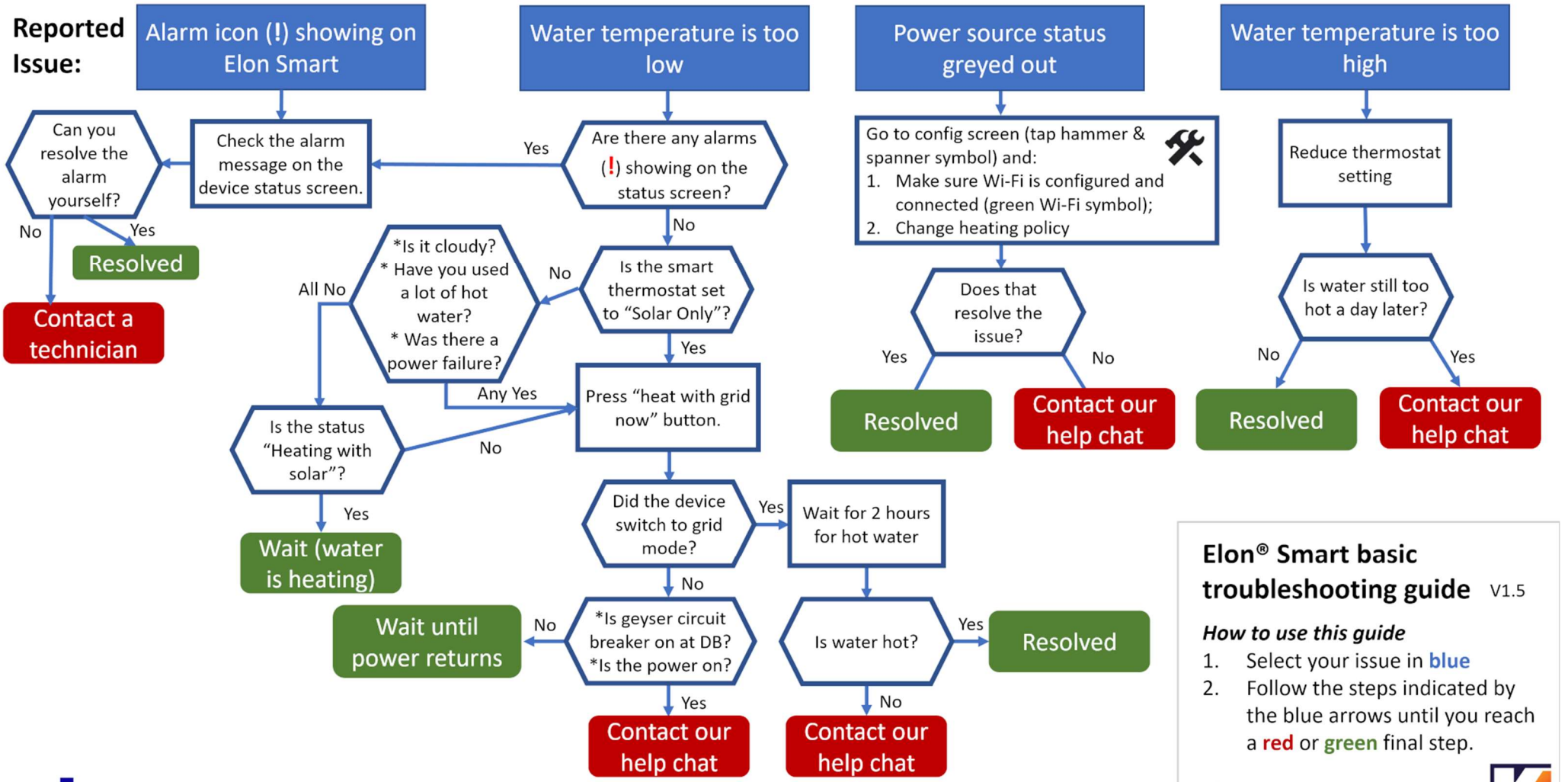
Elon® Smart 1st Line Support Checklist V1.5

STEP 1. COLLECT INFORMATION

Customer Name				
Customer Address				
Date		**Elon® serial no.**		
What is the issue?				
How long have you been experiencing this issue?				
Have you had any power failures recently?				
Have you used more hot water than usual (such as having guests over), or at a different time than usual?				
Has the weather been cloudy or rainy in the last day or two?				
Any alarms? (Indicated with a red exclamation mark ! on the home screen and with an alarm message on the status screen)	**Yes** ☐	**No** ☐	**Alarm message**	
What heating profile is the Elon Smart thermostat set to?				
What are the temperature set points?	**Solar**	**°C**	**Grid**	**°C**
What is the water temperature?				
Do you have the latest version of the Elon Smart app?				
Position of geyser circuit breaker in DB (distribution board) (X)		**On** ☐	**Off** ☐	**Don't know** ☐
Anything else to note?				

