2017 31 201 31 201 16 201 11 2020 31 2022.

Financial Services Framework Agreement between BEH Finance and the Company

25 2016. 1 1, 2017 31 201 . 31 201 ( ), 16 201 . 1 1, 2020 31 2022.

Sales and Leaseback Agreement

(寧夏同心大地日盛新能源有限公司) (' '), - A 1 (\ ). 50L\ A1 (') 16 L, 2021. L 226 L 337,7 7,0 7.5 12 23 L, 2021t 22 L, 2033.

A 16, A 1 ( ).\ A 0.1% 5%, A 14A

(1)

(2)

(3)

14A.56

()

(.)

(..)

(.)

3000(. . . .)'A

740

'A

471 50

14A.56

14A

Report of the Directors

[illegible]

[illegible] 47[illegible]

[illegible]

A [illegible] (the "[illegible]"), [illegible] A[illegible] 14 [illegible] 31 [illegible] 2021.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 25% [illegible] A [illegible]

Report of the Directors

31 2021,

2021 31 2021

A 2021 31 2021

21 4 A

31 2021.

Chairman of the Board

2 L 2022

Report of the Board of Supervisors

2021, [illegible]

2021

( )

2021, [illegible]

2021 [illegible] 30 L, 2021, [illegible] 02 L [illegible] 2020\ [illegible]

2021 [illegible] 26 A [illegible] 2021, [illegible] 02 L [illegible] 2021 [illegible]

( )

2021, [illegible] A [illegible]

Report of the Board of Supervisors

( )

1 A 2021,

2021

( )

( )

( )

2022

2022,

Corporate Governance Report

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 31 [illegible] 2021, [illegible]

[illegible]

[illegible] (), [illegible] A [illegible] 10 [illegible]

[illegible] A [illegible] 31 [illegible] 2021.

[illegible])

[illegible]

(Chairman)
(General Manager)

Corporate Governance Report

31 2021,

3.13

.2.2 (A.4.2)

A A

A

Corporate Governance Report

Corporate Governance Report

31 2021

Note

Executive Directors

(Chairman)

Non-executive Directors

Independent non-executive Directors

24 2021)

Note:

Corporate Governance Report

24 2021.

[illegible]

[illegible] 4 [illegible] (the "Listing Rules"), [illegible] 1 [illegible]

[illegible] 24 [illegible], 2021.

[illegible] 2 [illegible], 2022.

[illegible]

[illegible] 4 [illegible].

[illegible]

[illegible] 27 [illegible], 2021 [illegible] (the "Listing Rules"), [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Corporate Governance Report

-
-
- A
-
- A

–

–

–

A.2.1 (.3.1).

31 2021

/		4/4	3/3	1/1	2/2
(1) /		2/2		1/1	0/1

(2) 2/2 1/1

Corporate Governance Report

[illegible] 31 [illegible] 2021, [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 31 [illegible] 2021.

[illegible]

[illegible] 741 7 .

[illegible]

[illegible]

[illegible] 31 [illegible] 2021, [illegible] L 7,472,000 [illegible] L 1 ,000, [illegible]

[illegible]

[illegible] ("[illegible]"), [illegible] [illegible] [illegible]

Corporate Governance Report

[illegible]

[illegible]

[illegible]

[illegible]

A [illegible] 7/ / [illegible] . 6\ [illegible]
[illegible]
([illegible])

[illegible]

[illegible]

[illegible]

22 [illegible] 2021, [illegible] A [illegible] A [illegible] A [illegible] A [illegible] 25 [illegible] 2021 [illegible] A [illegible] .

Independent Auditor's Report

(incorporated in the People's Republic of China with limited liability)

[illegible] 7 [illegible] 237, [illegible] 31 [illegible] 2021, [illegible]

[illegible] 31 [illegible] 2021, [illegible] ("[illegible]"), [illegible] A [illegible] ("A [illegible]"), [illegible]

[illegible]

[illegible] A [illegible] ("A [illegible]"), [illegible] A [illegible] A [illegible] A

(continued)

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Independent Auditor's Report

(continued)

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Independent Auditor's Report

(continued)

Certified Public Accountants

2 L, , 2022

	Notes	2021 RMB'000	2020 RMB'000
	6	**1 ,35 , 32**	17,003,306
	8	**03,1 3**	7 7,3 3
		(,053, 5)	(, 04,303)
	13	**(3,11 , 54)**	(2, 11,261)
	13	**(1,0 ,24)**	(6 , 25)
		(42,22)	(5 4,657)
	9	**(2 ,254)**	(7 ,7 3)
	10	**25,404**	(13,160)
		1,14	(1,510)
		4,5 5, 02	3, 17,0 0
	11	**34, 2**	41,065
	11	**(1,30 ,2)**	(1,150, 47)
		(,1 5)	167,7 1
		(3 , 4)	(22,063)
		3,0 4,250	2, 53,026
	12	**(5 5,04)**	(557,041)
	13	**2,4 ,202**	2,3 5, 5
		2,3 ,131	2,303,3 0
	43	**5 , 5**	31, 50
		1,1	60,645
		2,4 ,202	2,3 5, 5
(RMB cents)	16	**2 . 2**	27. 4

Consolidated Statement of Profit or Loss and Other Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2021

		31
	2021	2020
	RMB'000	*RMB'000*
	2,4 ,202	2,3 5, 5
	42, 2	,026

Consolidated Statement of Financial Position

AT 31 DECEMBER 2021

	Notes	2021 RMB'000	2020 RMB'000
	17	50, 5, 2	43,1 7,213
	18	1,4 ,21	1,431,342
	19	4, 3,	4,410,754
	20	114,134	1 0,04
	22(a)	3,1 ,022	3,51 ,50
	22(b)	10 ,000	117,000
	23(a)	3,110	130, 04
	23(b)	0,000	70,000
	24	1 ,4	2 6,104
	25	10 , 3	66, 11
	29	1,55 ,553	1,114,305
		,532	1,072,426
	31	, 1	50,7 7
	37	52,50	
		3,53 ,544	55,656,303
	26	, 4	104,416
	27	11, ,31	,15 ,317
	28	30 , 4	463,77
		12, 4	16,565
	48(a)	4 2,33	170,1 3
	29	553, 3	46 ,666
	30	2 0,2 0	1 6,043
	31	23	4,577
	32	5,0 ,300	4,2 7,450
		1 ,4 ,302	14, 2,005

Consolidated Statement of Financial Position

AT 31 DECEMBER 2021

	Notes	31 2021 RMB'000	2020 RMB'000
	33	5, 3 ,2 3	5,05 ,
	48(b)	132, 1	1 ,53
	34	11,2 2,51	12,31 ,322
	35	,5 ,4 1	7,060,65
	36	2,0 1,245	6,656
	36	1,025, 41	26,12
		0,	56,3 0
	39	, 2	64,65
	37		1 ,576
		,453	125,3 1
	38	1 ,31	22 ,336
		2 ,32 , 2	25,244,624
		(, 2 ,4 0)	(10,362,61)
		53, 0 ,0 4	45,2 3,6 4
	37	1,034	45,002
	34	1 ,044,0	10, 6,26
	36	2,4 4,33	4,4 ,67
	36	,42	1, ,2 4
		1 ,31	12,440
	24	2 1, 12	1 3,615
	38	3 1,53	435, 11
	39	11,22	36,336
	40	12,1	1 ,402
		24,044, 04	1 , 26, 37
		2 ,3 3,3 0	26,366, 47

Consolidated Statement of Financial Position

AT 31 DECEMBER 2021

	Notes	31 2021 RMB'000	2020 RMB'000
	41	,244,50	,244,50
		1 ,031, 0	16,24 ,142
		2 ,2 ,2	24,4 3,650
	43	3,02 , 2	1,525,5 2
		35 ,110	347,615
		2 ,3,3 0	26,366, 47

7 237

2 2022

Director *Director*

Consolidated Statement of Changes in Equity

FOR THE YEAR ENDED 31 DECEMBER 2021

	RMB'000 (Note 41)	RMB'000 (Note 42)	RMB'000 (note(a))	RMB'000 (note(b))	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000 (Note 43)	RMB'000	RMB'000
A 1 , 2020	,244,50	3, 34,473	2,2 6,420	(67,13)	10,714	(64,67)	(1 5,417)	,513,7 6	22,672,66	,	402,641	23,075,30
	,	,	,	,	,	,	,	2,303,3 0	2,303,3 0	31, 50	60,645	2,3 5, 5
	,	,	,	,	12, 77	21,451	2,475	,	126, 03	,	,	126, 03
	,	,	,	,	(4,666)	,	,	,	(4,666)	,	,	(4,666)
	,	,	,	,	,211	21,451	2,475	2,303,3 0	2,425,527	31, 50	60,645	2,51 ,122
(Note (c))	,	,	,	(600)	,	,	,	,	(600)	,	(4 ,6 0)	(50,2 0)
	,	,	,	,	,	,	,	,	,	1,500,000	,	1,500,000
	,	,	,	,	,	,	,	,	,	(6,36)	,	(6,36)
	,	,	152,240	,	,	,	,	(152,240)	,	,	,	,
	,	,	,	,	,	,	,	(5 5,253)	(5 5,253)	,	(65, 1)	(661,244)
	,	,	,	,	(24,42)	,	,	24,42	,	,	,	,
	,	,	,	(,6 2)	,	,	,	,	(,6 2)	,	,	(,6 2)
A 31 , 2020	,244,50	3, 34,473	2,43 ,660	(76,430)	(5,503)	(43,227)	(2, 42)	10,0 4,111	24,4 3,650	1,525,5 2	347,615	26,366, 47

