

PUBLICATION REFERENCE: EuropeAid/135636/IH/SUP/RS.

NAME OF TENDERER: <name>

Lot 2 Solar Panels

A		C	D	E
ITEM NUMBER	QUANTITY	SPECIFICATIONS OFFERED (INCL BRAND/MODEL)	UNIT COSTS WITH DELIVERY DDP¹ PLACE OF ACCEPTANCE EUROS	TOTAL EUROS
1.	Consisting of:	Solar flat plate collector FPC		
1.1.	274 pcs	Module - FPC - type A		
1.2.	127 pcs	Module FPC - type B		
1.3.	44 pcs	Large Module FPC - type C		
2.	Consisting of:	Aluminium frame for Module's FPC, with inclination		
2.1	26 pcs	Aluminium frame for 5 Module's FPC – type A, with inclination of 0°		
2.2.	18 pcs	Aluminium frame for 5 Module's FPC – type A, with inclination of		

¹ DDP (Delivered Duty Paid)— Incoterms 2010 International Chamber of Commerce <http://www.iccwbo.org/products-and-services/trade-facilitation/incoterms-2010/the-incoterms-rules/> .

		40°		
2.3.	3 pcs	Aluminium frame for 4 Module's FPC – type A, with inclination of 0°		
2.4.	1 pc	Aluminium frame for 6 Module's FPC – type A, with inclination of 0°		
2.5.	2 pcs	Aluminium frame for 7 Module's FPC – type A, with inclination of 0°		
2.6.	1 pc	Aluminium frame for 8 Module's FPC – type A, with inclination of 0°		
2.7.	17 pcs	Aluminium frame for 10 Module's FPC – type A, with inclination of 0°		
2.8.	1 pc	Aluminium frame for 8 Module's FPC – type A, with inclination of 20°		
2.9.	1 pc	Aluminium frame for 4 Module's FPC – type A, with inclination of 40°		
2.10.	1 pc	Aluminium frame for 5 Module's FPC – type A, with inclination of 40°		
2.11.	2 pcs	Aluminium frame for 10 Module's FPC – type A, with inclination of 40°		
2.12.	1 pc	Aluminium frame for 7 Module's FPC – type A, with inclination of 60°		
2.13.	1 pc	Aluminium frame for 9 Module's FPC – type B, with inclination of 0°		

2.14.	1pc	Aluminium frame for 8 Module's FPC – type B, with inclination of 0°		
2.15.	4 pcs	Aluminium frame for 7 Module's FPC – type B, with inclination of 20°		
2.16.	1 pc	Aluminium frame for 5 Module's FPC – type B, with inclination of 20°		
2.17.	6 pcs	Aluminium frame for 5 Module's FPC – type B, with inclination of 40°		
2.18.	2 pcs	Aluminium frame for 9 Module's FPC – type B, with inclination of 40°		
2.19.	2 pcs	Aluminium frame for 10 Module's FPC – type B, with inclination of 40°		
3.	958 pcs	Roof mounting material for standard roof tile, – type 1		
4.	64 pcs	Roof mounting material for duo hanger bolt (DHB)		
5.	66 pcs	Roof mounting material for standard roof tile, – type 2		
6.	32 pcs	Roof mounting material for cement asbestos roof tile		
7.	44 pcs	Lifting Large Module FPC – type C		
8.	76 sets	Hydronic basic set for FPC module's, copper piping		

9.	12 sets	Hydronic basic set for FPC module's, corrugated pipe - type 1		
10.	8 sets	Hydronic basic set for FPC module's, corrugated pipe – type 2		
11.	351 sets	Hydraulic expansion set		
12.	146 pcs	Solar air vents		
13.	52 pcs	Line control valve, - type 1		
14.	2 pcs	Line control valve, - type 2		
15.	1 pc	Solar control unit for solar systems		
16.	31 sets	Solar control unit for mid-sized to complex solar systems		
17.	3 sets	Solar control unit for multi-tank and complex solar systems		
18.	37 pcs	Protection for the outdoor sensor		
19.	37 pcs	Versatile temperature sensor, - type 1		
20.	78 pcs	Versatile temperature sensor, - type 2		
21.	115 pcs	Sensor pockets for control thermostat		
22.	Consisting of:	Membrane-pressure expansion tanks for Solar system		
22.1.	7 pcs	Membrane-pressure expansion tank, - type 1		

