PROJECT:

HEAT BATTERIES FOR MONGOLIA

steatit.ru

TRS-HEATER and TRS-WALL heat batteries for yurts and new construction

An efficient and environmentally friendly source of energy

Mongolia's market size

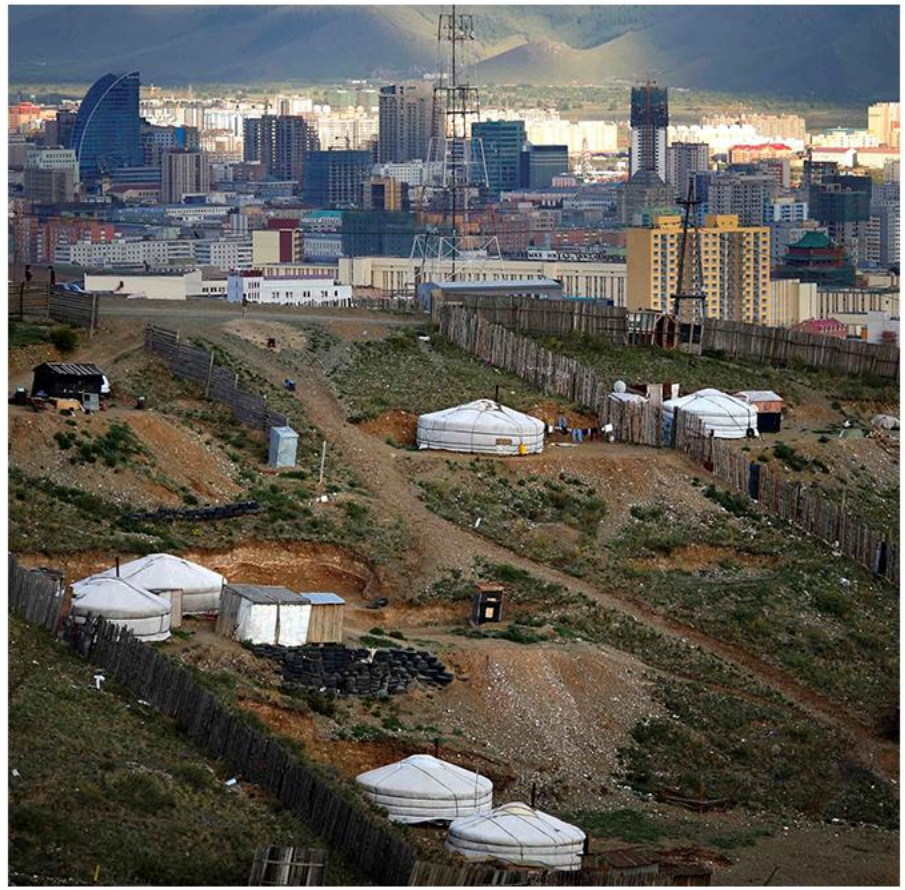
In 2017, Mongolia deployed a National Air and Environmental Pollution Programme with a view to reducing emissions.

The government has recently been offering subsidies for the purchase of greener household stoves. Since January 2017, off-peak night electricity has been free of charge for residents in many areas that have the most pollution.

In Ulan Bator, **350,000 people** live in yurts, **450,000** live in houses that are heated with fossil fuels, such as coal or wood, and only 600,000 live in apartment houses. During the winter months, residents of **200,000 yurts** in Ulan Bator burn over **600,000 tons** of raw coal, which accounts for 80% of the winter air pollution in the city.

TRS-WALL and TRS-HEATER heat batteries with a capacity of 2 to 4 kW can be used in yurts, and up to 9 kW in low-rise buildings, which are planned to be built in Ulan Bator and other cities across Mongolia.

TRS-HEATER uses wood and electricity as its sources of energy. Electricity can be used at night, from the mains or from solar electric batteries. TRS-WALL only uses electricity.



