



- **Is your solar hot water system sleeping on the JOB ?**
- In this simple study, we compared 2 Surface Power solar hot water systems against an online leading competitors solar hot water system. (same time and all systems located in ROI)
- **Surface Power's MPPTt technology means our solar system gets up before you do !!**

Time - 8:16am

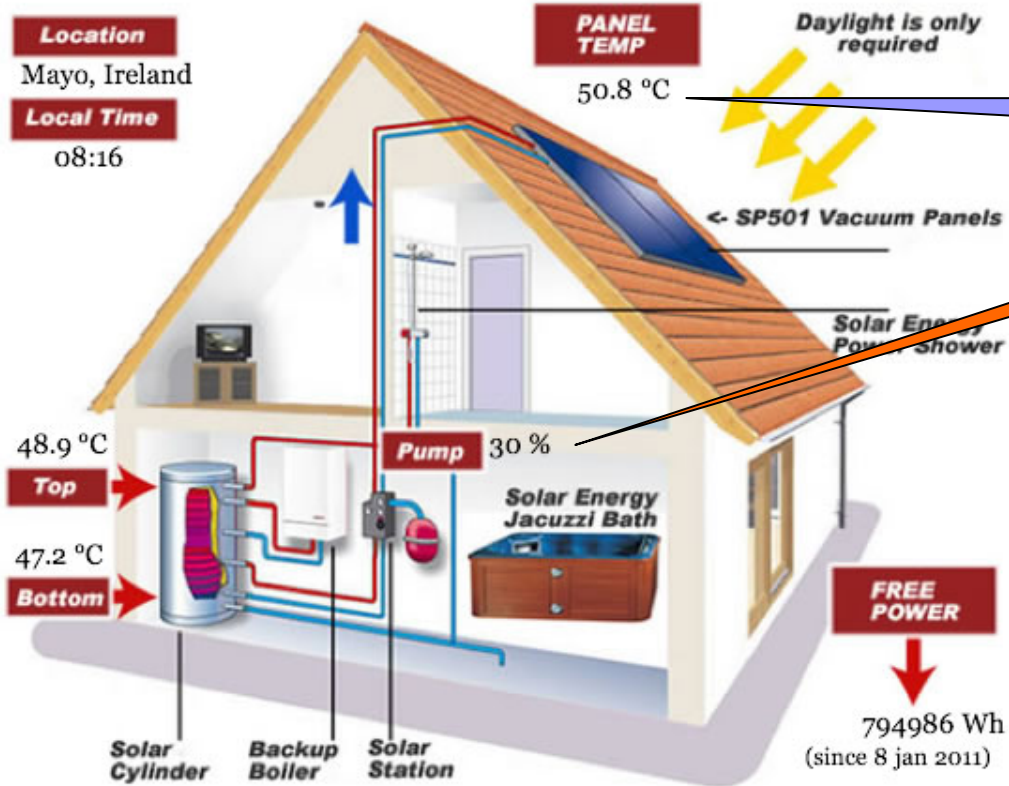


- **System 1 next slide**
- **Surface Power solar system**
- **Collectors at 50.8C**
- **Cylinder at 47.2C**
- **Delta T at 3.6C**
- **SYSTEM GENERATING HEAT**





Location  
Mayo, Ireland  
Local Time  
08:16



SOLAR CONTROL DASHBOARD

Water	Installed
Heating	Installed
Solar Air Conditioning	NOT Installed
Automation	NOT Installed

Local Time	08:16	Pump Speed	30 %
Hot Water Temp	48.9 °C	PPT	Auto
Collector Temp	50.8 °C	TTY	deqiqoizj2
Cylinder Bottom	47.2 °C	Date	20110506
Solar Flow Temp	50.8 °C	Comms	Online
Solar Return Temp	44.9 °C	IP Address	Hidden
		Version	ver 3.11.5

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TIME	08:16	SERVICE	Pump run-time 1605109 s
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Heating Temp

32.3 °C

SOLAR CENTRAL HEATING

Version	ver 3.heat
Heating Temp	32.3 °C
GGY1	Ok
DMX	Ok
Pump 2	Auto
Diagnostics	Ok