22.2.	4 pcs	Membrane-pressure expansion tank, - type 2		
22.3.	8 pcs	Membrane-pressure expansion tank, - type 3		
22.4.	1 pc	Membrane-pressure expansion tank, - type 4		
22.5.	10 pcs	Membrane-pressure expansion tank, - type 5		
22.6.	3 pcs	Membrane-pressure expansion tank, - type 6		
22.7.	1 pc	Membrane-pressure expansion tank, - type 7		
22.8.	3 pcs	Membrane-pressure expansion tank, - type 8		
23.	Consisting of:	Solar stations with flow meter		
23.1.	26 sets	Solar station with flow meter - type 1		
23.2.	5 sets	Solar station with flow meter - type 2		
24.	2 sets	Solar stations with sensor and control unit		
25.	4 sets	Solar stations for large system		
26.	3 pcs	Sensor module		
27.	3 pcs	Multifunctional valve		

28.	18 sets	Secondary pump group for Hot Water		
29.	3 pcs	Anti-stagnation unit with fan and 3-way motor switch valve		
30.	1 pc	Anti-stagnation unit - type 1		
31.	1 pc	Anti-stagnation unit - type 2		
32.	Consisting of:	Solar hot water tank, enamelled		
32.1.	8 pcs	Capacity 500 lit		
32.2.	8 pcs	Capacity 750 lit		
33.	Consisting of:	Electrical heating element for enamelled boiler		
33.1	2 pcs	Electric heating element 3.75 kw		
33.2	12 pcs	Electric heating element 6 kw		
33.3	10 pcs	Electric heating element 9 kw		
34.	Consisting of:	Combined tank for DHW (Domestic Hot Water)		
34.1	7 pcs	DHW tank, capacity 1,5 m ³		
35.	Consisting of:	Multifunctional stratified tank for DHW (Domestic Hot Water)		
35.1	4 pcs	DHW tank, capacity 1,0 m ³		
35.2	2 pcs	DHW tank, capacity 2,0 m ³		

35.3	4 pcs	DHW tank, capacity 3,0 m ³		
35.4	3 pcs	DHW tank, capacity 4,0 m ³		
35.5	1 pc	DHW tank, capacity 5,0 m ³		
36.	Consisting of:	Spherical exchanger for solar stratified tank		
36.1.	5 pcs	Spherical exchanger, capacity 68 lit		
37.	Consisting of:	Solar fresh water tank		
37.1	1 pc	Tank, horizontal, capacity 2m ³ – type 1		
37.2	2 pcs	Tank, horizontal, capacity 2m ³ – type 2		
37.3	1 pc	Tank, horizontal, capacity 8 m ³		
37.4	1 pc	Tank, horizontal, capacity 10 m ³		
37.5	1 pc	Tank, vertical, capacity 1m ³ – type 1		
37.6	2 pcs	Tank, vertical, capacity 1m ³ – type 2		
37.7	2 pcs	Tank, vertical, capacity 1.5 m ³		
37.8	1 pc	Tank, vertical, capacity 2 m ³ – type 3		
37.9	1 pc	Tank, vertical, capacity 2 m ³ – type 4		

37.10	1 pc	Tank, vertical, capacity 2 m ³ – type 5		
37.11	2 pcs	Tank, vertical, capacity 2 m ³ – type 6		
37.12	2 pcs	Tank, vertical, capacity 2 m ³ – type 7		
37.13	1 pc	Tank, vertical, capacity 3 m ³ – type 1		
37.14	1 pc	Tank, vertical, capacity 3 m ³ – type 2		
37.15	1 pc	Tank, vertical, capacity 3 m ³ – type 3		
38.	5.840 lit	Frost protection anti-freeze concentrate		
39.	4 pcs	Expansion vessel for Solar Fresh Water tank – type 1		
40.	6 pcs	Expansion vessel for Solar Fresh Water tank – type 2		
41.	3 pcs	Expansion vessel for Solar Fresh Water tank – type 3		
42.	10 pcs	Expansion vessel for Solar Fresh Water tank – type 4		
43.	5 pcs	Expansion vessel for Solar Fresh Water tank – type 5		
44.	2 pcs	Expansion vessel for Solar Fresh Water tank – type 6		

