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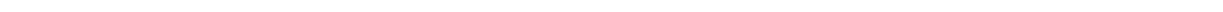
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111° 38 31 111° 41 5 27° 57 28 27°
 59 33
 30MW 9
 9 9.65km
 18.75km 110kV
 8742.5 kW·h 2014h 0.23 23143
 2021 8 2023 4 21
 5km 4.5km
 22.39hm² 0.67hm² 21.72hm²
 34.47 m³ 33.42 m³ 1.05 m³ 1
 2019 12
 26 2019 920 2019
 2020 6
 2020 11
 2019 2020
 875 2021 4 9
 2021 4
 2021 5
 2021
 175

2021 7

5

12

637

"

"

2021 8

GIS

GBT22490-2008

SL336-2006

2017 365

2023

4

2023

6

C

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)

	111° 38 31	111° 41 5	27° 57 28	27° 59 33
	1			
			400 900m	
			30MW	9
	9.65km		18.75km	
110kV			8742.5	kW·h
	2014h	0.23		
		22.39hm ²	0.67hm ²	21.72hm ²
	34.47 m ³	33.42 m ³	1.05 m ³	1
		23143	5310	
750m				400 900m
	4#		1	
	110kV			



30km

70km G207

G55

X047 X030

X030

9.65km

25m

9.0m

93%

14%

200m

2%

3%

4.5m

3%

2%

0.3%

0.3%

" " " "

4#

1

0.38hm²

2.4m

SVG

1		m ²	2548	
2	()	m ²	692.1	
3			27.16	

4		m ²	1216.4	
5			0.48	
6		m ²	700	
7		m ²	300	
8		m	184	

"

"

35kV 9

2

18.75km

0.15hm²

1

0.34hm²

1.05 m³

GB51018-2014

5

1.1-3

				(hm ²)	(m ³)	(m)		
Z5	3# 470m	111° 40 13	27° 58 58	0.34	1.05	18		5
				0.34	1.05			

2

3

10kV

3

50kw

4

G207

G55

X047 X030

2

1.1-4

3

2021 8

2023 4

21

34.47 m³

33.42 m³

1.05 m³ 1

1.1-5

		m ³			
1		9.25	9.13	0.12	
2		23.52	22.59	0.93	
3		0.65	0.65		
4		0.42	0.42		
5		0.55	0.55		
6		0.08	0.08		
7		34.47	33.42	1.05	

22.39hm²

0.67hm²

21.72hm²

		hm ²			
1		1.89	0.21	2.10	
2		17.52	1.64	19.16	
3		0.38		0.38	
4		0.26		0.26	
5		0.15		0.15	
6		0.34		0.34	
7		20.54	1.85	22.39	

1

750m 900m 400~600m 10° 25°
35° 50°

2

1

0.2m 3.8m 5m

-

-

2

4

5

GB18306-2015

0.35s

0.05g

3

17.0

40.1

-12.1

1328

1h

P=10% 56.8mm

1538

268

81%

1356.1mm

1				17	30
2				-12.1	
3				40.1	
4			mm	1328	30
5		1h P=10%	mm	56.8	
6		10		4915.9	30
7				1538	30
8				268	30
9			m/s	1.7	30
10			%	81	30
11			mm	1356.1	30

4

~ ~

3.2km

5

~

0.1m 0.3m

0.1 0.2m

6

SL190-2007

500t/km². a

2015 2030

V

V-4

V-4-6tr

2013 188

2017 1 22

GZ1

	km ²	km ²	1913.09	100.00%
		km ²	312.00	16.31%
		km ²	116.29	6.08%
		km ²	52.46	2.74%
		km ²	30.45	1.59%
		km ²	6.82	0.36%
		km ²	518.02	27.08%

2019 12
26 2019 920 2019
2020 6
2020 11
2019 2020
875
2021 4 9
2021 8
2021 4
2021 5
2021
175
10 9 9

10%

5%

2-3-1

1					
2					
3	30%	hm ²	22.41	22.39	-0.1%
4	30%	m ³	69.75	67.89	-2.7%
5	300 20%				
6	20%				
7	10%				
8	30%		10	9	
9	5 30%				
1	30%	m ³	5.66	5.70	0.7%
2	30%	hm ²	15.72	15.24	-3.1%
3	30%	m	17186	17066	-0.7%
1	5 20%				
2					