SOLAR HOT WATER

Version	ver 3.11.5
Pressure	Ok
TPPT	Auto
Frost	Auto
Pump 1	Auto
Diagnostics	Ok

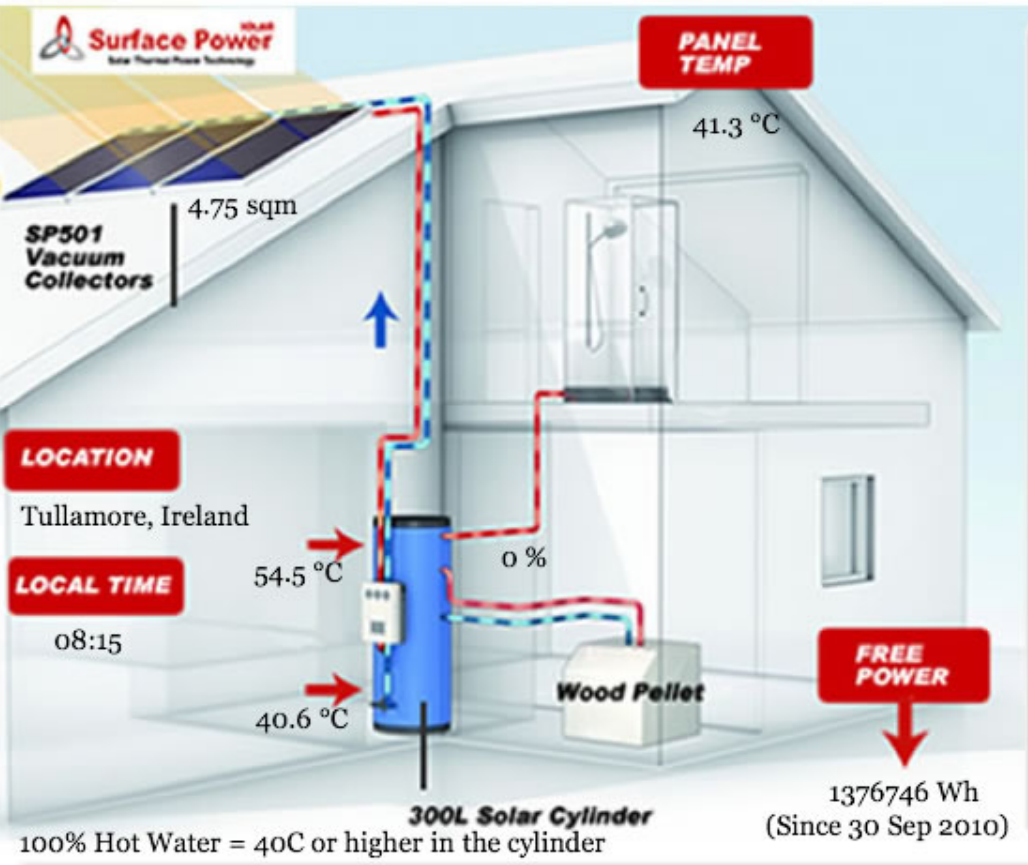
Water Temp

48.9 °C

Time - 8:16am

- **System 2 next slide**
- **Surface Power solar system**
- **Collectors at 41.3C**
- **Cylinder at 40.6C**
- **Delta T at 0.7C**
- **SYSTEM OFF**





SOLAR CONTROL DASHBOARD

Solar Hot Water	Installed
Solar Central Heating	NOT Installed
Solar Air Conditioning	NOT Installed
Solar Refrigeration	NOT Installed

Local Time	08:15	Pump Speed	0 %
Hot Water Temp	54.5 °C	PPT	Auto
Collector Temp	41.3 °C	TTY	iksnei83gb
Cylinder Bottom	40.6 °C	Date	
Solar Flow Temp	41.3 °C	Comms	Online
Solar Return Temp	23.2 °C	IP Address	Hidden
		Version	ver 3.11.5

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<b>TIME</b>	08:15	<b>SERVICE</b>	Pump run-time	1336
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Not Installed

SOLAR CENTRAL HEATING

Version	Not Installed
Heating Temp	0000
GGY1	0000
DMX	0000
Pump 2	0000
Diagnostics	----

SOLAR HOT WATER

Version	ver 3.11.5
Pressure	Ok
TPPT	Auto
Frost	Auto
Pump 1	0 %
Diagnostics	Ok

Water Temp

54.5 °C

Time - 8:16am

System from a  
Leading Competitor

- **System 3 next slide**
- **Market Leading “vacuum” solar system**
- **Collectors at 13C**
- **Cylinder at 34C**
- **Delta T at -21C (minus)**
- **SYSTEM OFF**

