



PRESS RELEASE

## **Tata Steel's IJmuiden energy storage to compensate for annual CO<sub>2</sub> emissions of 90.000 cars**

### ***Concrete benefits from utilizing waste heat with innovative Thermal Energy Storage***

Tata Steel operates one of Europe's largest steel production facilities in IJmuiden / Netherlands. Currently, large energy potentials are released to the atmosphere, through intermittent high temperature exhaust gases. Implicit economic benefits of this waste heat remain untapped. Finding an effective way to recover and reuse this energy will not only yield attractive economic returns, but also significant CO<sub>2</sub> emission reductions.

In order to fully utilize such effects, Tata Steel is now commencing the implementation of an EnergyNest Thermal Energy Storage (TES) demo project as a 'lighthouse initiative'. The IJmuiden demo will utilize exhaust gas energy from steel production to cover own energy demands in the facility – resulting in reduced natural gas consumption and CO<sub>2</sub> emissions.

"The steel industry has already undertaken huge efforts to reduce emissions, and to go any further simply requires new technologies. This demo installation is just a first step for Tata's IJmuiden plant. We are proud to be yet again the global leader for implementing environmentally friendly solutions with a strong business case." says Gerard Jägers, Program Manager Energy Efficiency. A joint assessment of effects for a full-scale implementation of the EnergyNest throughout the IJmuiden facility shows impressive results: a 500 MWh TES can yield annual savings of 2.3 million GJ of natural gas (65 million Nm<sup>3</sup>) and 130.000 tons of emitted CO<sub>2</sub>. EnergyNest CEO Dr. Christian Thiel: "These savings compensate for annual CO<sub>2</sub> emissions of 90.000 cars. And at the same time a full-scale implementation offers extremely attractive economics, which supplement such a project with a very healthy business rationale. We are very proud to support Tata Steel in its game-changing approach towards carbon footprint reduction."

The EnergyNest TES technology was introduced to Tata by Energy Storage NL member [EECT](#) and is based on globally available materials that are fully recyclable. Due to its very low cost-base, a full-scale implementation in the IJmuiden facility – together with Jord as acting EPC – has a payback of less than three years, based on today's natural gas prices. Should natural gas prices increase the payback period is reduced to less than two years. Adopting this innovative technology, Tata Steel IJmuiden will strengthen the facility's status as a global technology frontrunner.