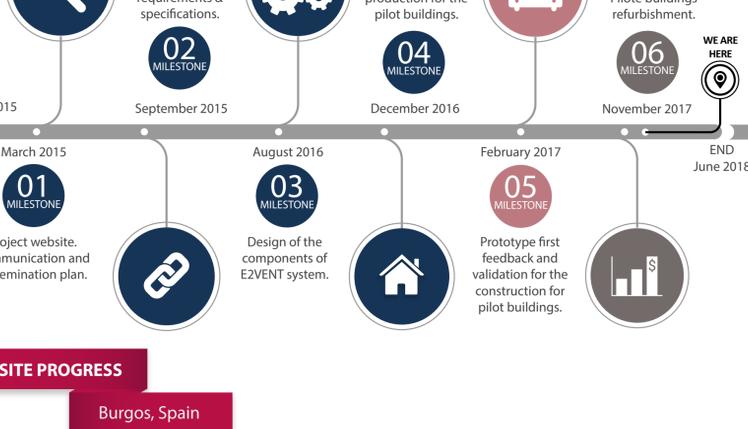


Dear Reader,

we are sharing with you the fifth newsletter of the E2VENT project. The aim of this newsletter is to provide you with a summary of the progress achieved so far in the E2VENT project as well as inform you about our plans for the next period of the project.



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



**DEMO-SITE PROGRESS**

**Burgos, Spain**

Entering its final phase, the E2VENT project demonstration on pilots started with the renovation of the first pilot site in Burgos, Spain. The building is in the University of Burgos, partner of the project. It is composed of two rooms (computer lab and classroom) with high internal heat loads which imply a need of air renewal and cooling. The renovation design corresponds to the installation of 3 SMHRU units and 2 LHTES units for a total ventilated façade to be installed of 250 m<sup>2</sup>.



The first step of the renovation consisted of the installation of the HVAC systems on the façade and of the commissioning regarding their correct functioning. This phase started the 30<sup>th</sup> of October and lasted 3 days. The first day corresponded to the fixation to the wall, the second one to the settings and functioning tests especially regarding piloting, and the third one to commissioning when airflow and noise levels were measured. All partners of the E2VENT consortium joined to participate and assist to the installation of the systems. Their attendance allowed not only to see the finalization of 3 years of development, but also to consider some potential points to be improved for the last design.

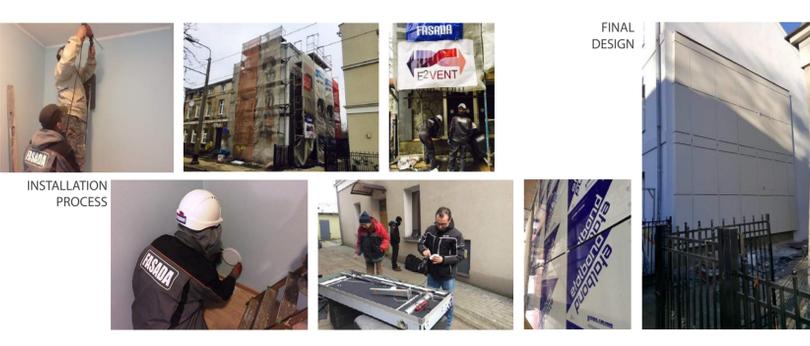
**DEMO-SITE PROGRESS**

**Gdansk, Poland**



The second building, in Gdansk, needed to be renovated because of its low energy performance and low air quality inside the flats that was confirmed by monitoring. E2VENT solutions were demonstrated on two flats. The elements composing the design were two SMHRU (Smart Heat Recovery Unit) allowing air renewal to ensure better indoor air quality while limiting thermal losses thanks to the double flux heat exchanger, two BEM (Building Energy Management) systems, that allow the smart piloting of the HVAC, the ventilated façade (40 m<sup>2</sup>) of Etalbond panels, fixed on vertical T-profiles on VARIO brackets, and ETICS façade (120 m<sup>2</sup>). The SMHRU and ventilated façades were manufactured in Greece in ELVAL while the BEM system was manufactured and calibrated by CARTIF in Spain. Then all the components were sent directly to Gdansk to FASADA premise.

The first step of the renovation process was marking and drilling of the holes for the installation of SMHRU units in the flats. It was crucial to place the ventilation units in such way that they can work properly and they are fitting the internal furniture location. The works were performed by FASADA in cooperation with other project partners (Tecnalia, Cartif, Nobatek, and Acciona). Important part of the commissioning process were acoustic tests performed, these tests were done in order to find the maximum speed of the ventilators that generates noise that is in agreement with existing acoustic standards. All the tests were performed according to technical standards.