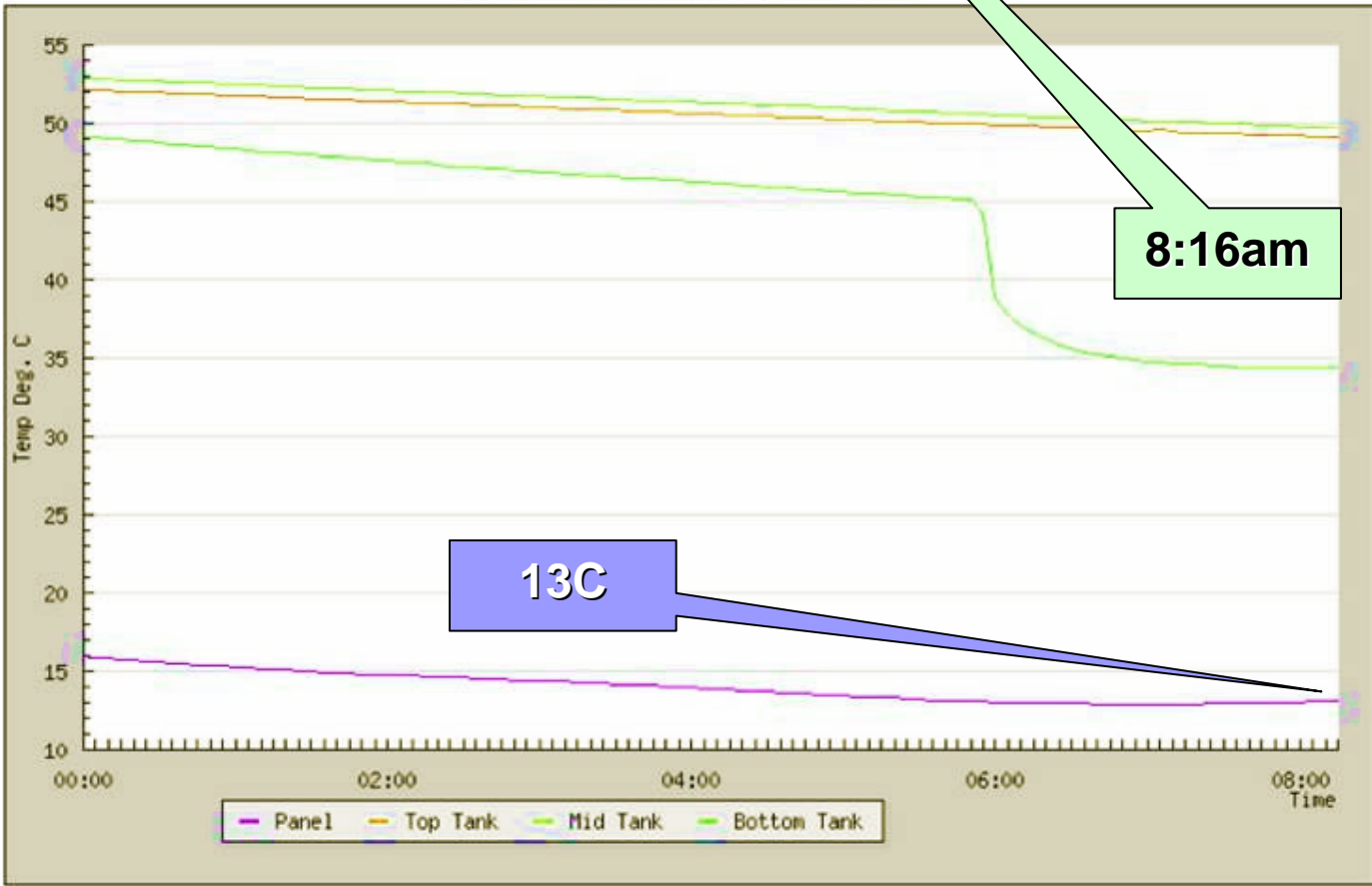




www. ....