STEP 2: TROUBLESHOOTING



Elon® Smart basic troubleshooting guide V1.5

How to use this guide

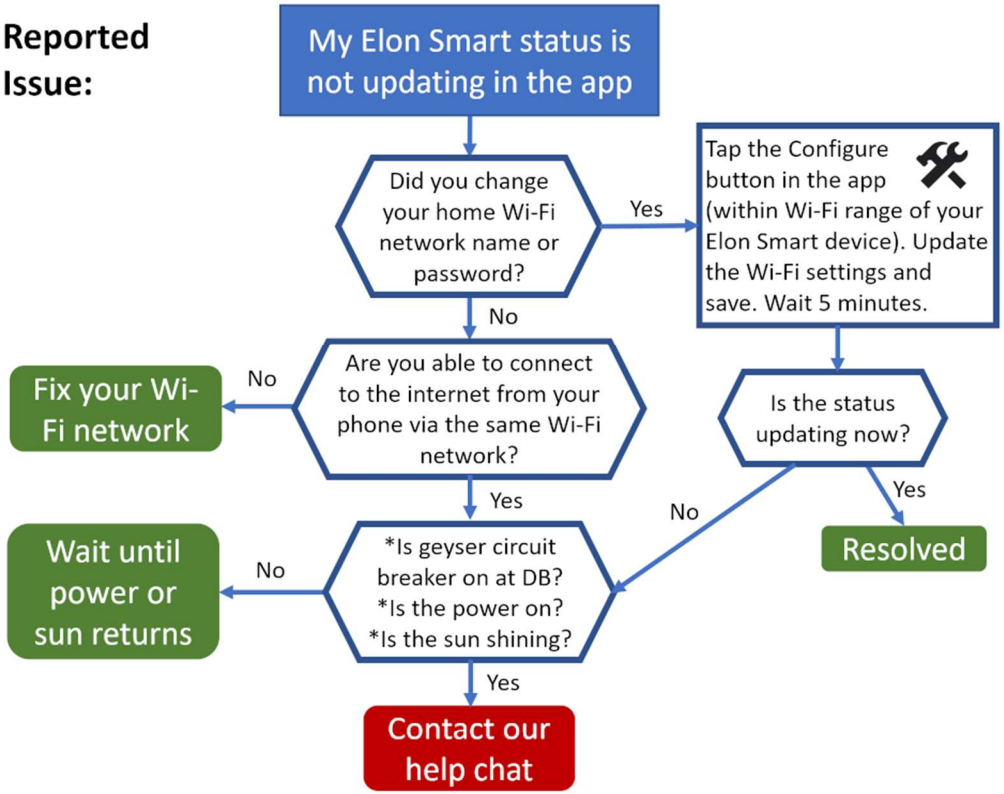
1. Select your issue in **blue**
2. Follow the steps indicated by the blue arrows until you reach a **red** or **green** final step.