	RMB'000 (Note 41)	RMB'000 (Note 42)	RMB'000 (note(a))	RMB'000 (note(b))	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000 (Note 43)	RMB'000	RMB'000
A 1l, , 2021	,244,50	3, 34,4 3	2,43 ,110	(1,430)	(5,503)	(43,22)	(2, 42)	10,0 4,111	24,4 3,150	1,525,5 2	34 ,115	21,3 1, 4
	.	.	.	.	.	.	.	2,31 ,131	2,31 ,131	5 , 5	11,1 1	2,4 ,202
	.	.	.	.	32,045	23,31	(,33)	.	(22, 21)	.	.	(22, 21)
	.	.	.	.	4,111	.	.	.	4,111	.	.	4,111
	.	.	.	.	31, 11	23,31	(,33)	2,31 ,131	2,34 , 1	5 , 5	11,1 1	2,4 0, 42

Consolidated Statement of Changes in Equity

FORMAT

Notes:

(1) [illegible]

(2) [illegible]

(3) [illegible] 2020, [illegible] 40% [illegible] 京能(遷西)發電有限公司 ([illegible]) [illegible] 50,2 0,000 [illegible]

Consolidated Statement of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2021

	31	
	2021	2020
	RMB'000	*RMB'000*
	3,0 4,250	2, 53,026
A		
	3,11 , 54	2, 11,261
	(1,0)	50, 44
	(, 3	11 ,521
	5, 15	,
	(1,14)	1,510
	, 35	14,633
( )		
	(5,343)	1,300
	1 ,1 5	(167,7 1)
	3 , 4	22,063
	(34, 2)	(41,065)
	1,30 ,2	1,150, 47
	(34,1 0)	(151,051)
	(5,323)	(5,277)
	(555,)	(47 , 0)
	,0 5,452	6,2 0, 41
L		
	,045	2,06
	(1, ,51)	(3, 2,556)
	(311,)	(116,222)
	10, 1	503,313
	(5,)	(40,330)
( ),	**(, 0)**	3 ,037
	2 1,055	341,711
	30,3 4	6,741
	5,4 , 1	3,133,704
	(521,2)	(531, 6)
	4, 55,550	2,601, 0

Consolidated Statement of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2021

	31	
	2021	2020
	RMB'000	*RMB'000*
	34, 2	42, 14
	1 4,0	6, 2
	,000	134,000
	-	75,000
	-	(117,000)
	-	(70,000)
	(1 ,120)	(1,222,000)
	(, 3 ,2 1)	(7,235, 20)
	(4 ,1 1)	(6 ,417)
	(0,11)	(10,76)
	(1,405, 2)	(142, 52)
	- ,020	34,224
	,2 2	4, 5
	(1 , 4)	(3,0 6)
	1,5 3	3,035
	(10,0 -,442)	(,56 , 4)

Consolidated Statement of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2021

	Note	2021 RMB'000	2020 RMB'000
A			(50,2 0)
		1,535	
		(1,20 , 0)	(1,0 0,351)
		22,23 ,13	12,272,425
		(1 ,3 0, 4)	(,647, 7)
		11,500,000	10,500,000
		(13, 3)	(11,33)
		(11,000,000)	(,500,000)
			1,000,000
			(1,415)
			1,000,000
			(35)
		1,500,000	1,500,000
		(5, 15)	(6,36)
		(4,3 1)	(4 ,321)
		(5 ,223)	(5 5,253)
		(55, 5)	(137,133)
		(51,100)	
		5, 4,	6,1 2,711
		3, 5	225,535
		4,2 ,450	4,056,110
		35, 5	15, 05
	32	5,0 ,300	4,2 7,450
		5,0 ,300	4,2 7,450

Notes to the Consolidated Financial Statements

FOR THE YEAR ENDED 31 DECEMBER 2021

1.

北京能源集團有限責任公司

北京國有資本運營管理有限公司

北京市人民政府國有資產監督管理委員會

2.

3. (–)

1 2021

16	*Covid-19-Related Rent Concessions*
, 3 , 7, 4, 16	*Interest Rate Benchmark Reform-Phase 2*

3.1 3 4 1 2

7 ().

3.

(–) *(continued)*

17	*Insurance Contracts and the related Amendments*[3]
3	*Reference to the Conceptual Framework*[2]
10	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[4]
2	
16	*Covid-19-Related Rent Concessions beyond 30 June 2021*[1]
1	*Classification of Liabilities as Current or Non-current*[3]
1, 2	*Disclosure of Accounting Policies*[3]
	Definition of Accounting Estimates[3]
12	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*[3]
16	*Property, Plant and Equipment – Proceeds before Intended Use*[2]
37	*Onerous Contracts – Cost of Fulfilling a Contract*[2]
	Annual Improvements to IFRSs 2018 – 2020[2]

3. (–) *(continued)*

(continued)

(1) 1 2021.

(2) 1 2022.

(3) 1 2023.

(4)

Amendments to IFRS 3 Reference to the Conceptual Framework

– 3 201 2010 2010)

– 37 21 37 21

– 2022.

3. [illegible] (continued)

[illegible] (continued)

Amendments to IAS 16 Property, Plant and Equipment – Proceeds before Intended Use

[illegible]

Amendments to IAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction

[illegible]

[illegible]

[illegible]

4.

4.1

2 *Share-based Payment*, 16 (1 , 201) 17 (16), 2 *Inventories* 36 *Impairment of Assets.*

4. [illegible] *(continued)*

4.1 [illegible] *(continued)*

[illegible] 1, 2 [illegible] 3 [illegible]

- [illegible] 1 [illegible]

- [illegible] 2 [illegible] 1 [illegible]

- [illegible] 3 [illegible]

4.2 [illegible]

Basis of consolidation

[illegible]

- [illegible]

- [illegible]

- [illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Basis of consolidation (continued)

[illegible]

[illegible]

[illegible]

Changes in the Group's interests in existing subsidiaries

[illegible]

[illegible]

[illegible]

4. [illegible] (continued)

4.2 [illegible] (continued)

Business combinations

Optional concentration test

[illegible] 2020,[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Business combinations (continued)

Business combinations (continued)

[illegible]

– [illegible] 12 [illegible] 1 *Employee Benefits* [illegible]

– [illegible] 2 *Share-based Payment* [illegible]

– [illegible] 5 *Non-current Assets Held for Sale and Discontinued Operations* [illegible]

– [illegible] 16), [illegible] 12 [illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Business combinations (continued)

Business combinations (continued)

[illegible]

[illegible]

[illegible]

Goodwill

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Goodwill (continued)

[illegible]

[illegible]

4. (continued)

4.2 (continued)

Investments in associates and a joint venture (continued)

36 *Impairment of Assets*

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Investments in associates and a joint venture (continued)

[illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Revenue from contracts with customers

[illegible]

[illegible]

– [illegible]

– [illegible]

– [illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Revenue from contracts with customers (continued)

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Leases

Definition of a lease

[illegible]

[illegible] 16 [illegible]

The Group as a lessee

[illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Leases (continued)

The Group as a lessee (continued)

[illegible]

[illegible] 12 [illegible]

[illegible]

[illegible]

– [illegible]

– [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Leases (continued)

The Group as a lessee (continued)

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

- [illegible]

- [illegible]

[illegible]

[illegible]

- [illegible]

- [illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Leases (continued)

The Group as a lessee (continued)

[illegible]

[illegible]

– [illegible]

– [illegible]

[illegible]

[illegible]

Foreign currencies

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Foreign currencies (continued)

[illegible]

[illegible]

Borrowing costs

[illegible]

[illegible]

[illegible]

Notes to the Consolidated Financial Statements

FOR THE YEAR ENDED 31 DECEMBER 2021

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Taxation

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Taxation (continued)

[illegible]

[illegible]

[illegible] 12 [illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Property, plant and equipment

[illegible]

[illegible]

[illegible]

Ownership interests in leasehold land and building

[illegible]

[illegible] 16) [illegible] 16), [illegible]

[illegible]

4.

