



**WHA Utilities and Power Public Company Limited**

## **Annual Green Bond Report**



**“Your Ultimate Solution Partner in Utilities & Power with **Environmental Care.**”**

**May 2024**

## Green Bonds Proceeds Allocation

As at end of May 2024, WHAUP has, so far, 2 series of following green bonds outstanding:

- **“Green Debentures of WHA Utilities and Power Public Company Limited No. 1/2565 Tranche 1 Due B.E. 2568”** issued on 1 June 2022, with the total issue size of THB 1,800,000,000 (**“Green Bonds No. 1/2565”**)
- **“Green Debentures of WHA Utilities and Power Public Company Limited No. 2/2566 Tranche 2 Due B.E. 2571”** issued on 15 June 2023, with the total issue size of THB 500,000,000 (**“Green Bonds No. 2/2566”**) (Green Bonds No. 1/2565 and Green Bonds No. 2/2566 together as **“Green Bonds”**)

The entire amount of proceeds from the Green Bonds (with the total issue size of THB 2,300,000,000) were all allocated to solar projects in Thailand, in accordance with WHA Utilities and Power Public Company Limited’s Green Bond Framework, May 2022.

The proceeds allocation is as following:

Date	Brief Description	Amount (THB) – Proceeds from Green Bonds	Amount (THB) – Other sources
1 June 2022	To refinance the equity portion of solar projects that the company invest during 2019 – 2021	1,475,701,582.1	-
1 June 2022	To refinance the equity portion of solar projects that the company invest during 1 January – 31 May 2022	146,723,565.4	-
1 July 2022	To refinance the equity portion of solar projects that the company invest during 1 – 30 June 2022	177,574,852.5	34,119,463.5
15 June 2023	To refinance the equity portion of solar projects that the company invest during 1 Jul – 31 Dec 22	500,000,000	149,125,649.1
<b>Total</b>		<b>2,300,000,000.0</b>	<b>183,245,112.6</b>

**Description of Related Solar Projects financed by the Green Bond No.1/2565 and No.2/2566 (In operation and under construction):**

No.	Type of Project	Brief Description (Location)	WHAUP's share of Installed Capacity	MW	COD
1	Solar Rooftop	Samutprakran	100%	0.90	22-Jun-18
2	Solar Rooftop	Rayong	100%	0.50	18-Jan-19
3	Solar Rooftop	Samutprakran	100%	0.58	27-May-19
4	Solar Rooftop	Nakhonnayok	100%	1.00	6-Jun-19
5	Solar Rooftop	Phathomthani	100%	0.50	18-Jun-19
6	Solar Rooftop	Rayong	100%	0.43	16-Aug-19
7	Solar Rooftop	Rayong	100%	0.80	18-Oct-19
8	Solar Rooftop	Samutprakran	100%	0.43	1-Nov-19
9	Solar Rooftop	Rayong	100%	1.00	1-Dec-19
10	Solar Rooftop	Rayong	100%	0.06	1-Jan-20
11	Solar Rooftop	Pathum Thani	100%	1.00	18-Feb-20
12	Solar Rooftop	Rayong	100%	1.58	1-Mar-20
13	Solar Rooftop	Rayong	100%	0.50	1-Mar-20
14	Solar Rooftop	Phetchaburi	100%	4.99	4-Mar-20
15	Solar Rooftop	Rayong	100%	1.50	1-Apr-20
16	Solar Rooftop	Rayong	100%	0.11	1-May-20
17	Solar Rooftop	Rayong	100%	0.20	1-May-20
18	Solar Rooftop	Saraburi	100%	1.00	1-May-20
19	Solar Rooftop	Chachoengsao	100%	0.50	15-Jul-20
20	Solar Rooftop	Songkhla	100%	1.39	19-Aug-20
21	Solar Rooftop	Rayong	100%	0.99	19-Aug-20
22	Solar Rooftop	Rayong	100%	0.65	16-Sep-20
23	Solar Rooftop	Udonthani	100%	2.01	16-Sep-20
24	Solar Rooftop	Suratthani	100%	1.95	27-Oct-20
25	Solar Rooftop	Phetchaburi	100%	1.00	28-Oct-20
26	Solar Rooftop	Chonburi	100%	4.82	1-Nov-20
27	Solar Rooftop	Samutprakarn	100%	1.00	18-Nov-20
28	Solar Rooftop	Ayutthaya	100%	2.47	16-Dec-20
29	Solar Rooftop	Chonburi	100%	1.00	23-Dec-20
30	Solar Rooftop	Rayong	100%	2.01	6-Jan-21
31	Solar Rooftop	Rayong	100%	4.19	1-Mar-21
32	Solar Rooftop	Prachinburi	100%	2.47	16-Jun-21
33	Solar Rooftop	Saraburi	100%	2.05	1-Sep-21
34	Solar Rooftop	Rayong	100%	2.12	1-Oct-21
35	Solar Rooftop	Rayong	100%	0.83	1-Nov-21
36	Solar Rooftop	Ratchaburi	100%	2.33	11-Dec-21
37	Solar Rooftop	Rayong	100%	0.88	15-Dec-21
38	Solar Rooftop	Chonburi	100%	1.80	1-Jan-22
39	Solar Rooftop	Ayuthaya	100%	0.68	1-Apr-22
40	Solar Rooftop	Rayong	100%	0.70	19-Apr-22
41	Solar Rooftop	Rayong	100%	2.14	1-Jun-22
42	Solar Rooftop	Chonburi	100%	1.00	1-Jun-22
43	Solar Rooftop	Samutsakorn	100%	1.00	26-Oct-22
44	Solar Rooftop	Chonburi	100%	19.44	14-Dec-22
45	Solar Rooftop	Chonburi	100%	0.99	21-Dec-22

