



**ETELÄ-KARJALAN JÄTEHUOLTO OY DRY DIGESTION FACILITY AND
BIOGAS UPGRADING AND FILLING STATION DESIGN AND TURN-
KEY CONTRACT**

INSTALLATION WORK AGREEMENT

25.05.2018



Installation work agreement

Purchaser:	
Contractor:	
Subject of the installation/contract:	
Order code:	
Project no.:	
Delivery terms and time:	
Contract terms:	
Purchaser's installation supervisor:	
Purchaser's contact person, contractual matters:	
Contractor's installation supervisor:	
Contractor's contact person, contractual matters	



		Procures		Finances	
		Purchaser	Contractor	Purchaser	Contractor
1	INSTALLATION STAFF		X		X
1.1	Supervisor/manager		X		X
1.2	Skilled labour including tools		X		X
1.3	Unskilled labour		X		X
1.4	Official inspectors		X		X
1.5	Travel expenses for suppliers per- sonnel		X		X
1.6	Daily allowances		X		X
1.7	Accommodation		X		X
1.8	Training officer		X		X
2	SITE FACILITIES				
2.1	Office units m ²		X		X
2.2	Office furniture		X		X
2.3	Telephone		X		X
2.4	Telecommunication charges		X		X
2.5	Internet connection and payment		X		X
2.6	Copying machine		X		X
2.7	Heated indoor storage m ²				
2.8	Covered storage m ²		X		X
2.9	Furniture (such as shelves) 2.7 and 2.8		X		X
2.10	Appropriate outdoor storage ar- ea m ²		X		X
2.11	Cleaning of Offices, locker rooms and canteen		X		X
2.12	Parking lot		X		X
2.13	Site layout		X		X
2.14	Site work plan		X		X



		Procures		Finances	
		Purchaser	Contractor	Purchaser	Contractor
3	CIVIL ENGINEERING WORK				
3.1	Foundations		X		
3.2	Grouting				
3.3	- completion		X		X
3.4	- inspection	X	X	X	X
3.5	Drilling and chasing of holes		X		X
3.6	Anchor bolt holes		X		X
3.7	Accessing openings and preliminary covers		X		X
3.8	Safety covering of openings after use		X		X
3.9	Location measures and benchmarks		X		X
3.10	Anchoring positions for temporary lifting and pulling equipment during installation		X		X
3.11	Inserts/joints in concrete				
3.12	- manufacturing		X		X
3.13	- installation		X		X
3.14	- inspection	X	X	X	X
4	TRANSPORT AND STORAGE				
4.1	For Machines and equipment - marking of goods		X		X
4.2	- packaging		X		X
4.3	- freight		X		X
4.4	- forwarding		X		X
4.5	- customs clearance		X		X
4.6	Freight for erection equipment		X		X
4.7	Receipt of arriving materials before works start at site		X		X
4.8	Warehouse management and responsibility for goods		X		X
4.9	Tarpaulins		X		X
4.10	Offloading from transport		X		X
4.11	Transport to intermediate storage		X		X
4.12	Transport and transfer to the installation location		X		X
4.13	Road maintenance and snow clearing at the warehouse and installation area	X		X	



		Procures		Finances	
		Purchaser	Contractor	Purchaser	Contractor
5	TOOLS AND SUPPLIES				
5.1	Overhead cranes + operator		X		X
5.2	Cranes, lift-trucks + operator		X		X
5.3	Special tools		X		X
5.4	Welding and cutting gases		X		X
5.5	Welding equipment and consumables		X		X
5.6	Metal-framed scaffolding		X		X
5.7	Electricity: 3-phase, 400 V 50 Hz max. _____ kW	X		X	
5.8	Electricity: 1-phase, 220...240 V 50 Hz max. _____ kW	X		X	
5.9	Main site substations 1 unit	X		X	
5.10	Electricity distribution panels X units		X		X
5.11	Extension and connection cables with outlets		X		X
5.12	Compressed air m ³ /s, 7.0 bar		X		X
5.13	Instrument air m ³ /s, 7.0 bar		X		X
5.14	Water	X		X	
5.15	Pressure-test water 5 °C	X		X	
5.16	Hoses for compressed air and water		X		X
5.17	Cleaning agents		X		X
5.18	Steam		X		X
5.19	Lubricants		X		X
5.20	Cleaning of lubrication systems		X		X
5.21	First fill of lubricants		X		X
5.22	Cleaning of the hydraulic systems		X		X
5.23	Hydraulic fluids		X		X
5.24	First fill of hydraulic systems		X		X
5.25	Flushing oils		X		X
6	INSURANCES				
6.1	Property insurance, delivered equipment and material (all risks)		X		X
6.2	Transporting insurance		X		X
6.3	Property insurance for installation machines, equipment and tools (all risks)		X		X
6.4	Transporting insurance		X		X
6.5	Installation and worksite insurance during the construction up to (contract value) EUR		X		X
6.6	Operational third-party insurance up to 1 million EUR		X		X



6.7	Legally required insurances for installation personnel		X		X
7	GENERAL				
7.1	Erection area heating to X °C		X		X
7.2	Cleaning of construction area		X		X
7.3	Waste container management to platforms		X		X
7.4	Waste platform management	X		X	
7.5	Disposal of hazardous waste		X		X
7.6	Purchaser safety training at the processing centre's area 1 h/person	X		X	
7.7	Safety equipment		X		X
7.8	Personal protective gear		X		X
7.9	First aid equipment		X		X
7.10	Permission to conduct flame works	X	X	X	X
7.11	Flame works card		X		X
7.12	Protection surroundings of work place		X		X
7.13	Firefighting equipment		X		X
7.14	Fire guarding, general	X		X	
7.15	Work place fire guarding		X		X
7.16	Fire guarding after working hours, 2 h		X		X
7.17	Plant security guarding	X		X	
7.18	General lighting	X		X	
7.19	Work place lighting		X		X
7.20	X-ray tests, protection		X		X
7.21	Leakage and pressure tests		X		X
7.22	Pressure vessel commissioning inspection		X		X
7.23	Electricity commissioning inspection		X		X
7.24	Patch painting		X		X
7.25	Finish painting		X		X
7.26	Cleaning of welding seems		X		X
7.27	Cleaning of pipework and systems		X		X



	Procures		Finances	
	Purchaser	Contractor	Purchaser	Contractor
8 MISCELLANEOUS				
8.1 Mechanical installation		X		X
8.2 Electrical installation		X		X
8.3 Instrument installation		X		X
8.4 Installation inspection	X	X	X	X
9 COMMISSIONING AND START-UP				
9.1 Mechanical inspections		X		X
9.2 Dry test runs		X		X
9.3 Wet test runs		X		X
9.4 Commissioning inspections for instruments		X		X
9.5 Manufacturer's specialists for start-up of equipment		X		X
9.6 Procurement/transfer of seed for biogas reactors		X		X
9.7 Preparing of start-up plan for biogas reactors		X		X
9.8 Operation of biogas reactor during start-up		X		X
10 GUARANTEE TESTS				
10.1 Supervision of guarantee tests	X	X	X	X
10.2 Recording the protocols during final acceptance test		X		X
10.3 Reporting on guarantee tests		X		X
10.4 Compiling guarantee test protocol		X		X
10.5 Sampling of odorous gases (external laboratory)		X		X
10.6 Sampling (except odorous gases)		X		X
10.7 Analysing samples		X		X