



WHA Utilities and Power Public Company Limited

Annual Green Bond Report



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

May 2025

Green Bonds Proceeds Allocation

As at end of May 2025, WHAUP has, so far, 4 series of following green bonds outstanding:

- **“Green Debentures of WHA Utilities and Power Public Company Limited No. 2/2022 Tranche 1 Due B.E. 2025”** issued on 1 June 2022, with the total issue size of THB 1,800,000,000 (**“Green Bonds No. 2/2022”**)
- **“Green Debentures of WHA Utilities and Power Public Company Limited No. 2/2023 Tranche 2 Due B.E. 2028”** issued on 15 June 2023, with the total issue size of THB 500,000,000 (**“Green Bonds No. 2/2023”**)
- **Green Debentures of WHA Utilities and Power Public Company Limited No. 1/2024 Tranche 2 Due B.E. 2029”** issued on 12 July 2024, with the total issue size of THB 800,000,000 (**“Green Bonds No. 1/2024”**)
- **Green Debentures of WHA Utilities and Power Public Company Limited No. 1/2025 Tranche 2 Due B.E. 2030”** issued on 9 May 2025, with the total issue size of THB 800,000,000 (**“Green Bonds No. 1/2025”**)

(Green Bonds No. 2/2022, Green Bonds No. 2/2023, Green Bonds No. 1/2024 and Green Bonds No. 1/2025 together as **“Green Bonds”**)

The entire amount of proceeds from the Green Bonds (with the total issue size of THB 3,900,000,000) 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) – Use of 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	1,475,701,582.10	-
1 June 2022	To refinance the equity portion of solar projects that the company invest during 1 January – 31 May 2022	146,723,565.40	-
1 July 2022	To refinance the equity portion of solar projects that the company invest during 1 – 30 June 2022	177,574,852.50	34,119,463.50
15 June 2023	To refinance the equity portion of solar projects that the company invest during 1 Jul – 31 Dec 2022	500,000,000.00	149,125,649.10
12 July 2024	To equity portion of solar projects that the company invest during 1 Oct – 31 Dec 2024	267,001,372.53	-

12 July 2024	To equity portion of solar projects that the company invest during 1 Jan– 30 Apr 2025	335,670,621.05	-
9 May 2025	To repayment the “Green Debentures of WHA Utilities and Power Public Company Limited No. 2/2022 Tranche 1 Due B.E. 2025”	800,000,000.00	-
Total		3,702,671,993.58	183,245,112.6

Remark: The remaining proceeds from Green Bond issued on 12 July 2024 amounting to 197.32 MB are expected to be utilized in 2025.

Description of Related Solar Projects financed by the Green Bond No.2/2022, No.2/2023, and No.1/2024 (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

No.	Type of Project	Brief Description (Location)	WHAUP's share of Installed Capacity	MW	COD
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	Ayutthaya	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
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	Samutprakarn	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	Samutprakarn	100%	0.51	1-Oct-23
61	Solar Rooftop	Samutprakarn	100%	1.00	1-Oct-23
62	Solar Rooftop	Bangkok	100%	0.83	4-Oct-23
63	Solar Rooftop	Rayong	100%	1.00	25-Oct-23
64	Solar Rooftop	Rayong	100%	0.61	25-Oct-23
65	Solar Rooftop	Nakhonnayok	100%	0.58	1-Jan-24
66	Solar Rooftop	Nonthaburi	100%	1.00	3-Jan-24
67	Solar Rooftop	Chonburi	100%	1.00	1-Feb-24
68	Solar Rooftop	Rayong	100%	0.88	1-Feb-24
69	Solar Rooftop	Rayong	100%	2.22	21-Feb-24
70	Solar Rooftop	Rayong	100%	1.00	1-Mar-24
71	Solar Rooftop	Rayong	100%	7.73	20-Mar-24
72	Solar Rooftop	Rayong	100%	0.67	1-Apr-24
73	Solar Rooftop	Rayong	100%	1.60	1-Apr-24
74	Solar Rooftop	Chonburi	100%	0.50	1-Apr-24
75	Solar Rooftop	Sakaeo	100%	3.65	8-Jul-24
76	Solar Rooftop	Nonthaburi	100%	1.00	15-Jul-24
77	Solar Rooftop	Rayong	100%	1.00	1-Aug-24
78	Solar Rooftop	Saraburi	100%	4.00	1-Oct-24
79	Solar Rooftop	Saraburi	100%	0.32	1-Oct-24

No.	Type of Project	Brief Description (Location)	WHAUP's share of Installed Capacity	MW	COD
80	Solar Rooftop	Chonburi	100%	2.98	15-Oct-24
81	Solar Rooftop	Chonburi	100%	1.82	15-Oct-24
82	Solar Rooftop	Chachoengsao	100%	0.73	1-Mar-25
83	Solar Rooftop	Suratthani	100%	2.10	Under construction
84	Solar Rooftop	Rayong	100%	1.83	Under construction
85	Solar Rooftop	Rayong	100%	0.07	Under construction
86	Solar Rooftop	Rayong	100%	0.12	Under construction
87	Solar Rooftop	Saraburi	100%	0.08	Under construction
Total				140.22	

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 ^{1/}	59.06 ^{1/}	69,269 ^{2/}	0	41,465 ^{2/}
2023	61 ^{1/}	101.01 ^{1/}	113,511 ^{2/}	0	67,947 ^{2/}
2024	81 ^{1/}	134.46 ^{1/}	147,084 ^{2/}	0	88,045 ^{2/}

*Remarks: ^{1/} The capacity megawatt excludes project under construction that has not operated in a particular year

^{2/} The production and the Avoided emission (tonCO2eq) are derived from actual production and from operating projects only.