Google

Temperature Data for 6-May-2011



8:16am

13C

# Time - 8:25am

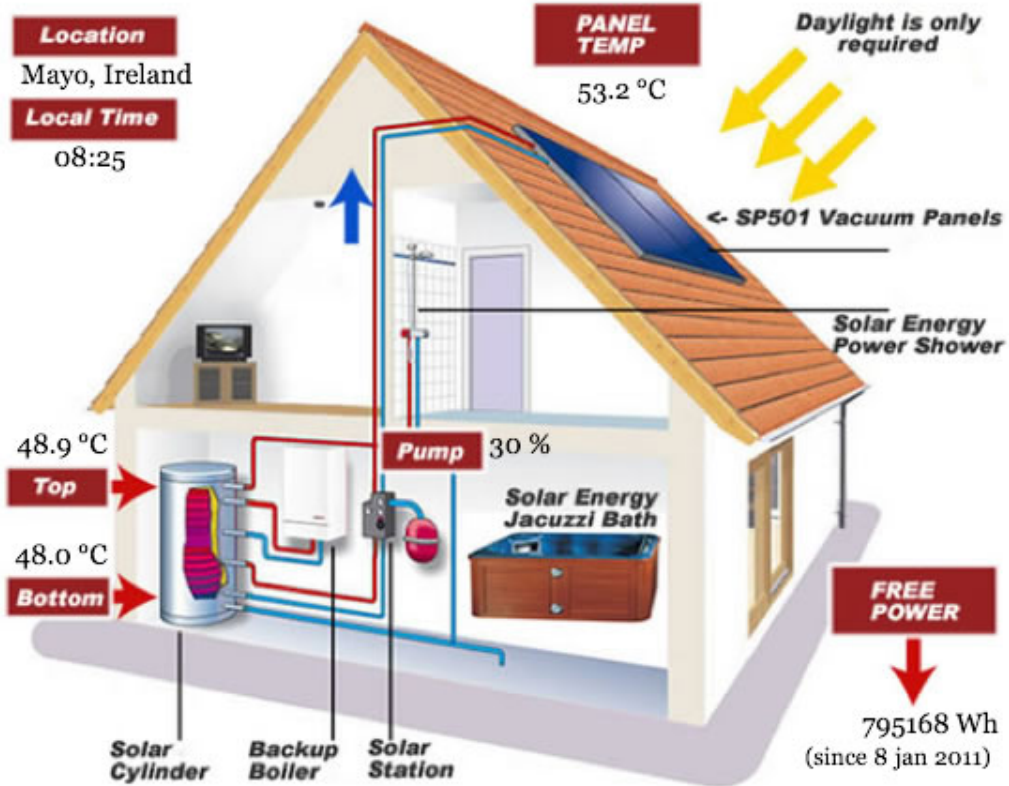
- **System 1 next slide**
- **Surface Power solar system**
- **Collectors at 53.2C**
- **Cylinder at 48C**
- **Delta T at 5.2C**
- **SYSTEM GENERATING HEAT**





**Location**  
Mayo, Ireland

**Local Time**  
08:25



SOLAR CONTROL DASHBOARD

Solar Hot Water	Installed
Solar Central Heating	Installed
Solar Air Conditioning	NOT Installed
Solar Refrigeration	NOT Installed

Local Time	08:25	Pump Speed	30 %
Hot Water Temp	48.9 °C	PPT	Auto
Collector Temp	53.2 °C	TTY	deqiqoiziz
Cylinder Bottom	48.0 °C	Date	20110506
Solar Flow Temp	53.2 °C	Comms	Online
Solar Return Temp	46.4 °C	IP Address	Hidden
		Version	ver 3.11.5

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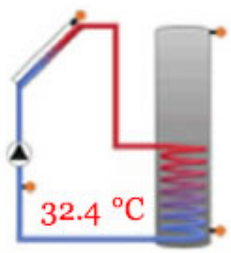
TIME

08:25

SERVICE

Pump run-time 1605698 s

Heating Temp



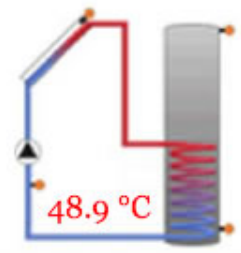
SOLAR CENTRAL HEATING

Version	ver 3.heat
Heating Temp	32.4 °C
GGY1	Ok
DMX	Ok
Pump 2	Auto
Diagnostics	Ok