**FIRST E2VENT WORKSHOP**

**"Think green, think Smart Façade"**

The E2VENT project will be presented within **BUDMA - International Construction and Architectural Fair in Poznan, Poland on 31<sup>st</sup> January 2018**. BUDMA is the largest construction industry trade fair in Poland and Central and Eastern Europe. It is a great opportunity for more 800 exhibitors to introduce new products and make valuable connections.

The E2VENT team will introduce the E2VENT project within the workshop **"Think green, think Smart Façade"** organized by FENIX TNT and FASADA. The speakers will speak about the project itself, demo-sites, business opportunity, intellectual property rights, innovative applications of aluminium and trends in ventilated facade systems. For detailed agenda see the picture below.

Registration free within the BUDMA Fair at [e2vent.eu/budma-workshop](http://e2vent.eu/budma-workshop)

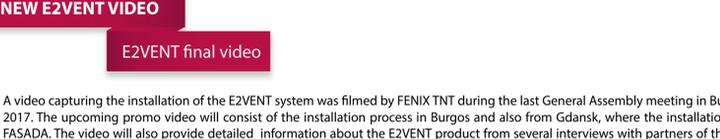
09:30 – 10:00	Registration and coffee	FENIX TNT: Petra Colantonio
10:00 – 10:15	Welcome and opening	NOBATEK: Antoine Dugué
10:15 – 10:45	E2VENT PROJECT: General presentation	FASADA: Agnieszka Lukaszewska
10:45 – 11:30	E2VENT PROJECT: Demo sites presentation	EUROPEAN ALUMINIUM: Bernard Gilmont
11:30 – 12:00	Energy Performance of Buildings Directive and Renovation of the EU Building Stock	
12:00 – 12:30	Coffee break	RINA Consulting: Anna Paraboschi
12:30 – 13:00	E2VENT PROJECT: Business opportunity	FENIX TNT: Barbora Blaskovicova
13:00 – 13:30	Intellectual Property Rights protection for innovation	ELVAL COLOUR: Angelos Zografos
13:30 – 14:00	Practical view of the manufacturer and trends in ventilated facade systems	
14:00 – 14:30	Panel Discussion	



**NEW E2VENT VIDEO**

**"Who We Are"**

In the "Who We Are" video all partners introduced themselves as a company and they explained their role in the project. The video was created by FENIX TNT during the meeting in Anglet, France. You can all E2VENT videos, including this one, on our Youtube channel called "E2VENT project".



**NEW E2VENT VIDEO**

**E2VENT final video**

A video capturing the installation of the E2VENT system was filmed by FENIX TNT during the last General Assembly meeting in Burgos in October 2017. The upcoming promo video will consist of the installation process in Burgos and also from Gdansk, where the installation was filmed by FASADA. The video will also provide detailed information about the E2VENT product from several interviews with partners of the project. FENIX TNT will present the final video at BUDMA fair in Poland and share it also on the E2VENT Youtube channel "E2VENT project".



**SOCIAL ACCEPTANCE QUESTIONNAIRE**

For each new product is essential to find social acceptance in society. For this purpose, a questionnaire was created and distributed to dozens of respondents at the University of Burgos. These respondents were mainly students and teachers who spend several hours each day in a building that is used as a demo site for the E2VENT system, thus they are able to share their experience with the air quality and conditions in the computer lab.



**PARTNERS**



The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 637261

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[www.e2vent.eu](http://www.e2vent.eu)

**UPCOMING EVENTS**

**Public Workshop in Burgos**

The public workshop in Spain for E2VENT project is planned in **April/May 2018** at **University of Burgos (UBU)**. Attendants of the workshop will also have a chance to see the final design of the demo-site at the University campus.



**"New Industrial Policy: Which role for EU strategic value chains" in Brussels**



**European Aluminium** yearly organizes a public event connected with political dossiers that are at the agenda of EU Institutions. The Spring 2018 event will be entitled **"New Industrial Policy: Which role for EU strategic value chains"** and will include various sessions including the E2VENT Workshop, a good example of increasing added value down to the final product while improving energy performance of buildings through innovation. The workshop will take place on **19<sup>th</sup> April 2018** in the hotel **Steigenberger Wiltcher's**. We will inform you about the further details at the E2VENT website and social media.

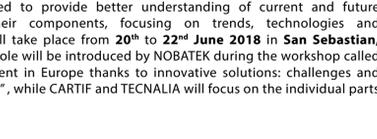
**E2VENT project at Building Fairs in Brno**

The E2VENT project will be presented by FENIX TNT at the **Building Fairs in Brno, Czech Republic in April 2018**. Fairs in Brno are well known for a unique presentation of all aspects of housing and house constructions, building management services, technical solutions and equipment. We will inform you about the further details at the E2VENT website and social media.