1	5%		2.9% 10%
2	5	10% 5	20% 5%
3	5	0.1 30%	10%

2021 8

22.39hm²

22.39hm² 0.67hm² 21.72hm²

2.10hm² 19.16hm² 0.38hm²

0.26hm² 0.15hm² 0.34hm²

		hm ²		
1		0.31	1.79	2.10
2			19.16	19.16
3		0.36	0.02	0.38
4			0.26	0.26
5			0.15	0.15
6			0.34	0.34
7		0.67	21.72	22.39

2021 175

22.41hm²

22.39hm²

0.02hm²

3.1-2

		hm ²	hm ²	hm ²		
1		1.99	2.10	0.11	5.5%	
2		16.01	19.16	3.15	19.7%	
3		0.36	0.38	0.02	5.6%	
4		1.50	0.26	-1.24	-82.7%	
5		0.30	0.15	-0.15	-50.0%	
6		2.25	0.34	-1.91	-84.9%	
7		22.41	22.39	-0.02	-0.1%	

0.1%

0.02

1 0.11hm²

2 3.15hm²

3 0.02hm²

4 1.24hm²

5 0.15hm²

0.15hm²

6

1.91hm²

1

5

6

2.25hm²

8.84 m³

		hm ²	m ³		
Z1	8#	0.35	1.54		
Z2	6# 150m	0.38	1.83		
Z3	4# 70m	0.33	1.29		
Z4	K0+520	0.22	1.00		
Z5	3# 470m	0.51	1.52		
Z6	2# 210m	0.46	1.66		
		2.25	8.84		

1

0.34hm²

1.05 m³

5

GB51018-2014

5

3.2-2



7 55m 1.95hm² 75m 1430m
0.53 m³
3.4-1

1		m	75	2022	12
2		m	1430	2022	12
3			7	2022	12
4		m	55	2023	3
5		hm ²	1.95	2022	11
6		m ³	0.53	2022	10
7		m ³	0.53	2022	12

800m 14050m 28 11 830m
 15.31hm² 4.91 m³ 2023

3.4-2

1		m	14050	2023	3
2			28	2023	3
3		m	830	2023	3
4		m	800	2022	12
5			11	2023	4
6		hm ²	15.31	2022	12
7					

0.26hm²

0.05 m³



1		m	85	2023	2
2			1	2022	12
3		m	56	2023	1

1

6

1

2

3

2022 12

2023

5600m²

1.87hm²

1		m ²	5600	2023 4	
2					

1		hm ²	0.15	2022	12
2			60	2022	12

1

1200m²

0.28hm²

900

3.4-12

1		m ²	1200	2023	3
2		hm ²	0.28	2023	3
3			900		

1 21.70hm²

22.25hm²

2

3

4

5

1

1780m

16

420m

4200m²

2

9420m

5150m

42

43520m²

3		410m	72m
3	650m ²		
4		600m	2800m ²
5		220m	40m
2	390m ²		
6		160m	220m
	2600m ²		3

1			m	420	2022	10
2			m	1780	2022	10
3				16	2022	10
4			m ²	4200	2022	12
5			m	5150	2022	10
6			m	9420	2022	11
7				42	2022	10
8			m ²	43520	2023	1
9			m	72	2022	10
10			m	410	2022	10
11				3	2022	10
12			m ²	650	2022	10
13			m	600	2022	11
14			m ²	2800	2022	

3.4-15

1		m	4936	5842	906	118%
2		m	13810	12650	-1160	92%
3			72	66	-6	92%
4		m ²	67398	54160	-13238	80%

1110.22

				()
2			28	3.15
3		m	830	19.52
4		m	800	2.40
5			11	0.76
6		hm ²	15.31	73.49
7		m ³	4.91	46.74
8		m ³	4.91	31.42
				8.90
1		m	420	6.23
2			2	0.22
3		hm ²	0.18	0.86
4		m ³	0.10	0.95
5		m ³	0.10	0.64
				2.04
1		hm ²	0.26	1.24
2		m ³	0.05	0.48
3		m ³	0.05	0.32
				1.80
1		m	30	0.44
2		hm ²	0.15	0.72
3		m ³	0.04	0.38
4		m ³	0.04	0.26
				25.12
1		m	85	1.26
2			1	0.11
3		m	56	1.32
4		m	35	19.68
5		hm ²	0.34	1.63
6		m ³	0.07	