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Intangible assets (continued)

Intangible assets acquired in a business combination

[illegible]

[illegible]

[illegible]

Impairment of property, plant and equipment, right-of-use assets and intangible assets other than goodwill

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Impairment of property, plant and equipment, right-of-use assets and intangible assets other than goodwill (continued)

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Inventories

[illegible]

Financial instruments

[illegible]

[illegible] 15 *Revenue from Contracts with Customers*. [illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets

[illegible]

[illegible]

– [illegible]

– [illegible]

[illegible] ('[illegible]')

– [illegible]

– [illegible]

[illegible] 3 *Business Combinations* ('[illegible] 3'), [illegible].

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible] *(continued)*

A [illegible]

– [illegible]

– [illegible]

– [illegible]

[illegible]

() A[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible] *(continued)*

(i) [illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible] *(continued)*

() [illegible]

[illegible]

– [illegible]

– [illegible]

– [illegible]

– [illegible]

– [illegible]

[illegible] 30 [illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible] *(continued)*

(i) [illegible]

[illegible] (the "[illegible]").

[illegible] 0 [illegible]

(iii) [illegible]

A [illegible]

( ) [illegible]

( ) [illegible]

( ) [illegible]( ) [illegible] ( )[illegible]( ) [illegible]

( ) [illegible]

( ) [illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible] *(continued)*

(a) [illegible]

[illegible]

(b) [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial assets (continued)

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Financial liabilities and equity

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Derivative financial instruments

[illegible]

Hedge accounting

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Hedge accounting (continued)

[illegible]

[illegible]

– [illegible]

– [illegible]

– [illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Financial instruments (continued)

Hedge accounting (continued)

[illegible]

[illegible]

[illegible]

4. [illegible] *(continued)*

4.2 [illegible] *(continued)*

Related parties

( ) A [illegible]

() [illegible]

(,) [illegible]

(,,) [illegible]

( ) A [illegible]

() [illegible] ([illegible]).

(,) [illegible] ([illegible]).

(,,) [illegible]

( ) [illegible]

( ) [illegible]

(,) [illegible] ( ).

(,,) A [illegible] ( )() [illegible] ([illegible]).

(,,,) [illegible]

[illegible]

5.

5. *(continued)*

31 2021

20.

50.

(–)

44, 3

( )

31 2021

(continued)

(continued)

31 2020

	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
	10,1 2, 73	2,314,207	2,145,343	3 5,27	,	15,037,702
	1, 63,2	,	,	,	,	1, 63,2
	,	,	,	,	2,316	2,316
A	12,146,161	2,314,207	2,145,343	3 5,27	,	17,000, 0
	,	,	,	,	2,316	2,316
L	12,146,161	2,1 2,2	2,140, 14	3 5,27	2,316	16, 76, 5
	,	121, 1	4,52	,	,	126,447
	12,146,161	2,314,207	2,145,343	3 5,27	2,316	17,003,306

[illegible] *(continued)*

( ) [illegible]

[illegible]

[illegible]

[illegible] 60 [illegible]

( ) [illegible]

[illegible] ([illegible]), [illegible] 31 [illegible] 2021, [illegible] 2020, [illegible] A [illegible] 15, [illegible]

(continued)

( )

A 31 2021 2020

	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 2021						
	12,40 ,4	2, 4,1 5	2,5 5,30	3 ;3	5,4	1 ,35 , 32
(note (i))	1, ,44	1, ,45	1,3 ,0 1	10 ,2	(3 , 0)	4,5 3, 3
	14,21 ,02	34,2 5, 50	23,451, 3	2,4 1,241	2 , 3,234	103,1 ,1 3
	(,114,0 0)	(23,315,223)	(1 ;50 ,42)	(2,0 , 2)	(2 , 3, 1)	(; 01,3 5)
	01, 35	50,305	01,20	104,030	4, 01	2, 2,2 0
	13,103	1 1, 05	3 ;5	25,511	55	25 ,5 4
(note (ii))	,2	44 , 3	4 3,0	52,1 5	25 ;	1,30 ,2
	5 3, 42	2 3,3 5	1 ,1 4	1,2	1 ;414	03,1 3
	4 5, 03	24,12				500,030
	33,255	2, 32	10,1	2		4 ; 5
	13, 3	14 ;14	3,24			1 3,131
	1,04	110,45	4, 4	44	1 ;414	1 3,11
	3 3,113	,05 ,10	3, 04, 0	4 ; 5	;0 5	11,1 , 0

(continued)

( ) *(continued)*

	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
31 2020						
	12,146,161	2,314,207	2,145,343	3 5,27	2,316	17,003,306

(continued)

( ) *(continued)*

( )

( )

	2021 *RMB'000*	2020 *RMB'000*
	4,5 3, 3	3, 33,2 6
	1,	(16,206)
	4,5 5, 02	3, 17,0 0
	34, 2	41,065
	(1,30 ,2)	(1,150, 47)
	(1 ,1 5)	167,7 1
	(3 , 4)	(22,063)
	3,0 4,250	2, 53,026

(continued)

( ) *(continued)*

	31	
	2021 *RMB'000*	2020 *RMB'000*
	103,1 ,1 3	0, 2,447
	(2 ,024,030)	(26,237,537)
	3,1 ,022	3,51 ,50
	10 ,000	117,000
	3,110	130, 04
	0,000	70,000
	1 ,4	2 6,104
	10 ,3	66, 11
(note)	2,111,42	1,5 3, 71
	2,035, 4	70,53 ,30
	; 01,3 5	6 ,4 , 25
	(2 ,00 , 0)	(26,221,331)
	,453	125,3 1
	2 1, 12	1 3,615
(note)	2,111,42	1,5 3, 71
	52,3 2,4	44,171,461

Note:

(continued)

( )

		31	
		2021	2020
		RMB'000	*RMB'000*
	(Note 38)	**500,030**	426,40
	(Note 38)	**4 ; 5**	43, 5
	(note (a))	**1 3,131**	132,73
	(note (b))	**13 ,4 3**	137, 61
		5 ,24	56,427
		03,1 3	7 7,3 3

Notes:

( ) [illegible]

( ) [illegible] 50% [illegible]

	31	
	2021	2020
	RMB'000	*RMB'000*
	411,[illegible]5	3 ,734
	1 4,11[illegible]	1 3,112
12	**[illegible]2, [illegible]1**	5 , 24
	15 ,[illegible]2	136,123
	2 ,254	7 ,7 3

10.

		31	
		2021	2020
		RMB'000	*RMB'000*
		(, 35)	(14,633)
		(1[illegible];23)	(3,3 1)
		1,0	(50, 44)
	(Note 37(b))	**5,343**	(1,300)
	(Note 44)	**34,1 0**	151,051
		(5, 15)	
		([illegible]; 3)	(11 ,521)
		([illegible];12)	25,46
		25,404	(13,160)

11. [illegible]

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
[illegible]		
[illegible]	**4,5 3**	5,364
[illegible]	**2, 14**	4,150

12.

	31	
	2021 *RMB'000*	2020 *RMB'000*
	4 5,	533,311
	4 5,	533,311
	10 ,210	23,730
	5 5,04	557,041

25% (2020 25%) 31 2021.

31 2030 1 1, 2021 31 2030. A 15% 50% 31 2021, 2020.

16.5%

12. *(continued)*

30% (2020: 30%)

31

	2021 *RMB'000*	2020 *RMB'000*
	3,0 4,250	2, 53,026
25% (2020: 25%)	**1,0 3**	73 ,257
	45,1	45,526
	51, 4	(36,42)
	, 22	63, 76
	35, 2	2 , 0
	(10,21)	(2, 17)
	(3 4, 14)	(2 3,6 4)
	,535	2,532
	5 5,04	557,041

13.

	31	
	2021	2020
	RMB'000	*RMB'000*
	,1**	,162
	2, **1	5 , 24
	2, **05	2,4 6,41
	0,300	60,126
	25 ,5 4	271,206
	(5,25)**	(6,4)
	3,11 , 54	2, 11,261
(Note 14)	**5,2 **	3,6 1
	1,0 3, **2	66,234
	1,0 ,24	6 , 25

14.

31 2021

	RMB'000	RMB'000	RMB'000 (note)	RMB'000	RMB'000
		332	1,0 5	53	1,450
		2 1		53	1,221
1 2021)		332	5 2	53	4
1 2021)		2 1	34	53	1,1
		1,22	3,34	212	4,

Notes to the Consolidated Financial Statements

FOR THE YEAR ENDED 31 DECEMBER 2021

14. [illegible] (continued)

[illegible] 31 [illegible] 2020

	RMB'000	*RMB'000*	*RMB'000* (note)	*RMB'000*	*RMB'000*
[illegible]					
L[illegible]		371	53	3	1,227
L[illegible]		311	773	3	1,0 7
L[illegible] (25 [illegible] 2020, 20 [illegible] 2020)		106	70		176
L[illegible] (2 L 2020)		101	5 7	3	701
			2,2 3		3,1 1
[illegible]					
L[illegible]					
L[illegible]					
L[illegible] (20 [illegible] 2020)					

	RMB'000	*RMB'000*	*RMB'000* (note)	*RMB'000*	*RMB'000*
	150	—	—	—	150
	150	—	—	—	150
	100	—	—	—	100
	17	—	—	—	17
	3	—	—	—	3
	500	—	—	—	500
	—	—	—	—	—
	—	311	737	3	1,051
	—				

15.