45.	7 pcs	Expansion vessel for Solar Fresh Water tank – type 7		
46.	4 pcs	Expansion vessel for Solar Fresh Water tank – type 8		
47.	2 pcs	Expansion vessel for Solar Fresh Water tank – type 9		
48.	3 pcs	Expansion vessel for Solar Fresh Water tank – type 10		
49.	Consisting of:	Circulation pumps for Solar Fresh water tank		
49.1	1 pc	Circulation pump – type 1		
49.2	1 pc	Circulation pump – type 2		
50.	3 pcs	Drain pump		
51.	Consisting of:	Plate heat exchanger		
51.1	1 pc	Plate heat exchanger, capacity 13,3 kW		
51.2	1 pc	Plate heat exchanger, capacity 26,7 kW		
51.3	1 pc	Plate heat exchanger, capacity 53,3 kW		
51.4	2 pcs	Plate heat exchanger, capacity 107 kW		
51.5	2 pcs	Plate heat exchanger, capacity 160 kW		

52.	Consisting of:	Safety valve for solar accumulation tank		
52.1.	18 pcs	Safety valve, R1" – type 1		
52.2.	29 pcs	Safety valve, R1" – type 2		
53.	Consisting of:	Hard copper pipes		
53.1.	305 m	Cu Ø 54,0 x 1,5 mm		
53.2.	245 m	Cu Ø 42,0 x 1,0 mm		
53.3.	322 m	Cu Ø 35,0 x 1,0 mm		
53.4.	911 m	Cu Ø 28,0 x 1,0 mm		
53.5	682 m	Cu Ø 22,0 x 1,0 mm		
53.6	lump sum	Connections, sealing, consumable material, provision for elbows, brackets, anchors, hangers and other consumable materials for ITEM 53 hard copper pipes		
54.	340 m	Double corrugated pipes for Sanitary hot water system DN16		
55.	lump sum	Fittings for 102 m double corrugated pipes, DN 16/22 mm		
56.	210 m	Double corrugated pipes for Sanitary hot water system DN20		
57.	lump sum	Fittings for 63 m double corrugated pipes, DN 20/22 mm		

58.	Consisting of:	PPR pipes for connecting systems of hot and cold fresh water tanks		
58.1.	315 m	PPR 63 x 10,5 mm		
58.2.	65 m	PPR 50 x 8,4 mm		
58.3.	205 m	PPR 50 x 8,4 mm		
58.4.	425 m	PPR 32 x 5,4 mm		
58.5.	65 m	PPR 25 x 4,2 mm		
58.6.	lump sum	Connections, sealing, consumable material, provision for elbows, brackets, anchors, hangers and other consumable materials for ITEM 58 PPR pipes		
59.	Consisting of:	Steel pipes		
59.1.	65 m	Fe 60,3 x 2,9 mm		
59.2.	127m	Fe 48,3 x 2,6 mm		
59.3.	46 m	Fe 33,7 x 2,6 mm		
60.	lump sum	Connections, sealing, consumable material, provision for elbows, brackets, anchors, hangers, acetylene gas, and other consumable materials for ITEM 59 steel pipes		
61.	Consisting of:	Galvanized steel pipes		

61.1.	18 m	Fe-Zn 60,3 x 2,9 mm		
61.2.	67 m	Fe-Zn 48,3 x 2,6 mm		
61.3.	11 m	Fe-Zn 33,7 x 2,6 mm		
61.4	lump sum	Connections, sealing, consumable material, provision for elbows, brackets, anchors, hangers, and other consumable materials for ITEM 61 galvanized steel pipes		
62.	Consisting of:	Insulation for Hard copper pipes		
62.1.	305 m	13 x 054		
62.2.	245 m	13 x 042		
62.3.	322 m	13 x 035		
62.4.	911 m	13 x 028		
62.5.	682 m	13 x 022		
63.	Consisting of:	Insulation for PPR piping		
63.1.	305 m	76/9 – m 305		
63.2.	70 m	60/9 – m 70		
63.3.	100 m	42/9 – m 130		
63.4.	365 m	35/9 – m 365		