SOLAR HOT WATER

Version	ver 3.11.5
Pressure	Ok
TPPT	Auto
Frost	Auto
Pump 1	Auto
Diagnostics	Ok

Water Temp

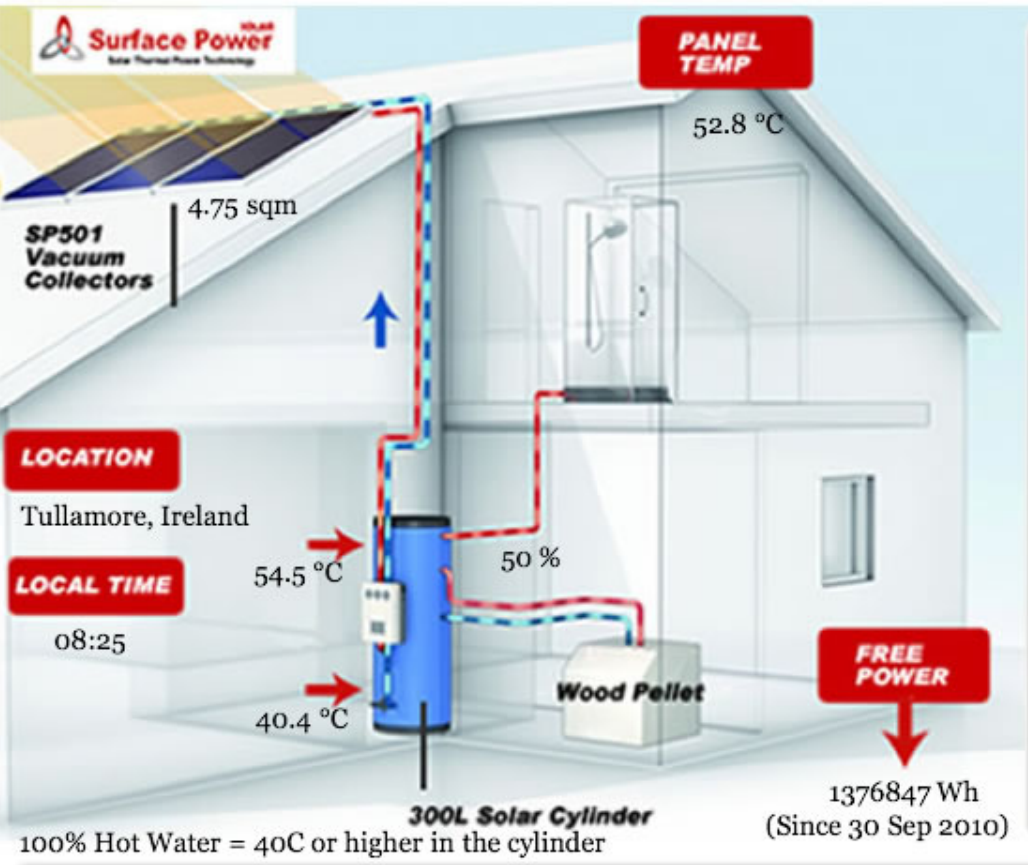


Time - 8:25am



- **System 2 next slide**
- **Surface Power solar system**
- **Collectors at 52.8C**
- **Cylinder at 40.4C**
- **Delta T at 12.4C**
- **SYSTEM GENERATING HEAT**





### SOLAR CONTROL DASHBOARD

Solar Hot Water	Installed
Solar Central Heating	NOT Installed
Solar Air Conditioning	NOT Installed
Solar Refrigeration	NOT Installed

Local Time	08:25	Pump Speed	50 %
Hot Water Temp	54.5 °C	PPT	Auto
Collector Temp	52.8 °C	TTY	iksnei83gb
Cylinder Bottom	40.4 °C	Date	
Solar Flow Temp	52.8 °C	Comms	Online
Solar Return Temp	29.1 °C	IP Address	Hidden
		Version	ver 3.11.5

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#### TIME

08:25

#### SERVICE

Pump run-time 1336

Not Installed



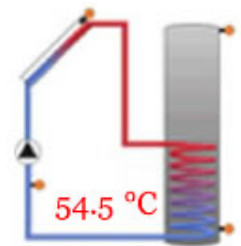
### SOLAR CENTRAL HEATING

Version	Not Installed
Heating Temp	0000
GGY1	0000
DMX	0000
Pump 2	0000
Diagnostics	----