( ) A L 6. i 31 2020, I i, i L 567,223,000 , i I, ' 24 I 2021, i 17 A i 2021.

( ) A L 7.22 i 31 201, I i, i L 5 5,253,000 , i I, ' 2 L, 2020, i 2 I 2020.

( ) 31 2021 L 7.037 i), i L 5 0,166,000 i I, i

1

	31	
	2021 *RMB'000*	2020 *RMB'000*
i I, i	**2,3 ,131**	2,303,3 0

	31	
	2021 *'000*	2020 *'000*
i I, i	**,244,50**	,244,50

i

1 .

1. [illegible] *(continued)*

	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
[illegible]						
At 1 [illegible] 2020	1,706,17	11, 27,625	66,2 2	74,264	,	13,674,34
[illegible]	272,30	2,1 5, 21	5,554	12,635	,	2,4 6,41
[illegible]						
[illegible] *(note (e))*	100,3 7	1 ,124	,	,	,	11 ,521
[illegible]	(1)	(3,4)	(4,226)	(2,2 7)	,	(0,0 2)
[illegible]						
[illegible]	,	14,161	11		,	14,1 0
At 31 [illegible] 2020	2,0 , 02	13, 3,343	[illegible] ,[illegible]21	4,[illegible]20	.	1[illegible];204,3 [illegible]
[illegible]	2 [illegible];01	2,4 ,2 [illegible]	,03	23,2 4	.	2, ,[illegible]05
[illegible]						
[illegible] *(note (e))*	33, 1	33,03[illegible]	.	1 [illegible]	.	[illegible]; 3
[illegible]	(1 4)	(45,2 [illegible])	(10,3[illegible])	(2,[illegible])	.	(5 ,53[illegible])
[illegible]						
[illegible]	.	(41, 4)	(31)	(21)	.	(41, 3[illegible])
At 31 [illegible] 2021	2,3 ,40[illegible]	1[illegible];40 ,4 5	[illegible];25	105,352	.	1 , [illegible] ,512
[illegible]						
At 31 [illegible] 2021	[illegible];543,[illegible] 5	3 ,4 1,[illegible][illegible]	2[illegible];011	33,[illegible]3	[illegible]; 0, 1[illegible]	50, [illegible]5, 2
At 31 [illegible] 2020	6,710, 1	31,235,47	23,6 7	37,74	5,17 ,4 1	43,1 7,213

Notes:

( ) [illegible]

[illegible]	2.11%[illegible] 4.75%
[illegible]	3.17%[illegible] 7. 2%
[illegible]	.50%[illegible] 1 . 3%
[illegible]	11.00%[illegible] 1 .00%

1. [illegible] *(continued)*

[illegible]

(a) [illegible]

(b) [illegible] RMB1,2 1,421,000, [illegible] 31 [illegible], 2021 (2020 RMB 1,341, 00,000). [illegible] 31 [illegible], 2021.

(c) [illegible] RMB3,6 3,441,000, [illegible] 31 [illegible], 2021 (2020 RMB 2,353,117,000), [illegible].

(d) [illegible] 31 [illegible], 2021, [illegible] RMB 66, 3,000 [illegible] 四川大川電力有限公司 ([illegible]) ([illegible]), [illegible] 四川眾能電力有限公司 ([illegible]) ([illegible]), [illegible].

[illegible] 31 [illegible], 2020, [illegible] RMB 11 ,521,000 [illegible] 黑水縣三聯水電開發有限責任公司 ([illegible]) ([illegible]), [illegible] 5 [illegible] .35%, [illegible] 31 [illegible], 2020. [illegible] 31 [illegible], 2021.

1 .

	RMB'000
A ,1 31 .. l ,. 2021	
.. ,l i	1,47 ,217
A ,1 31 .. l ,. 2020	
.. ,l i	1,431,342
N .1. .. .. 31 .. l ,. 2021	
..,1. ..	70,300
N .1. .. .. 31 .. l ,. 2020	
..,1. ..	60,126

	31	
	2021 *RMB'000*	2020 *RMB'000*
.. ,1. .. l ..	**2, 1**	5 , 24
A ,1. .. l - .. .1 *(note)*	**2,512**	321,6 2
A .1. .. .. *(Note 44)*	**35,113**	10 , 2
1. .. .. l ..	**1 2,340**	116,472

Note: .. ,1. .. l - .. .1 .. l .. .1. .. .. l .. .1. .. .. l .. .1. ..

1 .

	RMB'000 (note (b))	*RMB'000 (note (c))*	*RMB'000*	*RMB'000*
A 1 l, , , 2020	4,022,154	1, 41, 70	235,1	6,1 ,322
A , l,	,	,	6 ,417	6 ,417
A , , , l, *(Note 44)*	,	564,773	5	564, 6
A 31 , , l , , 2020	**4,022,154**	**2,50t; 43**	**303, 10**	**t; 32,t0**
A , l,	**,**	**,**	**4 ,1t1**	**4 ,1t1**
A , , , l, *(Note 44)*	**,**	**t 0,350**	**2,144**	**t 2,4 4**
, , ,►	**,**	**,**	**(245)**	**(245)**
A 31 , , l , , 2021	**4,022,154**	**3,1 ,0 3**	**353, 0**	**,553,01**
AL A				
A 1 l, , , 2020	1, 35,031	246, 4	6 ,667	2,150,647
, , , l, , , ,	164,411	7,610	1 ,1 5	271,206
A 31 , , l , , 2020	**1, ,442**	**334,55**	**, 52**	**2,421, 53**
, , , l, , , , ►	**1t4,411**	**,3**	**15, t4**	**25 ,5 4**
	,	**,**	**(10)**	**(10)**
A 31 , , l , , 2021	**2,1t3, 53**	**411, 5**	**103,50**	**2,t ,31**
A A				
A 31 , , l , , 2021	**1, 5 ,301**	**2, t5,135**	**250,2t3**	**4, 3,t**
A 31 , , l , , 2020	2,022,712	2,172,1 4	215, 5	4,410,754

1 . *(continued)*

Notes:

( ) 4%1 5%
2%1 10%
10%1 50%

( )

( )

20.

	31	
	2021 *RMB'000*	2020 *RMB'000*
t		
	124,1 4	124,1 4
A t	**65, 55**	65, 55
	1 0,04	1 0,04
t		
	(5, 15)	02%, -.027 10.72 54

21.

20 ( ) ( ) (') ( ) ( ).

31 2021, 2020,

.30% (2020 .30%). 2.00% (2020 2.50%)

2021, 2021 .325), 2021. 75, 15,000 10). 1,51 ,10 ,000, 31 2021.

21. [illegible] *(continued)*

[illegible] .67% (2020 .25%). [illegible]

22. [illegible]

( ) [illegible]

	31	
	2021 *RMB'000*	2020 *RMB'000*
[illegible]	**2,1 5,[illegible]**	2,166,556
[illegible]	**1,002,03**	1,360,644
[illegible]	**(,[illegible] 2)**	(,6 2)
	3,1 ,022	3,51 ,50

22. ... (continued)

( ) ... (continued)

... 31 ... 2021, ... 2020, ... t ...

		31		31		
		2021	2020	2021	2020	
北京京能國際能源股份有限公司 (...)* ('...')	L 3,400,000,000	**20%**	20%	**20%**	20%	...
... *(note)*	L 5,000,000,000	**20%**	20%	**20%**	20%	...
全州柳鋪水電有限公司 (...)* ('...')	L 25,000,000	**40%**	40%	**40%**	40%	...
北京市天銀地熱開發有限責任公司 (...)* ('...')	L 60,000,000	**50%**	50%	**50%**	50%	...
宜昌中基天然氣利用有限公司 (...)* ('...')	L 3 ,020,000	**4 %**		**4 %**		...

* ...

Note:

... 5 ... 201 ... L 1,222 ...

... L ... 2020, ... 2% ... 20% ...

22. *(continued)*

( )

	31	
	2021	2020
	RMB'000	*RMB'000*
	10 ,000	117,000

A t 31 2021,t (2020). A .4% (2020 .4%) 1 2022. A t 31 2021,t 1 2023.