63.5.	75 m	28/9 – m 75		
64.	2 pcs	Three-way motor valve		
65.	Consisting of:	Valves on steel and PPR pipes, NP10		
65.1.	70 pcs	R 2"		
65.2.	80 pcs	R 6/4"		
65.3.	1 pc	R 5/4"		
65.4.	80 pcs	R 1"		
65.5.	231 pcs	R 3/4"		
65.6.	27 pcs	R 1/2"		
66.	100 pcs	Thermometer for pipes and tanks		
67.	42 pcs	Manometer 0-10 bar for tanks and pipes		
68.	5 pcs	One-way valve R 6/4"		
69.	1 pc	One-way valve R 1"		
70.	3 pcs	One-way valve R 2"		
71.	3 pcs	Strainers in the set with brass mesh R 2"		
72.	1 pc	Strainers in the set with brass mesh R 1"		

73.	28 m2	Insulation with wool and aluminium sheet coated		
74.	4 pcs	Dismantling and remounting existing tank connections		
75.	1 pc	Dismantling and remounting existing tank 1.200 lit		
76.	2 pcs	Dismantling existing tank 1.500 lit		
77.	7 pcs	Dismantling existing tank 2.000 lit		
78.	6 pcs	Dismantling existing doors		
79.	1 pc	Dismantling existing windows		
80.	2 m3	Removal existing partition wall with floor levelling for boiler positioning		
81.	1 pc	Removal existing concrete structure		
82.	1 pc	Removal of existing wall, door in the archives, and removal of the old tank		
83.	12 pcs	Dismantling and removal old existing tank		
84.	1 pc	Dismantling and removal of old tank, fence and part of pipeline		
85.	1 pc	Dismantling and removal of existing pipeline 2"		
86.	2 m3	Removal of the part of existing wall		

		for entrance of new tank		
87.	3 pcs	Laying of the new tanks in the machine room		
88.	115 kg	Steel profile installation in the building structure		
89.	60 kg	Steel profile installation for reinforcement in the building structure, profiles 70x70x7mm		
90.	65 kg	Steel box profile installation in the roof structure, - type 1		
91.	90 kg	Steel box profile installation in the roof structure, - type 2		
92.	1.030 kg	Steel box profile installation in the roof structure, - type 3		
93.	80 pcs	Steel saddle reinforcement profile installation in the building structure		
94.	2.100 kg	Steel IP-profile installation in the building structure, profiles 200x200x8 mm, total length: 120 m		
95.	70 kg	Steel plates installation in the building structure		
96.	7.000 kg	Steel box profile installation for FPC substructure		
97.	31 kg	Steel box profile installation in the building structure		
98.	13 m2	Metal wall panel in the building structure		

99.	1 m3	Levelling the final layer of the floor in the existing building structure		
100.	570 kg	Processing and installation of Steel box profile 30x40x2 mm		
101.	540 kg	Steel box profile 100x100x3 mm		
102.	450 kg	Steel box profile 180x80x5 mm		
103.	1 pc	Light fuel boiler capacity 80-120 kW		
104.	1 pc	Contact thermostat for the Boiler – type 1		
105.	1 pc	Contact thermostat for the Boiler – type 2		
106.	1 pc	Two-stage with servo motor light oil burner		
107.	1 pc	Circulation pump – type 1		
108.	1 pc	Circulation pump – type 2		
109.	1 pc	Expansion vessel		
110.	1 pc	Safety valve		
111.	Consisting of:	Stop valve with counter flanges, screws and other elements		
111.1.	2 pcs	DN80 PN16		
111.2.	4 pcs	DN50 PN16		

111.3.	4 pcs	DN25 PN16		
111.4.	2 pcs	DN15 PN16		
112.	Consisting of:	Stop valve with counter flanges, screws and other elements		
112.1.	3 pcs	DN50 PN16		
112.2.	2 pcs	DN20 PN16		
113.	Consisting of:	Stop valve		
113.1.	2 pcs	R6/4", NP16		
113.2.	1 pc	R1", NP16		
114.	1 pc	Balancing valve		
115.	1 pc	Strainer		
116.	1 pc	One-way valve		
117.	1 pc	Insulated Gas flue duct		
118.	Consisting of:	Dismantling existing valves		
118.1.	2 pcs	DN80 PN16		
118.2.	4 pcs	DN25 PN16		
119.	1 pc	Dismantling pressure regulator		
120.	3 pcs	Stop valve dimensions: DN32 PN16		