No.	Type of Project	Brief Description (Location)	WHAUP's share of Installed Capacity	MW	COD
46	Solar Rooftop	Rayong	100%	1.14	21-Dec-22
47	Solar Rooftop	Rayong	100%	0.52	28-Dec-22
48	Solar Rooftop	Rayong	100%	1.00	1-Jan-23
49	Solar Rooftop	Samutprakran	100%	1.00	15-Feb-23
50	Solar Rooftop	Rayong	100%	0.50	8-Mar-23
51	Solar Rooftop	Ayuthaya	100%	1.00	8-Mar-23
52	Solar Rooftop	Ayuthaya	100%	0.71	8-Mar-23
53	Solar Rooftop	Rayong	100%	0.51	22-Mar-23
54	Solar Rooftop	Chomporn	100%	0.60	1-Apr-23
55	Solar Rooftop	Chonburi	100%	1.10	5-Apr-23
56	Solar Rooftop	Samutprakran	100%	9.61	21-Jun-23
57	Solar Rooftop	Rayong	100%	1.00	1-Jul-23
58	Solar Rooftop	Bangkok	100%	0.72	1-Jul-23
59	Solar Rooftop	Rayong	100%	0.51	21-Jul-23
60	Solar Rooftop	Bangkok	100%	0.83	4-Oct-23
61	Solar Rooftop	Rayong	100%	1.00	25-Oct-23
62	Solar Rooftop	Rayong	100%	0.61	25-Oct-23
63	Solar Rooftop	Chonburi	100%	1.00	1-Feb-24
64	Solar Rooftop	Rayong	100%	2.22	21-Feb-24
65	Solar Rooftop	Rayong	100%	7.73	20-Mar-24
66	Solar Rooftop	Suratthani	100%	2.10	Under construction
67	Solar Rooftop	Rayong	100%	1.83	Under construction
68	Solar Rooftop	Saraburi	100%	4.00	Under construction
69	Solar Rooftop	Saraburi	100%	0.32	Under construction
70	Solar Rooftop	Rayong	100%	0.07	Under construction
71	Solar Rooftop	Rayong	100%	0.12	Under construction
72	Solar Rooftop	Saraburi	100%	0.08	Under construction
73	Solar Rooftop	Nonthaburi	100%	1.00	Under construction
<b>Total</b>				<b>122.30</b>	<b>MW</b>

## Green Bonds Impact Reporting (Operating projects)

Year	No. of Related Solar Projects	Installed Capacity (MW)	Production (MWh)	GHG emission (tonCO2eq)	Avoided Emission (tonCO2eq)
2022	43 <sup>1/</sup>	59.06 <sup>1/</sup>	69,269 <sup>2/</sup>	0	41,465 <sup>2/</sup>
2023	61 <sup>1/</sup>	101.01 <sup>1/</sup>	113,511 <sup>2/</sup>	0	67,947 <sup>2/</sup>

\*Remarks: <sup>1/</sup> The capacity megawatt excludes project under construction that has not operated in a particular year

<sup>2/</sup> The production and the Avoided emission (tonCO2eq) are derived from actual production and from operating projects only.