( )

0 -1.4

22. [illegible] *(continued)*

( ) [illegible] *(continued)*

[illegible] 31 [illegible]

	2021 *RMB'000*	2020 *RMB'000*
	22,23[illegible];3 5	20,070,422
( ) [illegible]	**(3, 50,[illegible])**	1,6 0,672
( ) [illegible]	**(2,5 [illegible]; 34)**	1,150,00
	[illegible]4,500	22,442
	124,111	

[illegible] 31 [illegible]

	2021 *RMB'000*	2020 *RMB'000*
	,15 , 5	10,116,6 4
	20%	20%
	1,[illegible]31,5	2,023,33
	35,2 0	35,270
	1,[illegible]; 4	2,05 ,60

22. *(continued)*

( ) *(continued)*

31

2021 *RMB'000*	2020 *RMB'000*

22. *(continued)*

( )

31

	2021 *RMB'000*	2020 *RMB'000*
	1 ,120	
	2,555	2,401
	2, 0	
A	**2, 0**	63, 55

23.

( )

31

	2021 *RMB'000*	2020 *RMB'000*
	152,500	152,500
	(5 ,3 0)	(21,5 6)
	3,110	130, 04

23. *(continued)*

( ) *(continued)*

		31		31		
		2021	2020	2021	2020	
北京華源惠眾環保科技有限公司	L 160,000,000	50%	50%	50%	50%	

( )

	31	
	2021 *RMB'000*	2020 *RMB'000*
	0,000	70,000

A 31 2021, 2020, L 50,000,000 15 2022, 1 L, 2022 . A 31 2021, L 50,000,000 15 2023, 1 L, 2023.

24.

	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
			(note(c))		(note(a))	(note(b))		(note(a))					
At 1 , 2020	41,642	5,62	(24,306)	(3,571)	113,767	7 ,25	(6,376)	(4 ,42)	14,432	2 ,323	21,124	130,4 3	
(, ,) , , (,) (Note12)	(4,512)	62	1,4 6		(564)	(23, 67)	(12,713)	4,6 3	,3	3 0	2,116	(23,730)	
, , ,				3, 51						(7,56)		(3,71)	
A , , , , (Note 44)			416									416	
, , ( ) 1	(410)						(3,07)		(1,320)	3,657	1 0	(72)	
At 31 , 2020	3 ,20	5 0	(22,404)	2 0	113,203	54,2 1	(112,1)	(43, 45)	21,501	24, 01	23,420	102,4	
(, ,) , , (,) (Note12)	(2 ,423)	(2)	(1,34)		(2, 2)	(4 ,451)	(1,52)	4,3	(13,3)	(22, 0)	,234	(10 ,20)	
, , , , , ,				(10,1 1)						(,41)		(1 ,14)	
A , , , , (Note 44)		5,35	(,155)									(3,)	
, , , 1	(14)						, 5		(414)	(1,534)	201	2 5	
At 31 , 2021	3 3	11,5	(102, 0)	(10,401)	110,3 4	4, 40	(104, 4)	(3 ,02)	, 0	(,010)	30, 55	(2,424)	

24. *(continued)*

Notes:

( )

( )

( )

	31	
	2021	2020
	RMB'000	*RMB'000*
	1 ,4	2 6,104
	(2 1, 12)	(1 3,615)
	(2,424)	102,4

24. *(continued)*

31

	2021 *RMB'000*	2020 *RMB'000*
	1,250,	1,05 ,276
	142, 0	11 ,521
	1,3 3, 0	1,17 ,7 7

A 31 2021, L 40,547,000 (2020 L 40,303,000),

31

	2021 *RMB'000*	2020 *RMB'000*
2021		155,4
2022	**1 4,5**	174,5
2023	**1 3,**	163, 6
2024	**2 , 5**	26 , 56
2025	**250,3 3**	255,043
2026	**351,52**	
	1,210,351	1,01 , 73

25.

	31	
	2021 *RMB'000*	2020 *RMB'000*
	10 ,†3	66, 11

2†.

31 2021 L 277, 7 ,000 (2020 L 1 0,327,000).

2 .

	31	
	2021 *RMB'000*	2020 *RMB'000*
	2,01 ,3 4	2,1 ,6 7
	,421,023	6,6 3,224
	25†,304	2 4, 75
	11,†- 4, 11	,176,7 6
	(1†,3 5)	(17,46)
	11,†- ,31†-	,15 ,317

2 . *(continued)*

	31	
	2021	2020
	RMB'000	*RMB'000*
60 ,	**3,04 ;**	2, 4 , 43
365 ,	**3,0 ,2**	2,64 , 2
2 ,	**3,05 ,4**	2,200,362
3 ,	**1, 1, 44**	06,255
3 ,	**535, 2**	552, 2
	11, ,31	,15 ,317

A 31 2021,

2 . *(continued)*

A 31 2021, L 147,570,000 (2020 L 1 4,335,000)

A 31 2021, L 1,426,176,000 (2020 L 135, 7 ,000) 34( ), 46.

50( ).

2

	31	
	2021 *RMB'000*	2020 *RMB'000*
	42, 41	0,340
	1 5,0	342,554
	114,525	65,662
	332,455	4 ,556
A	**(24, 0)**	(24,77)
	30 , 4	463,77

50( ).

2.

	31	
	2021	2020
	RMB'000	*RMB'000*
	553, 3	46 ,666
	1,55 ,553	1,114,305
	2,111,42	1,5 3, 71

30.

	31	
	2021	2020
	RMB'000	*RMB'000*
(Note)	**2 0,2 0**	1 6,043

Note:

0.2 % (2020 0.2 %)

31.

	31	
	2021	2020
	RMB'000	*RMB'000*
	23	4,577
	1	50,7 7
	41	55,364

A 31 2021, 2020,

A 31 2021, 2020,

A 31 2021, (2020).

32.

	31	
	2021	2020
	RMB'000	*RMB'000*
	1,400	573,6 7
	2 ,1 4	371, 34
	345,304	453, 7
	5,1 3	5,13
	3, 2 ,22	2, 2, 5
	1	24
	5,0 ,300	4,2 7,450

2021 31 2020.

	31	
	2021	2020
	0.01% 1.55%	0.01% 1.55%

33.

	31	
	2021	2020
	RMB'000	*RMB'000*
	2,4 1, 4	2,3 4,450
	1, 0,0	1,601,100
	1,2 1	446,166
		20,000
	111,41	103, 70
	32,332	164,6
	341,43	33 ,714
	5, 3 ,2 3	5,05 ,

30

33. *(continued)*

	31	
	2021	2020
	RMB'000	*RMB'000*
30	**1,4 1,**	1,676,1 3
365	**515, 32**	563,1 4
2	**3 , 0**	115,6
3	**4,1**	37,516
3	**31, 2**	11, 5
	2,4 1, 4	2,404,450

	31	
	2021	2020
	RMB'000	*RMB'000*
	15, 3	25,307

34.

		31	
		2021	2020
		RMB'000	*RMB'000*
		25,200,354	1 ,405, 25
	(note(a))	**3,34 ; 50**	3,142,250
	(note(b))	**2 5,400**	220,000
	(note(c))	**32 ,331**	445,665
	(note(d))	**1,14 ; 0**	750
		30,31 ;5 5	23,214,5 0
		25,452,053	21,505,2 1
	(note(e))	**4, 4,542**	1,70 ,30
		30,31 ;5 5	23,214,5 0
		11,2 2,51	12,31 ,322
		5,1 3, 33	2,457,544
		**,1 , **	5,1 4, 2
		5, 1,1 5	3,253,7 5
		30,31 ;5 5	23,214,5 0
		(11,2 2,51)	(12,31 ,322)
		1 ,044,0	10, 6,26

34. \ *(continued)*

Notes:

( ) L 3,346,750,000 (2020 L 3,142,250,000) 10.00% L 2,443,500,000 2022 L 03,250,000 2023 2026. L 10 ,1 0,000 31 2021 (2020 L 65,232,000).

( ) A 31 2021, 北京京豐熱電有限責任公司 ( ) (" ") L 70,000,000 (2020 L 70,000,000) 北京京能融資租賃有限公司 ( ) (" ") L 225,400,000 (2020) 2022 3. 5% 2022 2033 4.15%

L 10,124,000 31 2021 (2020 L 10,667,000).

( ) 光大金融租賃股份有限公司 ( )(" ") A 31 2021,

() L 0,000,000 (2020 L 200,000,000) 31.16% 32.00% 2022 2024.

(,) L 310,000,000 (2020 L 310,000,000) 中國農發重點建設基金有限公司 (A) (" A "). A 北京上莊燃氣熱電有限公司 ( ) (" ") (" ") A A (" ") 60.03% 3 . 7% (2020 60.03% 3 . 7%)

()L L 110,000,000 1 2025, L 100,000,000 2 L 2026, L 100,000,000 6 2026 (,) A 1.2%

L 221,000,000 4. 0% L ,000,000 (3) 31 2021, L 221,000,000 (2020 L 221,000,000)

34. \ \ \

34. [illegible] *(continued)*

[illegible]

	31	
	2021	2020
	RMB'000	*RMB'000*
[illegible]	**15,104,45**	17,441,753
[illegible]	**15,212,13**	5,772, 37
	30,31 ,5 5	23,214,5 0

	31	
	2021	2020
[illegible]		
[illegible]	**2.0 % 4. %**	2.0 % 4. %
[illegible]	**1.20% 10.00%**	1.20% 10.00%

A t 31 l 2021, t [illegible] L 14,53 ,647,000 (2020 L 5,457,153,000).