**Public Workshop In Prague**

The public workshop in the Czech Republic for E2VENT project is planned in **May 2018** in **Technology Centre CAS in Prague, Czech Republic**. The workshop will be organised by FENIX TNT in cooperation with Technology Centre CAS who will provide the premises for the event. We will inform you about the further details at the E2VENT website and social media.



**ICAE 2018**



**ICAE 2018** is an event dedicated to provide better understanding of current and future architectural envelopes and their components, focusing on trends, technologies and developments. The conference will take place from **20<sup>th</sup> to 22<sup>nd</sup> June 2018** in **San Sebastian, Spain**. The E2VENT project as a whole will be introduced by NOBATEK during the workshop called "Accelerating building refurbishment in Europe thanks to innovative solutions: challenges and potential routes to overcome them", while CARTIF and TECNALIA will focus on the individual parts of the E2VENT solution.

**PAST EVENTS**

**E2VENT presented at 3<sup>rd</sup> ALUMInnov' conference**

The E2VENT project was presented by European Aluminium during the **3<sup>rd</sup> ALUMInnov' conference** in Paris on **12<sup>th</sup> December 2017**. ALUMInnov' is an initiative from Aluminium France, the cluster of French aluminium associations, aiming at promoting innovation across the aluminium value chain. This year's conference was focused on the building sector and was an ideal opportunity for Bernard Gilmont to present the E2VENT project. The presentation triggered debate with journalists and an architect who stressed the importance of accessibility for maintenance.



**EKOinnovation Forum in Krtiny, Czech Republic**

The E2VENT project was presented by FENIX TNT at the **EKOinnovation Forum** on **30<sup>th</sup> November** in **Krtiny, Czech Republic**. The forum aimed to accelerate the emergence of modern solutions into everyday life. Participants were provided with an interesting discussion of current and future trends in this area and introduced modern technologies that can provide European building industry with global competitiveness.



**Info day Horizon 2020 in Prague**

On **22<sup>nd</sup> November 2017**, the **Technology Centre CAS** of the Academy of Sciences of the Czech Republic organized an Info day focused on the Horizon 2020 programme which is on Nanotechnology, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing (NMBP) in the National Technical Library in Prague. The E2VENT project was presented by Petra Colantonio from FENIX TNT.



**The E2VENT project presented at CAE conference**

The E2VENT project was presented by FENIX TNT team during the 33<sup>rd</sup> International **CAE conference** and exhibition in **Vicenza, Italy** on **6<sup>th</sup> and 7<sup>th</sup> November 2017**. CAE conference is an enriching two-day conference driven by industrial peers' and pioneers interrogates traditional methods and approaches in engineering; opening an engineering network source of new and adopted ideas.



**6<sup>th</sup> General Assembly Meeting (after 36 months of the project)**

The E2VENT consortium met on **31<sup>st</sup> October 2017** and **1<sup>st</sup> November** in **Burgos, Spain**. The meeting was mainly dedicated to installing the E2VENT system, but it was also a chance to meet again with the all project partners, discuss and evaluate the project's progress and plan the next steps.



**Article about the E2VENT system on Elval Colour website**

One of the project partners, **Elval Colour**, published an article focused on the E2VENT system on their website. The article includes information about Elval's role in the project, introduction of the whole system, and demo sites.

**Article about the E2VENT project in the "Building Materials" magazine**

FENIX TNT wrote an article which introduces the E2VENT project to readers of a Czech magazine **"Materiální profstavbu"** ("Building Materials"). This extensive article was published in a September issue of this journal and included information about the technology, demo-site, and also about the impact of the project.



**Article "New Way for Building Renovation" in Energy & Research journal**

An article about the E2VENT project called **"New Way for Building Renovation"** was published in Innovative Energy & Research journal on **29<sup>th</sup> August 2017**. The article was written by **FENIX TNT**, published by Omics International and includes information about the E2VENT system itself, its technology, use, and outcomes.

**Cluster projects**

The E2VENT project is now connected with other "cluster" projects supported by European Commission which have a similar goals, ideas, or technology. Clustering with other projects allows project teams to better establish co-operation and share their experience. E2VENT cluster projects are now listed at the project website.

**E2VENT published at BuildUp portal**

The latest news about the E2VENT project were shared at **BuildUp portal** which is focused on energy efficiency in buildings in Europe. The article was published on 3<sup>rd</sup> July 2017 and included information about the project progress and test bench in Anglet, France.

This dissemination material reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.