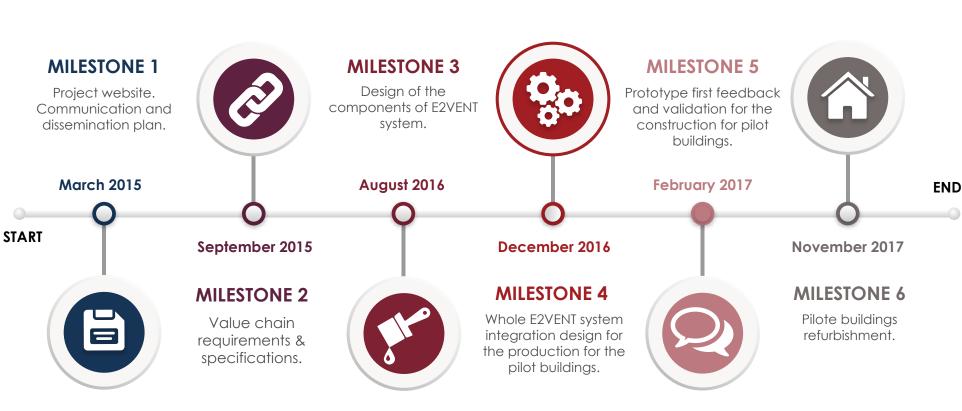
# Dear Reader,

we are proud to present you with the third E2VENT newsletter, which was created to provide you with an overview of the project's progress. The E2VENT project has reached a milestone of 25 months and we would like to share with you the latest news regarding the advances that were made in the past months and inform you in regards to the plans for the upcoming period.



Energy Efficient Ventilated Façades for Optimal Adaptability and Heat Exchange enabling low energy architectural concepts for the refurbishment of existing buildings



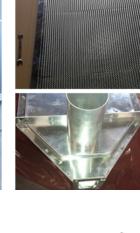
**SMHRU PROTOTYPE TEST** 

by TECNALIA and ELVAL COLOUR. The plates have been purchased from an external manufacturer. The first SMHRU prototypes arrived in the TECNALIA facilities in April 2016 and were successfully tested on location.

The SMHRU (Smart Modular Heat Recovery Unit) is the heat recovery unit that allows the air renewal while limiting the thermal losses. The SMHRU has been designed and then manufactured mainly







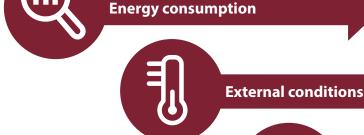
# The validation of the E2VENT technologies will be demonstrated through their integration and execution in two different demo buildings under different

**DEMO-SITE PROGRESS** 

climatic areas in Europe (continental and oceanic). The installation and the commissioning of the monitoring system has been already performed and it has been gathering data which is periodically followed up on and assessed. In order to assess the performances of the E2VENT system, the two buildings that will be monitored over the duration of one year. The data collected after one

year of the monitoring period will serve as a basis for the assessment and verification of the operation of the developed E2VENT technologies which were integrated into the demo building after renovation. The building monitoring will include measurements of:







The building to study is located in the city of Burgos in the northern part of Spain. It is a part of a set of blocks, which were

The proposed renovation for Burgos will integrate all the technologies developed in the project (Innovative ventilated façade, SMHRU, LHTES and BEMS – the building energy management system).









region of Europe (Innovative ventilated

THE TEST BENCH IN ANGLET The test bench in Anglet, France is currently being refurbished and the E2VENT technologies will be installed in it in February 2017. Prior to the demonstration on real buildings, and after the validation of the developments that were made in a laboratory conditions, it will be necessary to install the prototypes on an external platform in order to evaluate their functionality and to measure their efficiency. This external platform is a facade test bench and offers the opportunity to compare the performances of three types of retrofitting.



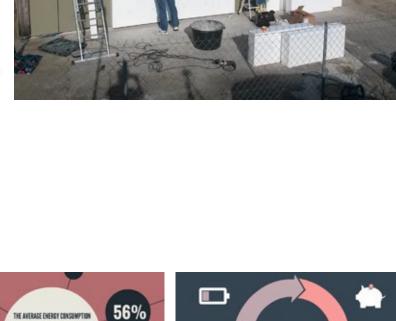




# The E2VENT solution will be compared to:

classic ETICS (External Thermal Insulation Composite System)

34% OF THE SUBURBAN



# W OR NO REQUIREMENTS FOR ENERGY EFFICIENCE

**VIDEO** 

Jobatek CCC

A video on the E2VENT project is available for you to learn

more about the project. Feel

free to watch it, share it and

comment on it.

https://goo.gl/AGP8lc



UNIVERSIDAD

DE BURGOS



IS REPRESENTING SON, OF THE OPEAN RESIDENTIAL BUILDING

1,6 MILLION



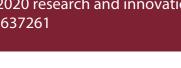
YOU CAN FIND US ALSO ON:

**FASADA** 





**UPCOMING EVENTS** 



The next general meeting will take place in Anglet, France on the 22<sup>nd</sup> and 23<sup>rd</sup> of February. This meeting is the opportunity to evaluate the project progress. It will take place few days after the test bench retrofitting and will bring about a workshop concerning any needed redesign concepts for the prototypes based on the feedbacks received. Various other workshops will be conducted in order

Participants of the conference had a chance to see presentations about various topics linked to green materials, new technologies and innovations in the construction sector. The event was concluded with the BRIMEE project demo site visit, where panels made of the Nano