35.

23 A 2021,i L 2,000,000,000
2. %, 21 I, 2022.

24 I 2021,i L 2,000,000,000
2.6 %, 1 L, 2022.

27 A i 2021,i L 1,500,000,000
2.50%, 27 L, 2022.

4 I, 2021,i L 2,000,000,000
2.52%, 2 I 2022.

I (銀行間市場交易商協會) (" AL"), i .

3

1 I, 2017, i L 2,000,000,000. 5.50% I i L 1, 4,340,000. I i 1 I, 2022.

3 A 201 i L 1,500,000,000. 5.1 % I i L 1,4 5,754,000. I i 3 A 2023.

A 2020,i L 1,000,000,000. 3.25% I i L ,5 5,000. I i 13 A 2025.

13 I, 201 , i L 1,000,000,000. 3.64% I i L ,642,000. i 13 I, 2022.

16 A 2020,i L 1,000,000,000. L 600,000,000 5- 3.22% I, L 400,000,000 3- 2.65% I i L ,642,000. 16 A 2023 16 A 2025 .

3 .

3 . ... (continued)

Notes:

( ) ...

A ... (Note 34((,))) ...

... .

L ...

... 31 ... 2021

...	...	...
A $111,500,000 (... L 515,353,000)	17 ... 2025	... A ... +1. 0% ... 2.15%
A $153,7 7,200 (... L 710, 50,000)	2 L, ... 2024	... A ... +0. 4% ... 1. 1%

A 31 ... 2020

...	...	...
A $137, 0,000 (... L 6 2,151,000)	17 ... 2025	... A ... +1. 0% ... 2.15%
I $1,420,000,000 (... L 1,1 5,12 ,000)	21 I ... 2021	... +1.43% ... 4.20%

3. [illegible] *(continued)*

Notes: (continued)

( ) [illegible]

[illegible] 2013 [illegible] 2.50% [illegible]

[illegible]

[illegible]	[illegible] 10 [illegible]	[illegible] 11 [illegible] 2012 ($5.1 [illegible] $40.2 [illegible]) [illegible] 2.50% [illegible]
[illegible]	[illegible] (31 [illegible] 2014)	[illegible]

[illegible]

[illegible] 11 [illegible] 201 [illegible] 31 [illegible] 2021, [illegible] 5,343,000 (2020 [illegible] 1,300,000) [illegible]

3 .

	RMB'000	*RMB'000*	*RMB'000*
	(note(a))	*(notes(b) and (c))*	
A 1 l, , 2020	313,033	4 5,25	7 ,2 1
A , l,	341,711	3,035	344,746
	(426,40)	(52,4 2)	(47 , 0)
A 31 l, 2020	**22 ,33**	**435, 11**	**4,14**
A , l,	**2 1,055**	**1,5 3**	**2 2, 1**
	(500,030)	**(55, 3)**	**(555,)**
A 31 l, 2021	**1 ,3 1**	**3 1,53**	**400,**

	31	
	2021	2020
	RMB'000	*RMB'000*
	1 ,3 1	22 ,336
	3 1,53	435, 11
	400,	664,147

3 . ... *(continued)*

Notes:

( ) ...

( ) ... L 46, 5,000 (2020 L 43, 5 ,000) ...

( ) Al ... L ,000,000, ... (... 34( )(,)). ... L , 41,000 (2020 L ,523,000).

3 . ...

	31 ...	
	2021 *RMB'000*	2020 *RMB'000*
...	**, 2**	64,65
...	**3,212**	5,7 6
...	**10,232**	1 0, 5
...	**5 , 4**	56 ,555
	00, 0	00, 5
Al ... 12 ...	**(, 2)**	(64,65)
Al ... 12 ...	**11,22**	36,336

... 4.76% (2020 4.77%).

40.

	31	
	2021	2020
	RMB'000	*RMB'000*
	1 ,402	24,2 5
	(5,323)	(5,277)
	(1,4 2)	3 4
	12,1	1 ,402

42.

	31	
	2021 *RMB'000*	2020 *RMB'000*
	2, , 5	2, 76,757
	(1 ,043)	(1 ,043)
	1,0 , 5	1,076,75
	3, 34,4 3	3, 34,473

43.

( ) 15 2020

15 L, 2020, L 1,500,000,000 (' '). L 1,4 3,250,000.

1 L, 2023, 3.44% 1 L, ( ).

1 L, 2023

A 1 L, 2023, 300

43. 重大事項 *(continued)*

(a) 發行中期票據

於2021年12月15日，本公司在中國銀行間市場交易商協會註冊發行本金總額為人民幣500,000,000元（「中期票據」）的中期票據。中期票據的發行所得款項已用於償還本公司的銀行貸款，金額為人民幣445,500,000元。

中期票據的年利率為3.23%，每年支付一次利息，於2023年12月15日到期（「中期票據到期日」）。中期票據的持有人有權在中期票據到期日前的特定日期（「回售日」）要求本公司以面值贖回全部或部分中期票據。本公司有權在回售日前的特定日期（「贖回日」）贖回全部或部分中期票據。倘本公司未行使贖回權，則中期票據的持有人有權在回售日要求本公司贖回全部或部分中期票據。

中期票據的發行所得款項已用於償還本公司的銀行貸款，金額為人民幣445,500,000元。

於2023年12月15日，本公司贖回人民幣300,000,000元的中期票據（「贖回」）。贖回後，本公司的未償還中期票據本金總額為人民幣200,000,000元。

43. [illegible] *(continued)*

( ) [illegible] 1[illegible] 2021

[illegible] 16 [illegible] 2021, [illegible] L 1,000,000,000 ([illegible]). [illegible] L 5,500,000.

[illegible] 20 [illegible] 2024, 3.30% [illegible] 20 [illegible] ([illegible]). [illegible]

[illegible] 20 [illegible] 2024 [illegible]

At 20 [illegible] 2024, [illegible] 300 [illegible]

[illegible] 31 [illegible] 2021, [illegible] L 5 , 5,000 (2020 L 31, 50,000) [illegible] L 51,600,000 (2020).

44.

31 2021

31 2021, 100%
L 1,517,002,000
0%

L 34,1 0,000, A

44. *(continued)*

31 2021 *(continued)*

			RMB'000
宜昌市夷陵區中基熱電有限公司	24	2021	41, 0
鄂托克前旗晟日新能源科技有限公司		2021	3 2
河北融智新源電力有限公司	12	2021	4,
	1	2021	1,0 2,400
	1	2021	3 0, 40
平羅縣旭清新能源有限公司	2	2021	4,
廣東輝宇新能源投資有限公司	1	2021	2,
張家口風沐新能源有限公司	2	2021	,04
			1,51 ,002

*

44. *(continued)*

31 2021 *(continued)*

	RMB'000
	2,141,130
	35,[illegible]3
	[illegible] 2,4 4
	5,35[illegible]
	2 ,40
	[illegible],[illegible]11
	54,245
	[illegible]0
	2
	([illegible] 1,112)
	(1,3 5,2 5)
	(22,22)
	(,155)
	(1,333)
	1,555, 32
	1,51 ,002
	4,[illegible]40
	(1,555, 32)
	(34,1 0)
	1,51 ,002
31 2021	(155,030)
	([illegible]0)
	1,3[illegible]1,212

44. *(continued)*

31 2021 *(continued)*

L 15,511,000 L 60,061,000

11, 2021, L 1,6 ,140,000, L 2,530,445,000.

11, 2021,

–

44. *(continued)*

31 2020 *(continued)*

	RMB'000
	1,346,52
	10 , 2
	564, 6
	2,60
	3 0,311
	16,514
	1 5,744
	3 , 0
	(2,060,603)
	(3 0, 50)
	(25,145)
	(2,1 3)
	(24)
	1 5,234
	34,1 3

44. *(continued)*

31 2020 *(continued)*

L 3 ,151,000, 2020 L 4,2 3,000 2020

11, 2020, L 17,227,564,000, L 2,473,0 6,000.

11, 2020,

2020

–

–

45.

31

	2021 *RMB'000*	2020 *RMB'000*
	,2 , 1	3,657,075

4[illegible]

( ) [illegible] 31 [illegible] 2021 [illegible] 2020.