				()
3		hm ²	1.87	17.36
				401.51
1		m ²	21701	107.92
2		m ²	60640	172.34
3		hm ²	10.56	98.05
4			2487	14.92
5			6896	8.28
				17.18
1		hm ²	0.15	1.39
2			80	0.48
3			260	0.31
4			500	15.00
				2.60
1		hm ²	0.28	2.60
				1.46
1		hm ²	0.15	1.39
2			60	0.07
				11.41
1		m ²	1200	3.41
2		hm ²	0.28	2.60
3			900	5.40
				48.25
				4.64
1		m	420	0.78
2		m	1780	2.02
3			16	0.07
4		m ²	4200	1.77
				38.73
1		m	5150	9.55
2		m	9420	10.69
3			42	0.17
4		m ²	43520	18.32
				0.88

				()
1		m	72	0.13
2		m	410	0.47
3			3	0.01
4		m ²	650	0.27
				1.86
1		m	600	0.68
2		m ²	2800	1.18
				0.49
1		m	40	0.07
2		m	220	0.25
3			2	0.01
4		m ²	390	0.16
				1.65
1		m	160	0.30
2		m	220	0.25
3			3	0.01
4		m ²	2600	1.09
				123.94
				19.28
				28.92
				33.74
				24.00
				18.00
				22.41
				1110.22

2021 175

1073.25

1110.22

36.96

3.5-2

		360.91	448.18	87.27
		32.34	24.48	-7.86
		249.81	385.84	136.03
		11.54	8.90	-2.64
		7.42	2.04	-5.38
		4.38	1.80	-2.58
		55.42	25.12	-30.30
		432.38	467.44	35.06
		36.48	33.28	-3.20
		332.42	401.51	69.09
		7.35	17.18	9.83
		7.46	2.60	-4.86
		2.72	1.46	-1.26
		45.95	11.41	-34.54
		37.44	48.25	10.81
		2.18	4.64	2.46
		16.98	38.73	21.75
		0.35	0.88	0.53
		3.96	1.86	-2.10
		0.23	0.49	0.26
		3.63	1.65	-1.98
		10.11		-10.11
		167.39	123.94	-43.45
		11.90	19.28	7.38
		65.00	33.74	-31.26
		27.77	28.92	1.15
		34.72	24.00	-10.72
		28.00	18.00	-10.00
		52.73	0.00	-52.73
		22.41	22.41	
		1073.26	1110.22	36.96

1

87.27

2

35.06

3

10.81

4

43.45

5

2021 175

22.41

22.41

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"

"

90%

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1

2

3

4

5

6

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1

2

3

4

5

6

7

8

9

10

11

1

2

3

4

5

6

SL336-2006

5

12

637

4.2-1

"

"

4.2-1

						()				
16				m ²	6800	2	0.1 1hm ² 1hm ²			
17				hm ²	2.30	5	0.1 1hm ² 1hm ²			
18				m ²	500	1	0.1 1hm ² 1hm ²			
19						3467	12			
20							7216	12		
21						hm ²	10.84	17	100 1000m	
22				m	5842	64	50 100m			
23				m	12650	132	50 100m			
24						66	5	10 30m ³ 30m ³ 10m ³		
25						m ²	54160	58	100 1000m ² 1000m ² 100m ²	
26			5	12	24			637		



5 12 637
637
100% 8.1.5
SL336-2006

1 5 2023 6

GB51018-2014

1

2

3

0.05g

2

1

1.15

1.05

GB51018-2014

Z5	3#	470m	1.15	1.05	1.703	1.425	

2

1.05

1.40

1.00

1.30

GB51018-2014

Z5	3#	470m	1.05	1.00	1.40	1.30	1.740	1.400	3.006	2.476

1

2

5

3

1

2

3

4

5

6

3



" "

1

2

95%

22.39hm²

22.39hm²

5.60hm²

16.50hm²

1.26hm²

15.24hm²

98.69%

5.2-1

		(hm ²)	(hm ²)	(hm ²)			
1		2.10	0.19	0.01	1.87	1.88	98.38%
2		19.16	5.23	1.20	12.50	13.70	98.80%
3		0.38	0.18	0.03	0.16	0.19	97.37%
4		0.26			0.25	0.25	96.15%
5		0.15			0.15	0.15	100.00%
6		0.34		0.02	0.31	0.33	97.06%
7		22.39	5.60	1.26	15.24	16.50	98.69%