### SOLAR HOT WATER

Version	ver 3.11.5
Pressure	Ok
TPPT	Auto
Frost	Auto
Pump 1	50 %
Diagnostics	Ok

Water Temp

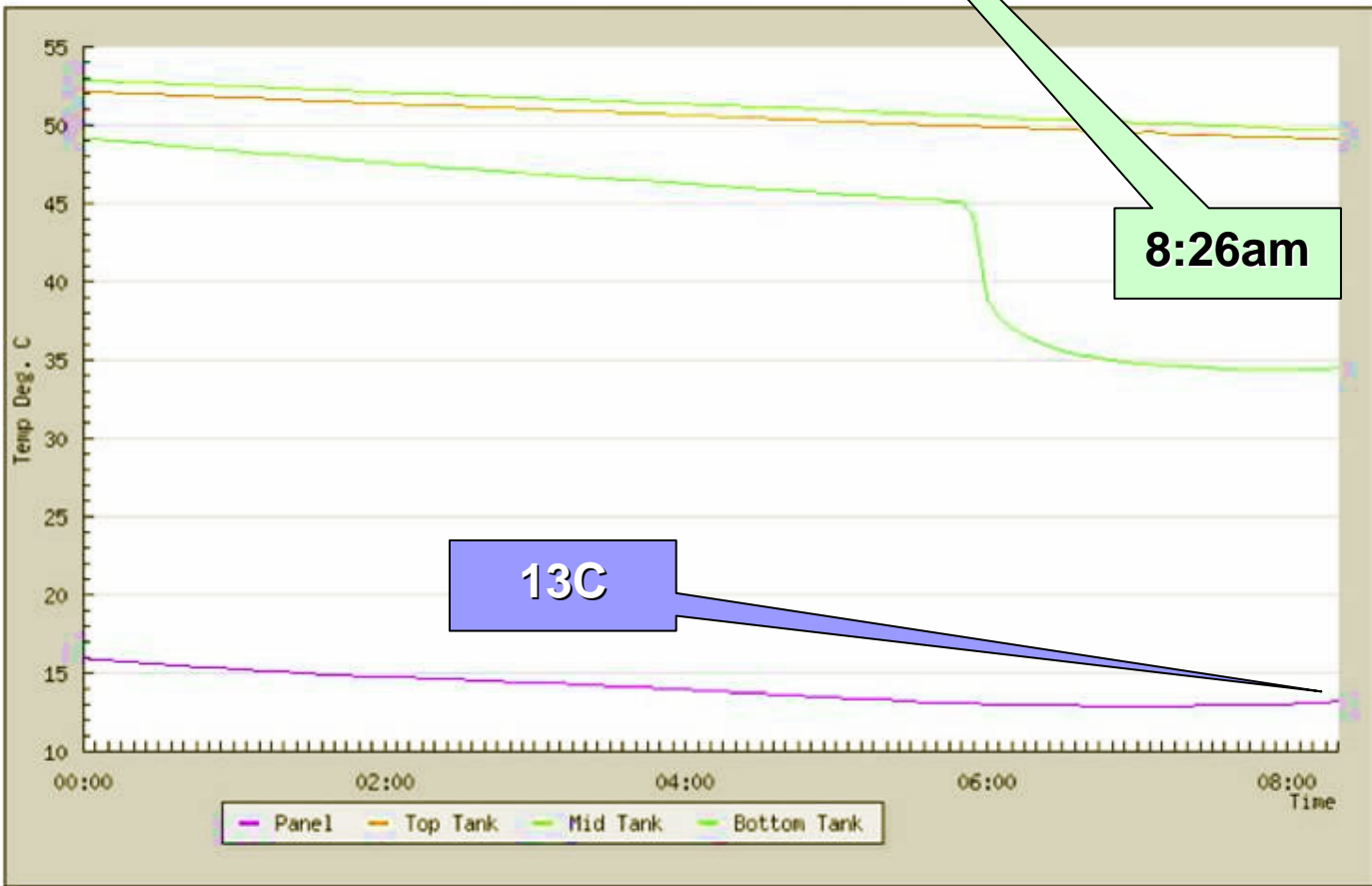


Time - 8:25am

System from a  
Leading Competitor

- **System 3 next slide**
- **Market Leading “vacuum” solar system**
- **Collectors at 13C**
- **Cylinder at 34C**
- **Delta T at -21C (minus)**
- **SYSTEM OFF**





Time - 8:56am



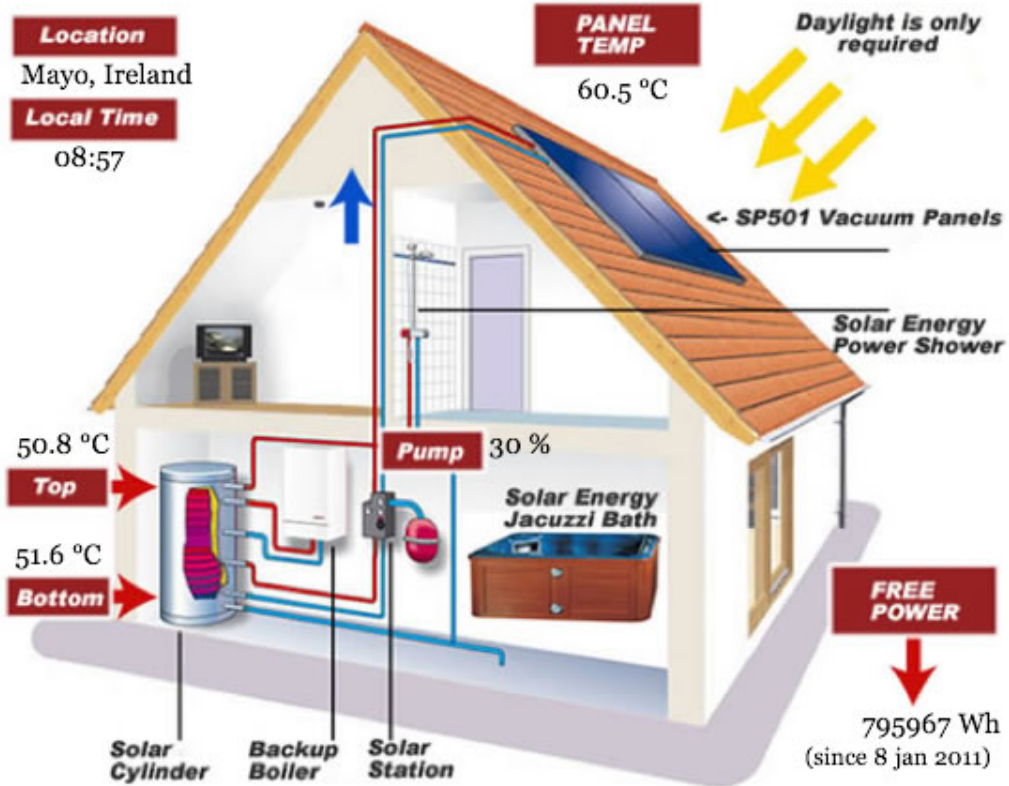
- **System 1 next slide**
- **Surface Power solar system**
- **Collectors at 60.5C**
- **Cylinder at 51.6C**
- **Delta T at 8.9C**
- **SYSTEM GENERATING HEAT**