Free off-peak night electricity and solar panels for space heating

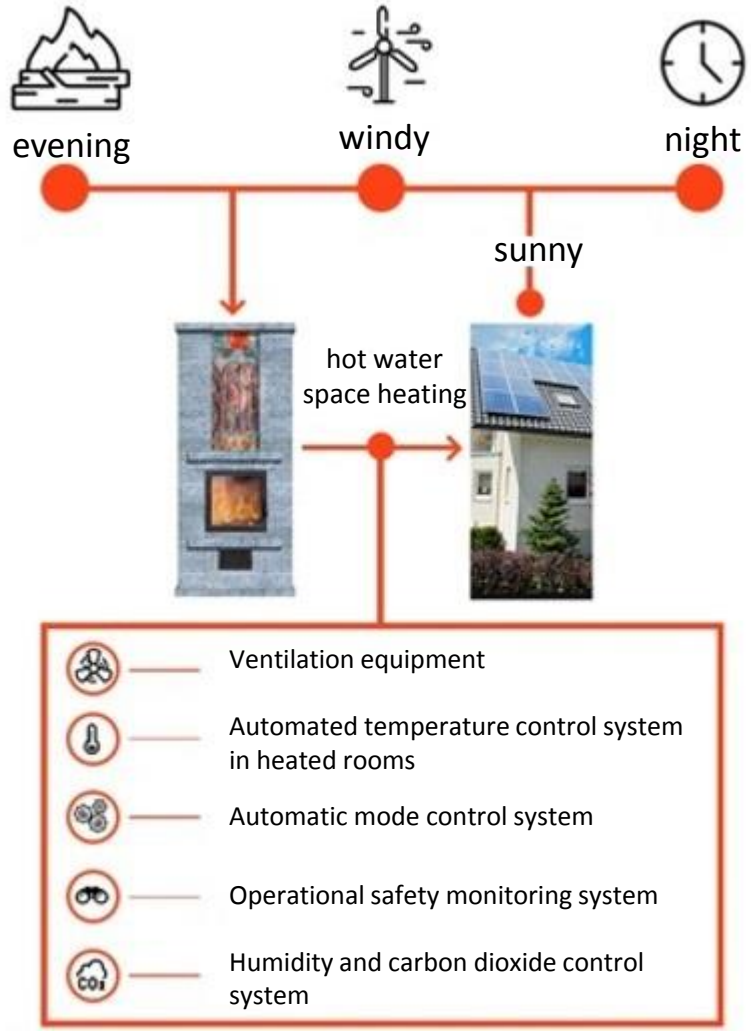
TRS-WALL and TRS-HEATER heat batteries

A space heating solution for one or two-story houses and yurts.

A soapstone heater accumulates heat at night when the electricity price is the cheapest (it's free in Mongolia during the night-time) as well as during the day — from the electricity generated by solar panels and wind turbines.

Soapstone has a high thermal conductivity, heat capacity and heat resistance, and is widely used in efficient masonry heaters in Russia and Scandinavia.

In addition to electricity, TRS-HEATER can use wood as a fuel for space heating.



TRS-HEATERS for yurts use wood and free night-time electricity and solar electricity

25 m² heating area
2 kW heat battery
1.5 kW wood firebox
1 kW electric cooking burner
2 cast iron hobs
10 litres wood-fired water heating
WxDxH: 860 X 750 (970) X 70 mm
Weight: 300 kg

50 m² heating area
4 kW heat battery
3.5 kW wood firebox
1 and 1.5 kW electric cooking burners
Ø331 mm cast iron hob
Up to 80 litres wood-fired water heating
WxDxH: 1.245 X 820 X 840 mm
Weight: 450 kg

TRS-WALL and TRS-HEATER for low-rise housing construction

TRS-WALL and TRS-HEATER are produced in small batches. The capacity of TRS-WALL can be increased up to 9 kW, and its heating area up to 60 m^2 (up to 160 m^2 in case of TRS-HEATER). The production is based in Russia and has **patent protection and the necessary certification**.

Eco-friendliness vs. solid-phase thermal batteries of foreign manufacturers

Low costs – 1.5-2 times less CAPEX and OPEX when converted to 1 sq.m. of heated space vs. natural gas-fired and water-based space heating solutions that use free-of-charge off-peak night electricity

TRS-WALL and TRS-HEATER can be integrated into a **Smart Home** system and adjust the room temperature

TRS-WALL and TRS-HEATER can **accumulate excess energy** from wind turbines and solar panels

1.5-2 times less space heating costs, while TRS-HEATER, which can use wood as a fuel, also improves the reliability of space heating in places with an unstable power supply

See the video about the TRS-WALL and TRS-HEATER design and applications here: https://youtu.be/KHC-RI_CkXo

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