



HEAT2BATTERY

Turning Waste Heat into Power

The Heat2Battery project is an EIC Pathfinder Open project funded under the Horizon Europe programme that is on a mission to redefine **how we recover, store and use energy** combining two powerful ideas:

Waste Heat Recovery

Capturing leftover heat, like thermoelectric systems, but without needing a temperature difference.



Energy Storage

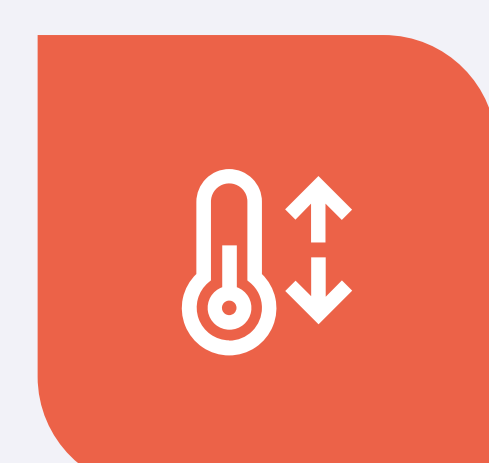
Just like a battery, but using heat to store electricity.



At the heart of our innovation is a hybrid **All-Solid-State Thermal Battery (ASSTB)** — a brand-new type of thermal cell that works without liquid components; it is safer, more stable, and able to operate across a broader range of temperatures.

Our Goal?

To create a solid-state thermal battery that:



Works reliably in a broad temperature spectrum



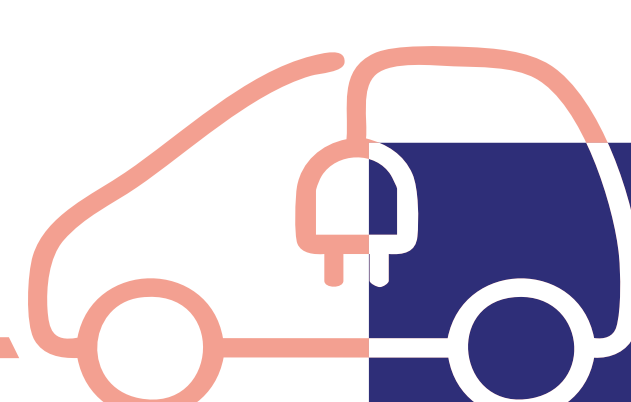
Stores enough energy to power small electronics (from mAh to Wh range)



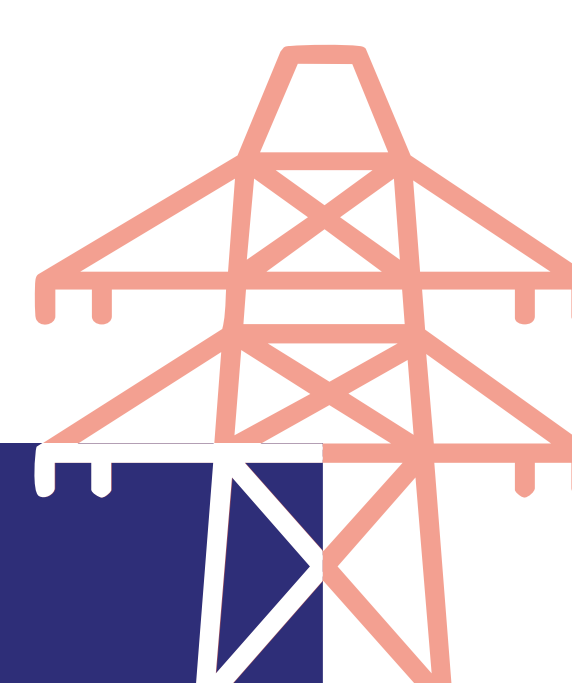
Stays stable over time

Use cases

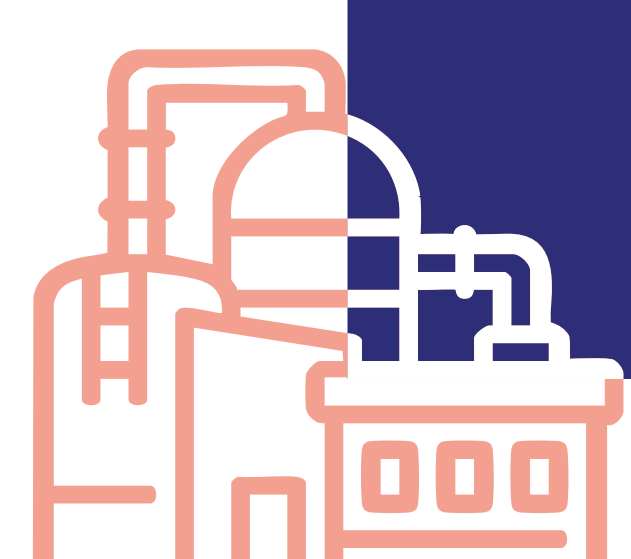
ELECTRIC VEHICLES



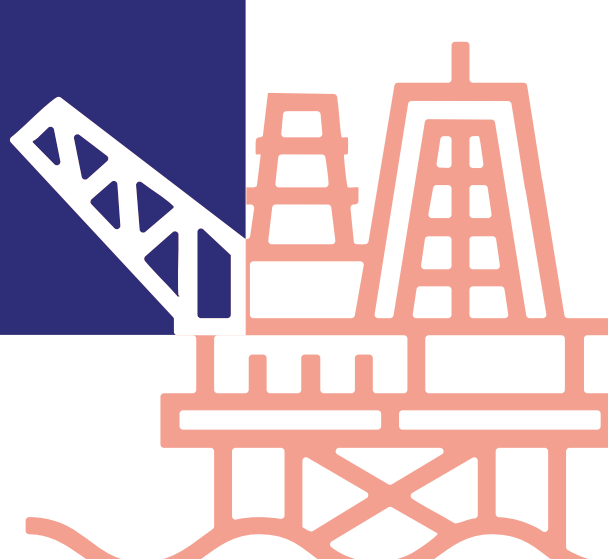
GRID SUPPORT



INDUSTRIAL WASTE HEAT RECOVERY



HIGH-TEMP IOT DEVICES



Follow Heat2Battery on



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The Heat2Battery consortium brings together complementary and world-class expertise in a synergistic effort.



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