**Location**  
Mayo, Ireland

**Local Time**  
08:57



SOLAR CONTROL DASHBOARD

Solar Hot Water	Installed
Solar Central Heating	Installed
Solar Air Conditioning	NOT Installed
Solar Refrigeration	NOT Installed

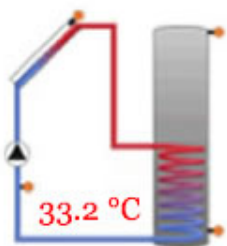
Local Time	08:57	Pump Speed	30 %
Hot Water Temp	50.8 °C	PPT	Auto
Collector Temp	60.5 °C	TTY	deqiqoiziz
Cylinder Bottom	51.6 °C	Date	20110506
Solar Flow Temp	60.5 °C	Comms	Online
Solar Return Temp	50.6 °C	IP Address	Hidden
		Version	ver 3.11.5

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TIME  
08:57

SERVICE  
Pump run-time 1607567 s

Heating Temp



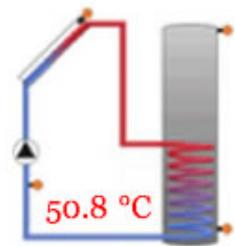
SOLAR CENTRAL HEATING

Version	ver 3.heat
Heating Temp	33.2 °C
GGY1	Ok
DMX	Ok
Pump 2	Auto
Diagnostics	Ok

SOLAR HOT WATER

Version	ver 3.11.5
Pressure	Ok
TPPT	Auto
Frost	Auto
Pump 1	Auto
Diagnostics	Ok

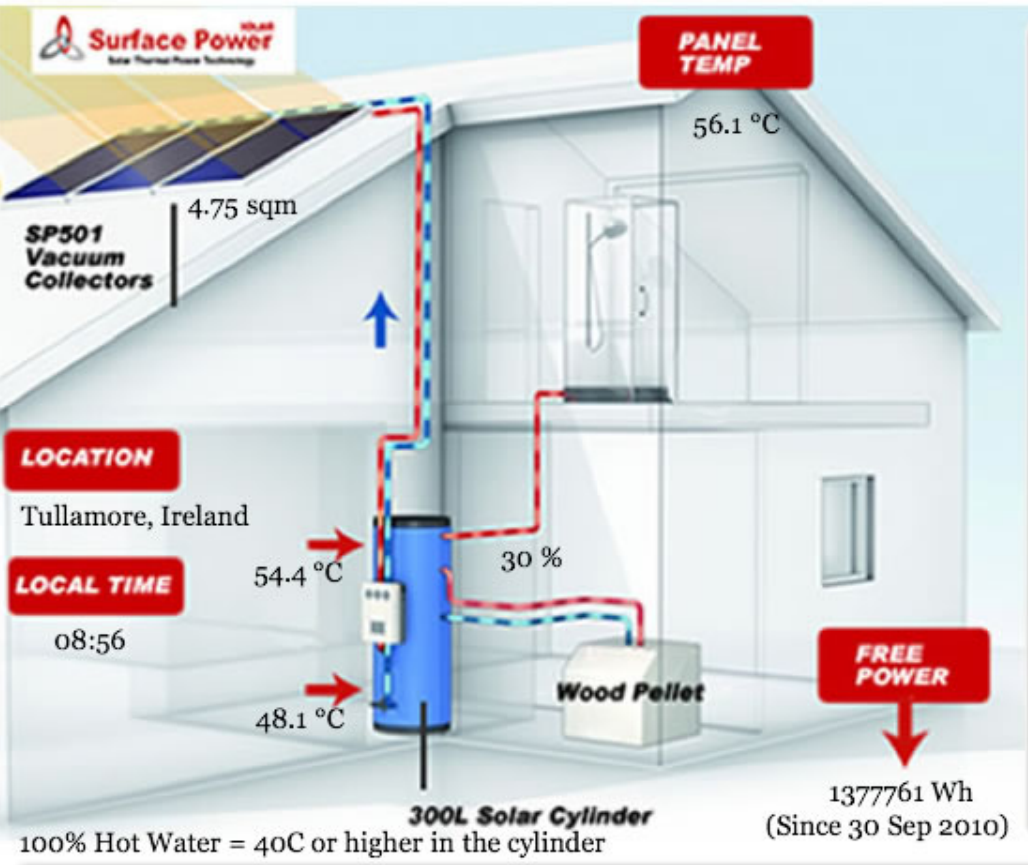
Water Temp



Time - 8:56am

- **System 2 next slide**
- **Surface Power solar system**
- **Collectors at 56.1C**
- **Cylinder at 48.1C**
- **Delta T at 8C**
- **SYSTEM GENERATING HEAT**