121.	1 pc	Inlet-outlet connection of light oil		
122.	4 m	Flexible pipes the dimensions G3 / 8 "		
123.	1 pc	Separator of gas and air dimensions DN40 / 25		
124.	Consisting of:	Steel pipes		
124.1.	4 m	R 1/2" - Ø 21,3 x 2,0 mm		
124.2.	24 m	R 1" - Ø 33,7 x 2,6 mm		
124.3.	12 m	R 6/4" - Ø 48,3 x 2,6 mm		
124.4.	28 m	R 2" - Ø 60,3 x 2,9 mm		
125.	Lump sum	Connections, sealing, consumable material, provision for elbows, brackets, anchors, hangers, acetylene gas, and other consumable materials for ITEM 124 steel pipes		
126.	42 m	Steel pipes for light oil fuel pipeline Dimension: R 5/4" - Ø 42,4 x 2,6 mm		
127.	16 m2	Insulation of pipes		
128.	2 pcs	Vent pots		
129.	2 pcs	Thermometer		
130.	2 pcs	Manometer		
131.	2.5 m3	Concrete MB30		

132.	1 pc	Dismantling - re-mounting barriers		
133.	1 pc	Dismantling - re-mounting barriers and existing vessel		
134.	Consisting of:	SWITCH GEAR CABINETS Cabinet dimensions:		
134.1.	29 pcs	300x300x200 mm		
134.2.	3 pcs	400x300x200 mm		
134.3.	3 pcs	600x500x200 mm		
		ELECTRICAL EQUIPMENT		
134.4.	31 pcs	Main cam switch 1P, 16A, door mounted		
134.5.	1 pc	Main cam switch 3P, 16A, door mounted		

134.6.	3 pcs	Main cam switch 3P, 25A, door mounted		
134.7.	61 pcs	Command cam switch MAN-OFF-AUT, door mounted, connection:10-51-U		
134.8.	2 pcs	Command cam switch MAN-OFF-AUT, door mounted, connection:16-90-U		
134.9.	61 pcs	Light indicator, green colour, 230Vac, 1,2W, door mounted		
134.10.	61 pcs	Three pole motor contactor, AC3, 230Vac, 10A, auxiliary contacts 1NC+1NO		
134.11.	48 pcs	Three pole thermal protection with adjustable range 0,18-0,27A		
134.12.	1 pc	Three pole thermal protection with adjustable range 0,2-0,6A		
134.13.	1 pc	Three pole thermal protection with adjustable range 0,4-0,6A		

134.14.	2 pcs	Three pole thermal protection with adjustable range 0,8-1,2A		
134.15.	1 pc	Three pole thermal protection with adjustable range 0,63-1A		
134.16.	2 pcs	Three pole thermal protection with adjustable range 1-1,4A		
134.17.	2 pcs	Three pole thermal protection with adjustable range 1,2-1,8A		
134.18.	4 pcs	Three pole thermal protection with adjustable range 2,4-4A		
134.19.	131 pcs	Automatic circuit breaker, C6, 1P, 10A, 6kA, mounting on the DIN Bar (EN50022)		
134.20.	3 pcs	Automatic circuit breaker, C10, 1P, 10A, 6kA, mounting on the DIN Bar (EN50022)		
134.21.	1 pc	Automatic circuit breaker, C16, 3P, 16A, 6kA, mounting on the DIN Bar (EN50022)		

135.	Consisting of:	INSTALLATION CABLES		
135.1.	1.015 m	NHXHX-J 3x1,5mm2		
135.2.	115 m	NHXHX-J 3x2,5mm2		
135.3.	395 m	NHXHX-J 3x4mm2		
135.4.	55 m	NHXHX-J 5x2,5mm2		
135.5.	130 m	NHXHX-J 5x4mm2		
136.	42 kg	STEEL PROFILES		
137.	315 pcs	CROSS JOINTS		

138.	1.400 m	EQUIPOTENTIAL BONDING		
139.	292 pcs	GALVANIC CONNECTIONS		
140.	40 pcs	BRIDGING GALVANIC CONNECTIONS		
141.	20 pcs	GALVANIC CONNECTIONS of Al sheet		
142.	435 m	CABLE TRAYS		
Training	Lump sum			
			TOTAL	