500t/km²·a

488t/km²

1.02

1.05 m³

5.70 m³

6.75 m³

6.44 m³

95.41%

95%

5.70 m³

6.09 m³ 93.60%

22.39hm²

15.53hm² 15.24hm²

98.11% 68.07% 5.2-2

5.2-2

		(hm ²)	(hm ²)	(hm ²)		(%)
1		2.10	1.90	1.87	98.21%	89.05%
2		19.16	12.73	12.50	98.19%	65.24%
3		0.38	0.17	0.16	94.12%	42.11%
4		0.26	0.26	0.25	96.15%	96.15%
5		0.15	0.15	0.15	100.00%	100.00%
6		0.34	0.32	0.31	96.88%	91.18%
7		22.39	15.53	15.24	98.11%	68.07%

5.2-3

5.2-3

%	98	98.69
	1	1.02
%	95	95.41
%	92	93.60
%	98	98.11
%	27	68.07

17

17

17

5.3-1

()	2		11		4		10	7
	()	(%)	()	(%)	()	(%)	()	(%)
	11	65%	6	35%		0%		0%
	12	71%	5	29%		0%		0%
	17	100%		0%		0%		0%
	17	100%		0%		0%		0%
	16	94%	1	6%		0%		0%

"

"

"

"

"

"

2021 8

GPS

2021 8 -2023 6

1

6

2

GPS

GIS GPS

GIS

GPS

3

2021 8 ~2023 6

2

1

1

1

3

1

1

4

2021 7

2021	175		22.41hm ²	1.0
/m ²		22.41		22.41
		8.1.7		

1

2

1

2

3

1	2019	12					
26				2019	920		2019
2	2020	6					
3	2020	11				2019	
						2020	875
4	2021	4	9				
5	2021	8					
6	2021	8					
7	2021	11	5	2022	6	21	
8	2022	7					
9	2022	9					
10	2022	9					
11	2022	8					
12	2022	8					
13	2022	10					

14 2022 10

15 2023 4

1 2021 4

2 2021 5

2021 175

3 2021 7

4 2021 7

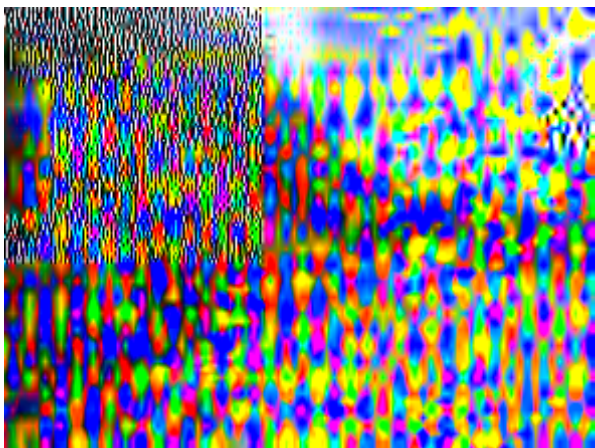
5 2021 8

6 2021 8

7 2022 4

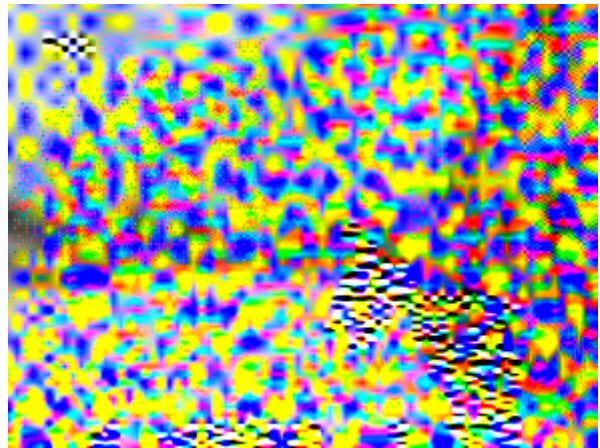
9 2023 4

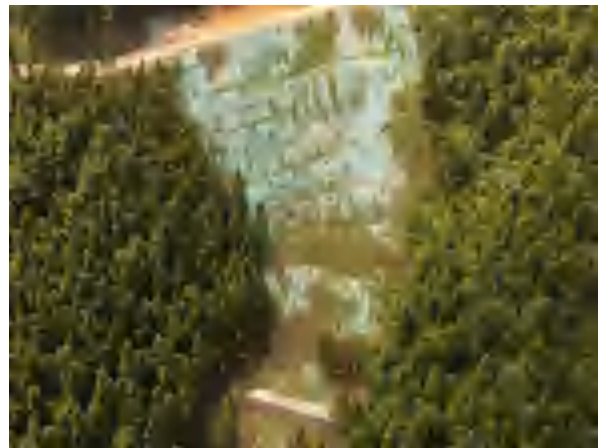












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- 1
 - 2
 - 3
 - 4
 - 5

