Customer and Regulatory Requirement	System Requirement	Verification Method	Verification Criteria
	5.4.3.1		Make sure supplier guarantees a MTTF > 1 year
	5.3.3.1	Contact supplier	Make sure supplier guarantees a MTTF > 5 years
1.1	5.2.3.1		Make sure supplier guarantees a MTTF > 1 year
	4.5.1	Calculate the price of sub-systems	Verify that total price will be lower than or equal to 8MNOK
	5.1.5.1	Contact supplier	Verify that the annual cost will be lower than or equal to 30kNOK
	5.1.5.2	Calculate the price of sub-systems	Verify that total price will be lower than or equal to 50kNOK
	5.2.5.1	Contact supplier	Verify that total price will be lower than or equal to 3MNOK
	5.3.5.1	Contact supplier	Verify that total price will be lower than or equal to 1.8MNOK
	5.3.5.2	Contact supplier	Verify that total price will be lower than or equal to 1.3MNOK
	5.3.5.3	Calculate the price of sub-systems	Verify that total price will be lower than or equal to 3.3MNOK
	5.4.5.1	Contact supplier	Verify that total price will be lower than or equal to 1.4MNOK
1.2	6.1.5.1	Contact supplier	Verify that total price will be lower than or equal to 50kNOK
	5.4.2.1	Connect a microcontroller to heatpump with RS-485 cable, and send data instructions	The heatpump shall turn on and off according to instructions
	5.4.2.2	Connect a microcontroller to heatpump with RS-485 cable, and read metadata	Verify that the heatpump sends metadata over the cable.
	5.4.4.1	Turn on heatpump and measure rated heat output	The rated heat output shall be larger than 67 kW
	5.4.4.2	Turn on heatpump and measure rated heat removal output	The rated heat removal output shall be larger than 20kW
	5.4.4.3	Measure heat energy ratio when -7 °C outside	Verify that ratio is larger than 1:3.1
	5.4.4.4	Measure heat energy ratio when 2 °C outside	Verify that ratio is larger than 1:3.6
	5.4.4.5	Measure heat energy ratio when 7 °C outside	Verify that ratio is larger than 1:4
	5.4.4.6	Measure heat energy ratio when 12 degrees C outside	Verify that ratio is larger than 1:4.3
	5.4.4.7	Measure cooling energy rato when outdoor temperature is -7 °C Measure cooling energy rato when outdoor temperature is 12 °C	Verify that ratio is larger than 1:4
	5.4.4.8	Turn on heathump in -10C and measure the rated heat output	The rated heat output shall be larger than 67 kW
	6.1.2.6		
	6.1.2.7	Send change temperature signal to control unit for different aparements and rooms.	Verify temperature in apartement and rooms matches the signal sent
	6.1.2.8		
	6.1.2.9		
	5.2.3.2		
	5.3.3.2		
	5.4.3.2		
	6.1.3.4		
	6.2.3.4	Fabricate faults and have maintenance search and repair the faults while taking the time	Verify that the components can be repaired within the set timelimit
	6.3.3.4		
	6.4.3.4		
	6.5.3.2		
	6.6.3.3		
1.4	6.7.3.3		
	6.6.2.5	Do penetration-testing on the server hosting the user interface	
	6.7.2.5	Do penetration-testing on the server hosting the Dev. tools	
1.5	6.1.2.20	Do penetration-testing on the server hosting the MCU	Make sure the penetration does not succeed
	4.4.1		Make sure we achieve 60% self-sustainability
1.6	4.4.2	Simulate energy need and energy production over a year	Make sure we dont throw away more than 1% of the energy produced
	5.1.3.1	Simulate giving the software more than 100kWh energy for selling, and record the decisions made	Confirm the decisions made by the control system does not break the Norwegian regulations
1.7	6.3.1.2	Feed database with dummy data	Make sure all data are anonymized
	5.1.3.2	Simulate 24 hours of system running with dummy production, consumption, storage and price data. Store the results in a log	Confirm in the log that 80% of total power sales was during said power price peak window
	5.1.3.3		Confirm in the log that 80% of total power purchases was during said cheapest power price window
1.8	6.5.4.1 6.5.4.2	Feed the ML software dummy weather data and dummy power price data	Verify the predictions are within set error margins
1.9	6.6.3.1	Gather a test group of different people with varying fields of interests and age. And let them use the website/app to see how fast they learn how to use it.	Verify the slowest people in the test group can meet the required MTTL
2.1			
2.2		See 1.7	