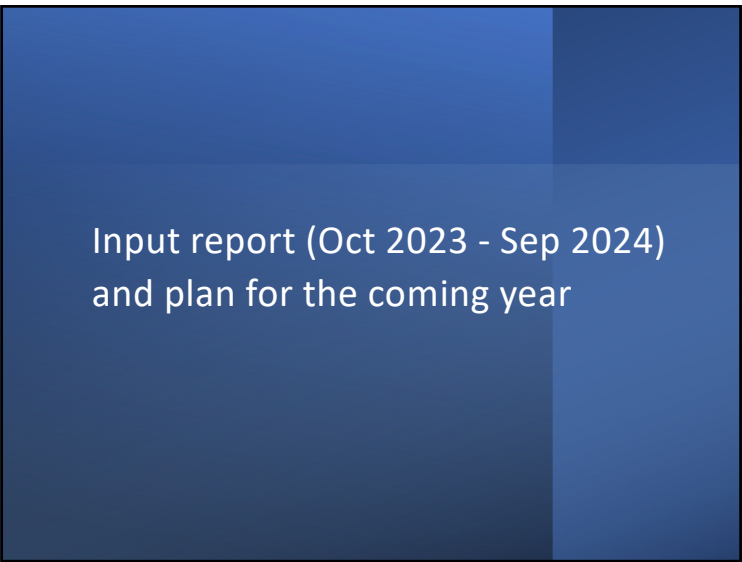


1



2

Experts dispatched from Japan

1 Long term, 12 Short term experts have been dispatched

Annex 5

Researchers and Experts dispatched by JICA/JST					
Long Term Expert					
No.	Name	Title	Institution	Period	Remarks
1	Mr. NISHIKORI Akira	Coordinator	JICA Thailand	25/5/2022- 24/5/2025	Be-HoBiD office in KU
Short Term Expert (Researcher) / Students					
No.	Name	Title / Working Group	Institution	Period (dd/mm/yy)	Remarks
34	MORIKAWA Masaaki	Chief Res. G1/G3	Hokkaido U.	Arr. 23/09/2023 - Dep. 28/09/2023	2nd JCC, research meetings
35	MATSUMOTO Kenich	G4-2	Hokkaido U.	Arr. 24/09/2023 - Dep. 28/09/2023	ditto
36	IKE Michihiko	G3	Osaka U.	Arr. 24/09/2023 - Dep. 27/09/2023	ditto
37	ISHIZAWA Hidehiro	G3	Univ. Hyogo	Arr. 24/09/2023 - Dep. 27/09/2023	ditto
38	MORI Kazuhiro	G5	U. Yamanashi	Arr. 24/09/2023 - Dep. 27/09/2023	ditto
39	TOYAMA Tadashi	G5	U. Yamanashi	Arr. 24/09/2023 - Dep. 28/09/2023	ditto
40	OYAMA Tokitaka	G2	Kyoto U.	Arr. 24/09/2023 - Dep. 27/09/2023	ditto
41	ITO Shogo	G2	Kyoto U.	Arr. 24/09/2023 - Dep. 27/09/2023	ditto
42	EBIE Yoshitaka	G6	NIES	Arr. 24/09/2023 - Dep. 26/09/2023	ditto
43	KUBOTA Kengo	G4-1	Tohoku U.	Arr. 15/10/2023 - Dep. 19/10/2023	Khon Kaen
44	MORIKAWA Masaaki	Chief Res. G1/G3	Hokkaido U.	Arr. 09/12/2023 - Dep. 15/12/2023	KU
45	OYAMA Tokitaka	G2	Kyoto U.	Arr. 12/12/2023 - Dep. 14/12/2023	ditto
46	ISODA Minako	G2	Kyoto U.	Arr. 11/12/2023 - Dep. 22/12/2023	ditto
47	KUBOTA Kengo	G4-1	Tohoku U.	Arr. 17/02/2024 - Dep. 22/02/2024	Khon Kaen
48	MORIKAWA Masaaki	Chief Res. G1/G3	Hokkaido U.	Arr. 16/03/2024 - Dep. 21/03/2024	KU
49	TOYAMA Tadashi	G5	U. Yamanashi	Arr. 06/05/2024 - Dep. 10/05/2024	ditto
50	MORIKAWA Masaaki	Chief Res. G1/G3	Hokkaido U.	Arr. 03/06/2024 - Dep. 08/06/2024	KU
51	OYAMA Tokitaka	G2	Kyoto U.	Arr. 03/06/2024 - Dep. 08/06/2024	ditto
52	MURANAKA Tomoaki	G2	Kyoto U.	Arr. 03/06/2024 - Dep. 08/06/2024	ditto
53	MORIKAWA Masaaki	Chief Res. G1/G3	Hokkaido U.	Arr. 09/09/2024 - Dep. 15/09/2024	KU
54	TOYAMA Tadashi	G5	U. Yamanashi	Arr. 09/09/2024 - Dep. 15/09/2024	ditto