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
[illegible]	**3,[illegible]3,441**	2,353,117
[illegible]	**1,42[illegible],1[illegible]**	135, 7
[illegible]	**44,03**	52,25
	5,153,[illegible]55	2,541,254

( ) [illegible]

A[illegible] 31 [illegible] 2021,[illegible] 100% (2020 75%) [illegible] [illegible] A[illegible] ("A[illegible]") [illegible] A[illegible] [illegible] A[illegible] 100% (2020 [illegible]) [illegible] [illegible] ("[illegible]"), [illegible] [illegible]

4 [illegible]

[illegible] 31 [illegible] 2021,[illegible] L[illegible] 2, 75,000 (2020 L[illegible] 41, 1,000) [illegible] L[illegible] 212,000 (2020 L[illegible] ,000) [illegible]

[illegible] 16% (2020 16%) [illegible] 31 [illegible] 2021.

[illegible] 31 [illegible] 2021, [illegible] 2020,[illegible] 31 [illegible] 2021 [illegible] 2020 [illegible]

4 .

4 . *(continued)*

( )

31

2021	2020
RMB'000	

4 . [illegible] *(continued)*

( ) [illegible]

[illegible] 31 [illegible] 2021, [illegible]

4 .

4 . [illegible] *(continued)*

( ) [illegible] *(continued)*

(viii) EPC framework agreement

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
[illegible]	**1[illegible]; 01**	4,56

(ix) Finance lease framework agreement

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
[illegible]	**-**	247,730

[illegible] 31 [illegible] 2020, [illegible] 10 [illegible] L 247,730,000.

(x) Operating services from related parties

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
[illegible]	**5, 04**	,366

4. [illegible] *(continued)*

(a) [illegible] *(continued)*

(xi) Generation Rights purchase from a related party

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
A [illegible]	**1,[illegible]4**	10,243

(b) [illegible]

	31 [illegible]	
	2021	2020
	RMB'000	*RMB'000*
[illegible]	**500**	500
[illegible]	**,120**	7,003
[illegible]	**3 0**	2
	, 0	7,532

[illegible]

(c) [illegible]

4.

50.

( )

	31	
	2021 *RMB'000*	2020 *RMB'000*
	1 ,[illegible]5, 20	14,267,440
	2 0,2 0	1 6,043
	10 ,[illegible]3	66, 11
	52,50	
	50,114,[illegible]2	41, 65, 64
	1,034	64,57

50. *(continued)*

( )

Market risk

31 2021.

(i) Interest rate risk management

(37).

50. *(continued)*

( ) *(continued)*

Market risk (continued)

(i) Interest rate risk management (continued)

A 25

25 31 2021
L 16,105,000 (2020 L 22,276,000).

50. *(continued)*

( ) *(continued)*

Market risk (continued)

(ii) Foreign currency risk management

32), 34), 33)

$ $

$. $

	31/12/2021 *RMB'000*	31/12/2020 *RMB'000*	31/12/2021 *RMB'000*	31/12/2020 *RMB'000*
	15, 3	25,307		
$			**5,0**	1,060
$			**3,**	5,13
$			**4, 5**	6,06

50. *(continued)*

( ) *(continued)*

Market risk (continued)

(ii) Foreign currency risk management (continued)

(continued)

5% $. 5% $ $ 5% $ $

31

	2021 *RMB'000*	2020 *RMB'000*
	140	1,027
($)	**(205)**	(43)
$)	**(110)**	(20)
($)	**(1 2)**	(246)

50. *(continued)*

( ) *(continued)*

Market risk (continued)

(iii) Other price risks

15%

31 2021 L 33, 51,000 (2020 L 24,554,000),

Credit risk and impairment assessment

A 31 2021,

50. *(continued)*

( ) *(continued)*

Credit risk and impairment assessment (continued)

		31	
		2021	2020
	12-		
		RMB'000	*RMB'000*
	12l	**0,33**	357,1 3
(Note i)			
	12l	**5,1 4,041**	4,352, 14
(Note i)			
	12l	**1 3,224**	3 ,116
(Note ii)			
		24, 0	24,77
	( )		
(Note ii)		**11,43 ,40**	, 1, 11
(Note ii)	12l	**25 ,304**	2 4, 75

Notes:

» 12l

50. (continued)

( ) (continued)

Credit risk and impairment assessment (continued)

Trade and bills receivables arising from contracts with customers

60

27

Other receivables and deposits

31 2021

50. *(continued)*

( ) *(continued)*

Credit risk and impairment assessment (continued)

Restricted bank deposits and cash and cash equivalents

	( )	( )	
	RMB'000	*RMB'000*	*RMB'000*
A 1 l, , 2020	15, 7	,	15, 7
, + , l .	7,	,	7,
, + , l .	(6,417)	,	(6,417)
A , t 31 . . l , , 2020	**1 ,4+-**	.	**1 ,4+-**
, + , l .	**3+-**	.	**3+-**
, + , l .	**(1,441)**	.	**(1,441)**
A , t 31 . . l , , 2021	**1+-;3 5**	.	**1+-;3 5**

l . , t . , l , l . 31 . . l , , 2021 , L, 24,706,000 (2020 L, 24,77 ,000) , , , , l . , l . , , l . , l . L, 72,000 (2020 , l , l . L, 3 ,000).

50. *(continued)*

( ) *(continued)*

Liquidity risk management

50. (continued)

( ) (continued)

Interest rate benchmark reform

BBSW

12

50. *(continued)*

( )

	31 2021	31 2020		
1) *(see Note 30)*	\ 2 0,2 0,000	L 1 6,043,000	1	
2) *(see Note 37)*	\ 11,3 1,000 \ 1,034,000	L 21,06 ,000	2	
3) *(see Note 25)*	\ 10 ,13 ,000	L 66, 11,000	3	
4) *(see Note 37)*	\ 41,131,000	L 43,510,000	3 *(note)*	3.17%, 2.31% 31 2021, 2020

50. *(continued)*

( ) *(continued)*

Note: A 5%, L 16, ,000 (2020 L 2 ,121,000).

3

31

	2021 *RMB'000*	2020 *RMB'000*
A 1 I,	**(43,510)**	(41,041)
	5,343	(1,300)
	( )	(1,16)
A 31 I,	**41,13**	(43,510)

Private equity investments at FVTOCI

L 42,726,000, (2020 L ,026,000).

51.

	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
A 1 l, , 2020	1 ,273,307	6,076, 41	3,560,377	1,004,515	5 7,400	30,502,540
	3,5 2, 43	23,05 2 ,302		4,76	(4 ,321)	6,3 ,752
A , , l , t	2 ,651	60,65	6,656	26,12	27, 27	241,020
	(62,261)	,	,	,	,	(62,261)
A , l, , , ,	,	,	,	,	30 , 44	30 , 44
A , l, , , , *(Note 44)*	3 0, 50	,	,	,	25,145	406,0 5
A 31 , l , 2020	23,214,5 0	7,060,65	4,5 5,335	2,025,412	00, 5	37,7 6, 0
A 1 l, , 2021	23,214,5 0	,0 0,5	4,5 5,335	2,025,412	00, 5	3 , , 0
	5, 3 ,202	43 ,342	(, 5)	(2 ,12)	(4,3 1)	,0 1,3
A , , l , t	3 ,	,4 1	, 05	2 ,1	3 , 43	2 ,314
	(14 ,4)	.	.	.	.	(14 ,4)
A , l, , , ,	.	.	.	.	22,3 5	22,3 5
A , l, , , , *(Note 44)*	1,3 5,2 5	.	.	.	22,22	1,3 ,513
A 31 , l , 2021	30,31 ,5 5	,5 ,4 1	4,5 5,5 4	2,025,4 3	00, 0	45,41 ,123

52.