### SOLAR CONTROL DASHBOARD

Solar Hot Water	Installed
Solar Central Heating	NOT Installed
Solar Air Conditioning	NOT Installed
Solar Refrigeration	NOT Installed

Local Time	08:56	Pump Speed	30 %
Hot Water Temp	54.4 °C	PPT	Auto
Collector Temp	56.1 °C	TTY	iksnei83gb
Cylinder Bottom	48.1 °C	Date	
Solar Flow Temp	56.1 °C	Comms	Online
Solar Return Temp	45.1 °C	IP Address	Hidden
		Version	ver 3.11.5

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<b>TIME</b>	08:56	<b>SERVICE</b>	Pump run-time	1336
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**Not Installed**

### SOLAR CENTRAL HEATING

Version	Not Installed
Heating Temp	0000
GGY1	0000
DMX	0000
Pump 2	0000
Diagnostics	----

### SOLAR HOT WATER

Version	ver 3.11.5
Pressure	Ok
TPPT	Auto
Frost	Auto
Pump 1	30 %
Diagnostics	Ok

### Water Temp

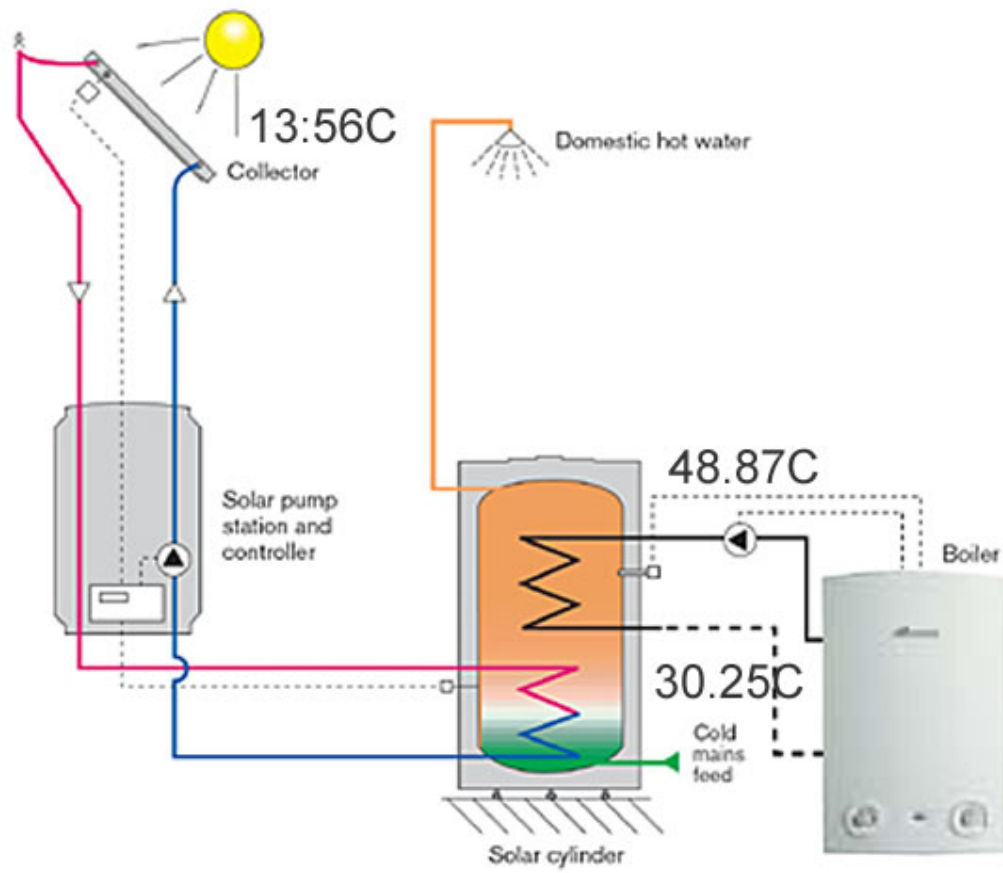
54.4 °C

Time - 8:56am

System from a  
Leading Competitor

- **System 3 next slide**
- **Market Leading “vacuum” solar system**
- **Collectors at 13.56C**
- **Cylinder at 30.25C**
- **Delta T at -16.69C (minus)**
- **SYSTEM OFF**





Temperature Data for 6-May-2011