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Training in Japan

2 additional Long term, 3 Short term planning)

Annex 6

JICA Counterpart Training in Japan and programs in Japan and 3rd countries							
No.	Name of trainees / Working	Working	Training / visit period in	Training course / Visit program	Main Training / visit place	Trainee's / participant's	Remarks
1	Pham Thi Thanh Huyen	G3	1/10/2021-30/9/2024	Doctoral course	Hokkaido Univ.		MEXT scholarship
2	SAIMEE YUPARAT	G3	1/10/2022-31/3/2026	Doctoral course	Osaka Univ.		JICA Long Term
3	ZAFIRAH MEUTHIA	G4-1	1/10/2023-30/9/2026	Doctoral course	Tohoku Univ.		MEXT scholarship
4	KARNJANA RUENPHAM	G5	1/10/2023-30/9/2026	Doctoral course	Univ. Yamanashi		MEXT scholarship
24	Pairaya Choeisai	G4-1	30/10/2023 - 12/11/2023	Biomethane production by anaerobic methane fermentation	Tohoku Univ.	Associate Professor, Faculty of Engineering, Dept. of Environmental Engineering, Khon Kaen University	
25	Chakrit Bunyoo	G5/G 3	17/02/2024 - 04/03/2024	Duckweed Holobiont and isolation and characterization of PGPB from WW acclimatized duckweed including re-introduction of PGPB to the duckweed	Univ. Yamanashi	PhD Student, Faculty of Science, Kasetsart University	
26	Royppim Thananurak	G2-2/G3-1	02/12/2024 - 17/12/2024	Duckweed Holobiont interaction and function enhancement	Kyoto U Osaka U	Researcher, Faculty of Science, Kasetsart University	

Training of all Pis by attending Japan Society of Environmental Biotechnology conference is scheduled in 2025