(44), 31 2021, 2020,

			2021	2020	2021	2020	2021	2020
北京太陽宮燃氣熱電有限公司		L 747,2 7,000	4%	74%			4%	74%
北京京橋熱電有限責任公司		L 76,7 0,000	100%	100%			100%	100%
北京京豐燃氣發電有限責任公司		L 325,770,000	100%	100%			100%	100%
北京京能高安屯燃氣熱電有限責任公司		L 760,512,000	100%	100%			100%	100%
北京京西燃氣熱電有限公司		L 1,030,010,000	100%	100%			100%	100%
		L 775,53 ,000	100%	100%			100%	100%
		L 231,770,000	100%	100%			100%	100%

52. (continued)

(continued)

		2021	2020	2021	2020	2021	2020	
盈江華富水電開發有限公司	L 413,600,000	100%	100%			100%	100%	
騰沖縣猴橋永興河水電開發有限公司	L 74, 76,000	100%	100%			100%	100%	
	L 137,500,000	100%	100%			100%	100%	
	L 0,000,000	100%	100%			100%	100%	
成都金華能電力實業有限責任公司	L 40,000,000			100%	100%	100%	100%	
內蒙古京能商都風力發電有限責任公司	L 207,520,000	100%	100%			100%	100%	
	L 2,721,13 ,000	100%	100%			100%	100%	
內蒙古京能察右中風力發電有限責任公司	L 313,641,000	100%	100%			100%	100%	
錫林郭勒吉相華亞風力發電有限責任公司	L 3 6,2 7,000	100%	100%			100%	100%	

		2021	2020	2021	2020	2021	2020
內蒙古京能烏蘭伊力更風力發電有限責任公司	L 7 , 50,000	100%	100%				

52. *(continued)*

(continued)

			2021	2020	2021	2020	2021	2020
寧夏京能靈武風電有限公司		L 411,327,000	100%	100%			100%	100%
五家渠京能新能源有限責任公司		L 3 7,264,000	100%	100%			100%	100%
寧夏京能中衛有限公司		L 56,000,000	100%	100%			100%	100%
北京京能未來燃氣熱電有限公司		L 304, ,000	100%	100%			100%	100%
建湖京能新能源有限公司		L 54,760,000	100%	100%			100%	100%
寧夏賀蘭京能新能源有限公司		L 56,760,000	100%	100%			100%	100%
寧夏中寧縣京能新能源有限公司		L 471,0 6,000	100%	100%			100%	100%
格爾木京能新能源有限公司		L 205,360,000	100%	100%			100%	100%
		L 3,147,000	100%	100%			100%	100%
		\$77,657,000	100%	100%			100%	100%
	A	A $132,460,000			100%	100%	100%	100%
	A	A $6,500,000			100%	100%	100%	100%

52. *(continued)*

(continued)

		2021	2020	2021	2020	2021	2020	
深圳京能清洁能源融資租賃有限公司	L 305, ,000			100%	100%	100%	100%	
府谷縣京能新能源有限公司	L 151,160,000	100%	100%			100%	100%	
共和京能清潔能源有限公司	L 165,254,000	100%	100%			100%	100%	
寧夏海原京能新能源有限公司	L 36,100,000	100%	100%			100%	100%	
大同京能新能源有限公司	L 170,000,000	100%	100%			100%	100%	
靖遠京能新能源有限公司	L 12 ,0 0,000	100%	100%			100%	100%	
徐聞京能新能源有限公司	L 1 , 0,000	100%	100%			100%	100%	
北票京能新能源有限公司	L 5 ,610,000	100%	100%			100%	100%	
朝陽縣京能新能源有限公司	L 30,660,000	100%	100%			100%	100%	
縉雲縣京能新能源有限公司	L 21,010,000	100%	100%			100%	100%	

			2021	2020	**2021**	2020	**2021**	2020	
葫蘆島南票京泰新能源有限公司		L 30,600,000	**100%**	100%			**100%**	100%	
葫蘆島南票萬和新能源有限公司		L 30,552,000	**100%**	100%			**100%**	100%	

		2021	2020	**2021**	2020	**2021**	2020	
深州電陽新能源有限公司		L 15,455,000	**100%**	100%			**100%**	100%

52. *(continued)*

(continued)

		2021	2020	2021	2020	2021	2020	
天津團泊明瑞新能源有限公司 (註冊成立為有限責任公司)*		L 40,000,000	100%	100%			100%	100%	
天津永能光伏發電有限公司 (註冊成立為有限責任公司)*		L 2, 00,000	100%	100%			100%	100%	
天津團泊昱隆光伏科技有限公司 (註冊成立為有限責任公司)*		L 120,000,000	100%	100%			100%	100%	
天津團泊昱宏光伏科技有限公司 (註冊成立為有限責任公司)*		L 130,000,000	100%	100%			100%	100%	
常甯光聚電力開發有限公司 (註冊成立為有限責任公司)*		L 22,700,000	100%	100%			100%	100%	
陸豐市明大新能源科技有限公司 (註冊成立為有限責任公司)*		L 116,420,000	100%	100%			100%	100%	
常德潤勇新能源有限公司 (註冊成立為有限責任公司)*		L 11, 30,000	100%	100%			100%	100%	
常德潤鵬新能源有限公司 (註冊成立為有限責任公司)*		L 11,070,000	100%	100%			100%	100%	

			2021	2020	**2021**	2020	**2021**	2020
常德宏潤新能源有限公司		L ,3 0,000	**100%**	100%			**100%**	100%

			2021	2020	2021	2020	2021	2020
義縣珈煜光伏電力有限公司		L 26,000,000	100%	100%			100%	100%

52. *(continued)*

(continued)

		2021	2020	2021	2020	2021	2020	
銀川京能清潔能源有限公司	L	14 ,400,000	100%	100%			100%	100%	
韓城京能清潔能源有限公司	L	15 ,000,000	100%				100%		
黑龍江京慶風力發電有限公司	L	2 ,000,000	0%	0%			0%	0%	
建平京能風力發電有限公司	L	26, 10,000	100%	100%			100%	100%	
天津京能新能源有限公司	L	125,373,000	100%	100%			100%	100%	
天津京河新能源有限公司	L	1,36 ,000	100%	100%			100%	100%	

*

Note: 44

52. *(continued)*

	2021 %	2020 %	2021 \ '000	2020 L '000	2021 \ '000	2020 L '000	2021 \ '000	2020 L '000
	2	26	1,1	60,645	1,1	60,645	33 ,35	332,315

	2021 *RMB'000*	2020 *RMB'000*
	25,	4 2, 62
	23,15	1,0 2,747
	22 , 31	263,0 1
	21,	24,37
	2,1 0,024	2,0 4,6
	235,2 4	233,250
	55, 5	65, 1
	3 1,52	44 , 6
	(14,05)	13, 6
	(214, 3)	(527,437)
	142,33	(64,565)

53.

	31	
	2021	2020
	RMB'000	*RMB'000*
	1,13 , 4	1,1 0,407
	1 ;	15,742
	12,203	1 ,571
	20, 03,143	16, 57, 0
	2,0 0, 42	2,410,32
	10 ,000	117,000
	3,110	130, 04
	0,000	70,000
	; 44, 00	4,257,500
	35, 02	37, 13
	2, 20	3,423
	2 ,23	,31
	31,023,4 3	25,11 ,015
		1,652
	3 5, 2	361,035
	113,433	266, 75
	10,533,200	11,3 ,500
	2,245	2,4 6
	**; 42, **	6,370, 20
	3, 1	5,425
	1, 2,2	47,3 5
	1 ,3 3, 3	1 ,255,1

53. *(continued)*

(continued)

	31	
	2021	2020
	RMB'000	*RMB'000*
	25 ,412	140,202
Al	**3,2 3**	2, 10
Al	**5, 40**	771,264
	,2 5,330	6,770,277
	,5 ,4 1	7,060,65
L	**2,0 1,245**	6,656
	1,025, 41	26,12
	1,0 2	4 7
	, 32	4,377
		1, 4
	1 ,345,01	14, 74, 1
	1,02 , 23	4,3 0,2 0
	32,052,31	2 ,4 ,2 5
	3,3 0, 0	1,02 ,500
L	**2,4 4,33**	4,4 ,67
	, 42	1, ,2 4
	05	2,7 2
	5,20	4,0
	11,132	11, 06
	, 51,	7,616,160
	25,100,32	21, 3,135

53. *(continued)*

(continued)

	31	
	2021	2020
	RMB'000	*RMB'000*
	,244,50	,244,50
	13, 2 , 5	12,113,045
	3,02 , 12	1,525,5 2
	25,100,32	21, 3,135

53. *(continued)*

	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
A 1 l, , 2020	4,2 7,401	1,162,056	,	15,750	5,6 6,65	11,151, 65
	,	,	,	,67	1,561,113	1,56 ,7 1
	,	,	,	(4,666)	,	(4,666)
A	,	152,240	,	,	(152,240)	,
	,	,	,	,	(5 5,253)	(5 5,253)
	,	,	,	(24,42)	24,42	,
	,	,	(,6 2)	,	,	(,6 2)
A 31 l, 2020	**4,2 ,401**	**1,314,2**	**(, 2)**	**(4,)**	**;524, 0**	**12,113,045**
	.	.	.	.	**2,2 ,3 1**	**2,2 ,3 1**
	.	.	.	**4,**	.	**4,**
A	.	**235,133**	.	.	**(235,133)**	.
	.	.	.	.	**(5 ,223)**	**(5 ,223)**
A 31 l, 2021	**4,2 ,401**	**1,54 ,42**	**(, 2)**	**.**	**, , 21**	**13, 2 , 5**

Definitions

	北京市熱力集團有限責任公司
	北京能源集團有限責任公司
	京能集團財務有限公司
	(北京能源投資集團（香港）有限公司)
	北京國有資本運營管理有限公司
	北京京能清潔能源電力股份有限公司

	21 2022,
	中國人民銀行 ( )
	31 2021
	國務院國有資產監督管理委員會 ( )
	(571)
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Corporate Information

Corporate Information

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