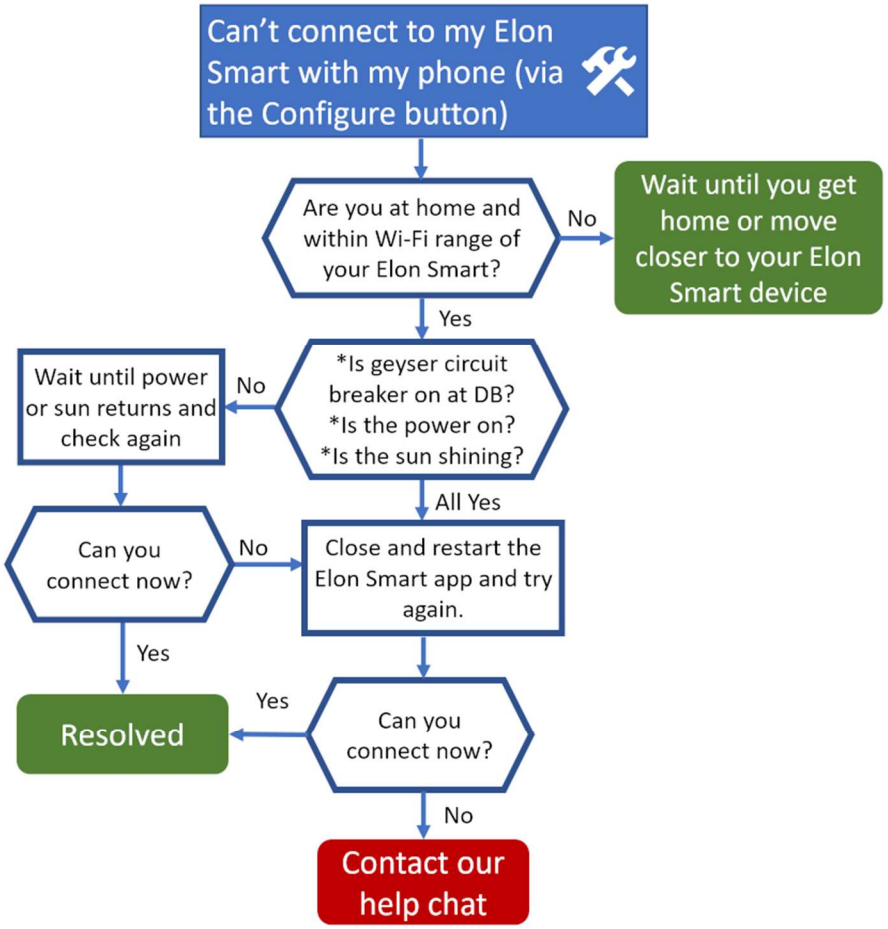
elon SMART HOT WATER SYSTEM

POWEROPTIMAL THE FUTURE OF ENERGY

KWIKOT powered by Haier

Reported Issue:





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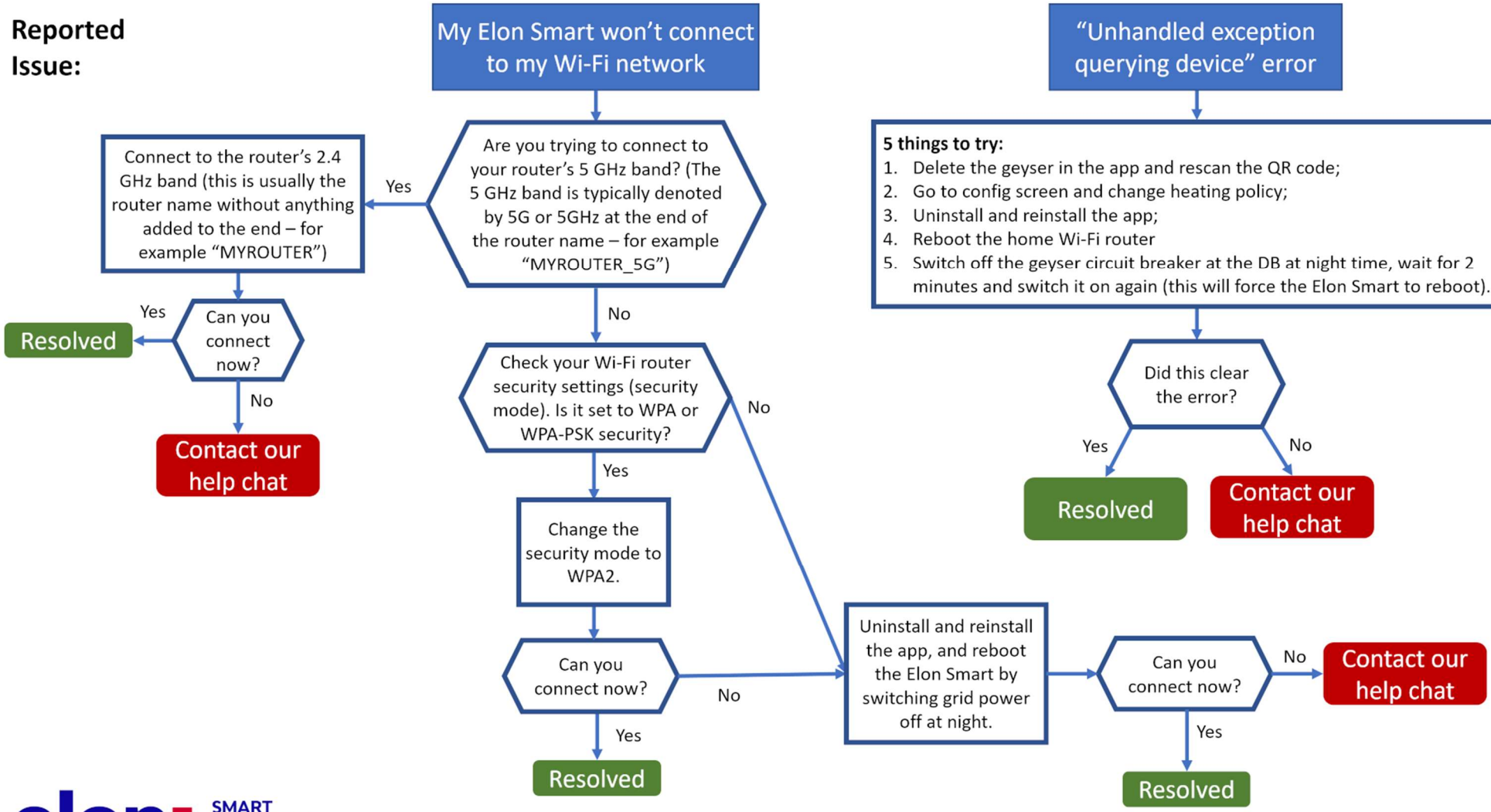
Reported Issue:



elon SMART HOT WATER SYSTEM

Alarm messages on the Elon Smart app

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
0	Element Faulty	Contact your installer / electrician	a. Check that the thermostat is inserted correctly. b. If that does not clear the alarm, measure element resistance and replace if necessary.
1	Switch Failed	Contact technical support	Contact technical support
2	DC Disconnect Failed	Contact technical support	Contact technical support
3	No Power on AC Input	This can be due to several reasons: a. There is no AC power connected to the Elon Smart b. AC power is off at the circuit breaker in the DB board or at the AC isolator close by the Elon Smart unit. c. There is a power failure or loadshedding. This alarm won't prevent the Elon Smart unit from functioning and heating water with solar (DC) power as long as there is solar power available. You can clear the alarm by switching the AC power on (where applicable), setting the Elon Smart heating policy to *Solar Only* (see Table 1.1) or you can leave it until AC power returns.	See to the left
4	Measurement Failure	Contact technical support	Contact technical support
5	Disconnected for Safety	When there is a safety-related alarm condition, the Elon Smart will disconnect power from the geyser. To clear this alarm, you need to clear the other safety-related alarm(s).	See to the left
6	Water Temperature Measurement Failure	Contact technical support	Contact technical support

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
7	Ambient Temperature Exceeded	a. Check the installation. If the geyser is installed in direct sunlight, see if you can provide shade to the geyser end space area where the Elon Smart is located. b. Reduce temperature set point by 5 degrees. c. Wait until temperatures cool down. The Elon Smart will start up again. d. Contact technical support if the above doesn't clear the alarm.	See to the left
8	DC Wiring Insulation Failure	Contact your installer / electrician. To operate the Elon Smart whilst the insulation fault has not been located and resolved, you can set the heating profile to *Grid Only* or switch off the DC disconnect switch.	a. Check solar panels and DC wiring for insulation faults. b. To operate the Elon Smart whilst the insulation fault has not been located and resolved, you can set the heating profile to *Grid Only* or switch off the DC disconnect switch.
9	Insulation Self-Test Failed	Contact your installer / electrician	Check earth wiring. Make sure both earth straps are connected securely to the geyser earth stud.
10	AC Wired to DC Input	Contact your installer / electrician	Wire AC to correct input (see Chapter 4 in the Installation Manual).
11	DC Wired to AC Input	Contact your installer / electrician	Wire DC to correct input (see Chapter 4 in the Installation Manual).

ID	Alarm message	How to resolve the alarm: USERS	How to resolve the alarm: TECHNICIANS / ELECTRICIANS
12	No Power on DC Input	This can be due to several reasons: a. There is no DC power connected to the Elon Smart b. DC power is off at the DC disconnect switch close by the Elon Smart unit. c. There is an issue with the DC wiring or solar PV installation. d. It is extremely dark and overcast during daytime. (The alarm is not active when the sun is less than 15 degrees above the horizon.) This alarm won't prevent the Elon Smart unit from functioning and heating water with grid (AC) power as long as there is grid power available. You can clear the alarm by: i. switching the DC power on (where applicable); ii. setting the Elon Smart heating policy to *Grid Only* (see Table 1.1); iii. leaving it until DC power returns; or iv. contacting your installer / electrician to inspect and fix the DC wiring and/or solar PV installation.	See to the left
13	DC Input Reversed	Contact your installer / electrician.	The wiring on the Solar input has been installed incorrectly (in reverse). The DC+ (positive) wire has been connected to the DC- (negative) terminal on the Elon Smart and the DC- (negative) wire has been connected to the DC+ (positive) terminal on the Elon Smart. Swap the DC wires around (see Chapter 4 in the Installation Manual).
14	Hot Connection	Contact your installer / electrician.	Elon Smart not correctly inserted into geyser element. Switch off all power to the Elon Smart and re-seat (reinsert) the Elon Smart.