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Equipment										Annex 7	
No.	Date of Purchase/Delivery	Budget	Procured by	Item (Yellow: R/D equipment)	Specification/Brand/other info	Qty	Unit price(THB)	Amount(THB)	JICA rate THB1=¥m	Unit price(JPY)	Amount(JPY)
101	2024-03-14	JICA HU Budget	HU	HW9312 DST86 EC/TDS/C°-Tester - 'Hanna,Romania'	HW9312 DST86 EC/TDS/C°-Tester - 'Hanna,Romania' -Ranges up to 20.00 mS / cm (EC) and 10.00 g / L (TDS) -Dual display of conductivity or TDS and temperature -Easily replaceable graphite EC / TDS probe -Automatic calibration and temperature compensation -Selectable TDS factor and temperature coefficient -Stability indicator for safe values -HOLD function to freeze a reading in the display -Battery charge indicator and automatic shut-off	1	6,505.60	6,505.60	4.18762	27,242.98	27,242.98
102	2024-04-30	JICA General project	JICA General project	Microwave Digital	Microwave Digital SHARP R-754G-S 25L	1	3,290.00	3,290.00	4.15344	13,664.82	13,664.82
103	2024-06-18	JICA General project	JICA General project	Air Condition	Air Condition Brand: Hisense Model: AS18TRKE2T 18000 BTU Inverter	1	31,565.00	31,565.00	4.26801	134,719.74	134,719.74
104	2024-06-25	JICA TH Budget	JICA TH Office	Phase 1 of Duckweed Plant Factory	Small size production rack x 1 set Common items x 1 set	1	610,200.00	610,200.00	4.15344	2,534,429.09	2,534,429.09
105	2024-08-07	JICA HU Budget	HU	Stainless Steel Drawer 5 layer	Stainless Steel Drawer 5 layer size 140 x 560 x 285 mm for -80°C Deep Freezer	24	5,350.00	128,400.00	4.28609	22,930.58	550,333.96
106	2024-08-08	JICA HU Budget	HU	Self-staining Cryogenic Vial	Self-staining Cryogenic Vial size 2 mL (Biologix#2BLG-81-8284)	100	395.90	39,590.00	4.28609	1,696.86	169,686.10
107	2024-09-09	JICA HU Budget	HU	Cryogenic Vial store box	MDP-2081BX-PJ	240				814.00	195,360.00
							Total THB	31,635,615.60		Total JPY Yen	139,936,323.69

Duckweed plant factory phase 2 and bench-scale plants are planning for 2025

Proposal of correction of errors and modification in PO

PO										Annex 3	
Correction of PO proposed											
Plan of Operation (PO) : Amendment to the P.O. version 1.2										update Version 1.2 to 1.3	
Project Title: Development of Duckweed and Associated Microbial Resource Values towards Bio-Circular-Green (BCG) Economy										12 November 2024	
Inputs from JICA											
Expert	JFY2021	JFY2022	JFY2023	JFY2024	JFY2025	JFY2026	JFY2027	JFY2028	JFY2029		
Project Coordinator (Long term Expert)											
Chief Advisor											
Short term Experts											
Short term Experts											
Short term Experts											
Short term Experts											
Training in Japan/Other countries											
Training for Counterpart Personnel											
Training for Counterpart Personnel											
Activities											
Activities	JFY2021	JFY2022	JFY2023	JFY2024	JFY2025	JFY2026	JFY2027	JFY2028	JFY2029		
Output 1: Duckweed Holobiont Resource & Research Center (DHRRC) is established at Kasetsart University											
1.1 To establish DHRRC equipped with the properties provided by Outputs 1.8.3											
1.2 To construct the DHRRC homepage											
1.3 To construct a duckweed plant factory in the DHRRC to produce duckweed holobiont biomass											
1.4 DHRRC to provide duckweed holobionts and functional microorganisms to other research groups											
1.5 DHRRC to provide functions and services of a common laboratory to be used by other research groups/teams											
Output 2: Duckweed holobiont collection is created											
2.1 To survey and collect duckweed holobionts (about 20 locations in 7 regions)											
2.2 To isolate and preserve duckweeds and associated microorganisms											
2.3 To characterize duckweeds and associated microorganisms											
2.4 To analyze the microbial community associated with duckweeds											
2.5 To create and provide to DHRRC catalog of preserved individual duckweeds, associated microorganisms, associated microbial communities, and their DNA sequence data											
Output 3: Technology base is developed for function enhancement of the duckweed holobiont											
3.1 To select the potential duckweed holobionts and prove to Output 5											
3.2 To analyze the mechanisms of interaction between duckweed and microbes											
3.3 To develop the technologies enhancing the function of duckweed holobionts											
3.4 To characterize duckweed holobionts using systems biology											
3.5 To search for active substances from duckweed and associated microorganisms											