

## **EMTech GmbH participates in a new innovation project for “Energy flexible Dynamic building CERTifications”**

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E-DYCE project (funded from the European Union’s Horizon 2020 program, under the Grand Agreement No. 893945), is an innovation program that EMTech GmbH has the pleasure to be part of. Due to this project, the company has the opportunity to develop close collaboration with 9 very innovative industrial and academic partners, from Denmark, Italy, Greece and Switzerland. The project kicked-off on the 1<sup>st</sup> of September and it is timetabled to run for 3 years.

E-DYCE aspires to deliver a methodology for dynamic certification of buildings based on openly available resources and tools and generate substantial savings of 30kWh/m<sup>2</sup> (+1 energy class) in buildings. Current steady-state energy labels of buildings have several shortcomings, resulting in high discrepancies and performance gaps. This inaccuracy does not allow the building owner to make informed decisions on time, and restricts the potential of economical exploitation of the building. E-DYCE project is developing a methodology for Dynamic Energy Performance Certification (DEPC) intended to replace or be used in conjunction with the current static methodology. It will consider the temporal nuances of energy use on scales of minutes, hours and days, rather than annual averages, providing better opportunities to suggest more effective energy-efficient behaviors to consumers.



EMTech is responsible for the detailed design and implementation of the E-DYCE framework and integration of the various software enablers. This includes implementation of several communication protocols and bridging agents for devices, services and tools. It includes the implementation of schedules for automated data collection, execution of simulations and optimization, handling of events, as well as implementation of data filters, data quality assurance or other intelligent utilities. EMTech will also develop a user-friendly GUI for Desktop applications as well as mobile devices, targeting both the certification parties and the tenants/owners. The E-DYCE framework will be based on FusiX platform developed and owned by EMTech GmbH.

It’s “a nugget of happiness” for EMTech, as many cooperative relations are established and lead to other opportunities, such as PRELUDE project. Moreover, a great benefit for the company is that the FusiX platform will be further validated and by the end of the project it will reach TRL 7-8, after having been demonstrated in 39 buildings across 5 different regions in Europe.