The E2VENT project was exhibited by **FENIX TNT** on BAU17, the World's Leading Trade Fair connected with civil engineering, which took place in **Munich, Germany** on the **14<sup>th</sup> – 19<sup>th</sup> January 2017**. BAU presented a display of architecture, materials and systems for



picharchitects

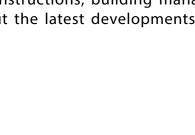




**BRIMEE CONFERENCE** 

**GENERAL MEETING** 

The **E2VENT project** will be exhibited by **FENIX TNT** at the Building Fairs in Brno, Czech Republic. The event will take place on the 26<sup>th</sup> – 29<sup>th</sup> March, 2017. Fairs in Brno are well known for unique presentation of all aspects of housing and house constructions, building management services, technical solutions, equipment, interior design and furniture. Visitors can learn about the latest developments, trends, products and services in various fields.



**PAST EVENTS** 

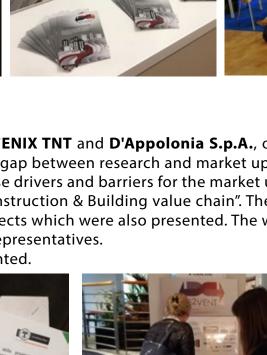
2017 at the Rectorate Brno University of Technology in Brno, Czech Republic.

# commercial and residential construction and interior design, for both new-build and R&M projects. Every year around 2,000 exhibitors from more than 40 countries showcases a comprehensive range of materials and technologies for planning and construction.

**BAU17** 









**ECTP CONFERENCE E2VENT** project.

# regeneration; infrastructure and mobility; and materials and sustainability. During the event, booths and posters of innovative European projects were exhibited to the





participants of the conference. CONFERENCE SUSTAINABLE SYNERGIES FROM BUILDINGS TO THE URBAN SCALE The Conference Sustainable Synergies from Buildings to the Urban Scale took place in Thessaloniki, Greece, from the 17th to 19th

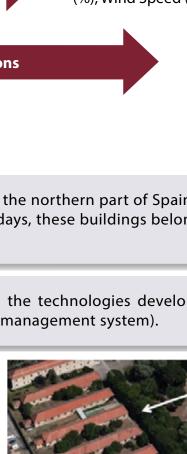
Sustainable Built Environment (SBE) Conferences 2016 Series are a bi-annual international conference series focused on developing High-Performance Built Environments. The conferences are promoted by international organizations such as CIB, iiSBE, FIDIC and UNEP- Sustainable Buildings and Climate Initiative members.

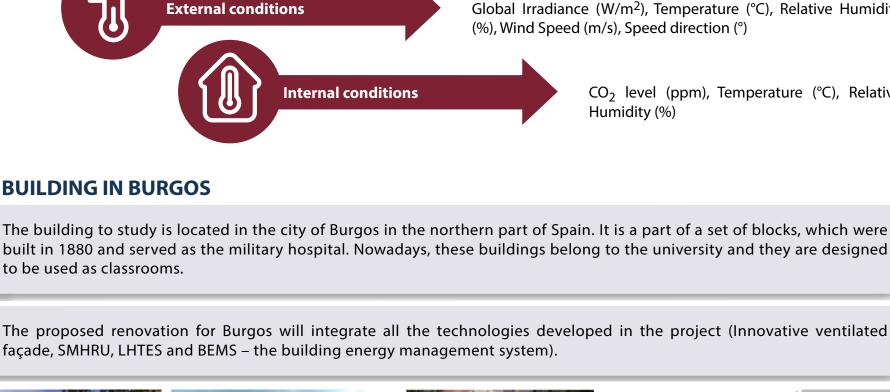


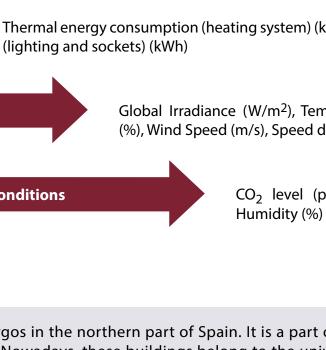












# Thermal energy consumption (heating system) (kWh), Electric energy consumption Global Irradiance (W/m<sup>2</sup>), Temperature (°C), Relative Humidity (%), Wind Speed (m/s), Speed direction (°) CO<sub>2</sub> level (ppm), Temperature (°C), Relative

# to be used as classrooms.

developed in the project but the LHTES as there is no need for cooling in this façade, SMHRU, BEMs).

The proposed renovation for Gdansk will integrate all the technologies

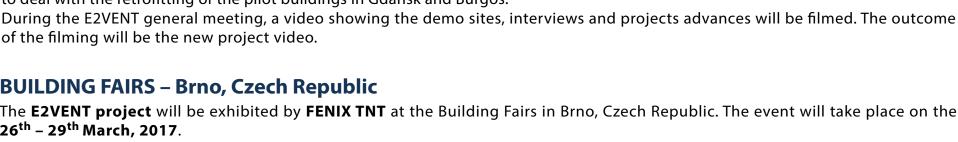
ventilated façade



STOCK IS BUILT IN THE 60'S - 80'S WHEN THERE WERE ONLY









The public AMANAC workshop was organized by FENIX TNT and D'Appolonia S.p.A., on the 23<sup>rd</sup> November 2016 in Milan, Italy.

