DELIVERABLE: D34-D6.1

Dissemination, Exploitation and Capitalization Strategy

Version: 14
Date: 2020/05/04

WP Leader: CSA – CENTRO SERVIZI AZIENDALE
Author: CSA – CENTRO SERVIZI AZIENDALE – Rosso Claudio
Contributions: All partners

Network for Using BIM to Increase the Energy Performance

Grant Agreement Number: 754016
Net-UBIEP H2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement *No.754016*

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 754016.

The present deliverable will be update during the project in order to align the outcome to the market needs as well as to other BIM related projects realized within Horizon 2020 program.

The updated version of the deliverable will be only available in the website of the project www.net-ubiep.eu.

Some deliverables could also be translated in partners national languages and could be find in the respective national web pages. Click on the flags to open the correspondence pages:

International web page

Italian web page

Croatian web page

Slovak web page

Spanish web page

Dutch web page

Estonian web page

Lithuanian web page

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Summary

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A. Deliverable Details	
Document Reference #:	D34 – D6.1
Title:	Dissemination, Exploitation and Capitalization Strategy
Version Number:	14
Preparation Date:	May, 2020
Delivery Date:	April, 20Th 2020
Author(s):	CSA – CENTRO SERVIZI AZIENDALE
Contributors:	All partners
Work Package	6 – DISSEMINATION, EXPLOITATION AND CAPITALIZATION OF BIM QUALIFICATION MODEL
Type of deliverable	Document/Report
Format	Printed and Electronic
Dissemination Level:	CO – Confidential, restricted under conditions set out in Model Grant Agreement

1. Brief Description

The energy agency network and the BIM network has been mobilized to spread the learning materials and the guidelines to ensure that more and more professionals and workers have been qualified as energy performances BIM professionals and workers.

Besides the partners who officially sign the consortium agreement, other "associated partners" representing key stakeholders, have been involved. The aim has been to enlarge the sphere of influence of the partnership.

Networking among partners have been done through Social Networks, Project Web Portal, Project Partner Web Sites, Support and Associated Net-UBIEP Partners Network.

Stakeholders play a crucial role to move professional and technicians to improve their competencies in building and refurbishment processes facilitated using BIM. For that reasons, round tables and discussion groups have been organized during Net-UBIEP Open Day to allow actors of the building sector to meet and share ideas and reflect together on the role of BIM in the energy performance.

Well-targeted events, combined with a strong message, are one of the major vehicles to maximize the visibility and the impact of the project, to disseminate information about the project results and outputs, to transfer information to organizations and other interested stakeholders. For this reason, beside the already planned activities, the partners have identified, in each country, the decision makers at national and regional level to present the

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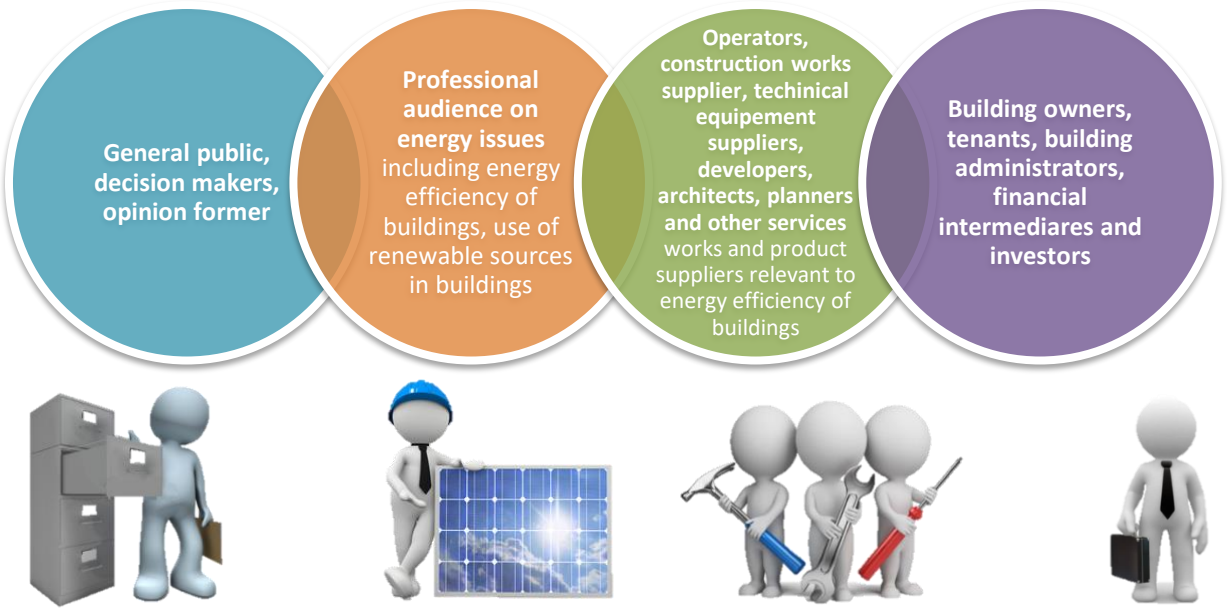
results of the project to promote the use of BIM in all the construction industry. All the stakeholders are collected in a database per each country, in which the analysis have been done for Public Administration, Professional, Supplier-Technician, Financial Institution, Owner. For more details of these databases examine the Dropbox folder "H2020 NET-UBIEP Project" (Stakeholders database).

Particular attention has been devoted to dissemination among decision makers in public administrations and among owner/tenant associations as these targets, can "impose" the employment of qualified professionals and workers or provides incentives to use qualified BIM experts.

Each country has developed its own strategy to continue to promote BIM Qualification Model for Energy Performance in nZEB among target groups after the end of the project by developing agreement with professional associations.

Dissemination of the project results have been done at 4 levels:



Impact of Net-Ubiep project are expected to be primarily on country partner thanks to the involvement as Support Partner such as National Confederation of Constructor, National Industry Trade Union, Building Companies, Energy Agencies, National Association of Engineers and Architects. Furthermore, a direct impact is expected in other country thanks to the presence of Support Partners from Czech Republic, Macedonia, Cyprus, Romania and Slovenia.

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CSA has been the head partner for this Work Package and has overseen the implementation of the relative plan. It has played a role of control over partner activities helping them to respect the timing and supporting them when it is needed. CSA has produced and provided partners periodic indications on activities to run within the Dissemination and Exploitation Strategy.
In each partner country, the share of activities is realized in according to partner resources: Both national partners will collaborate and work together to implement the activities.

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2 Measures adopted

2.1 Standardization on BIM training and BIM qualification and certification scheme

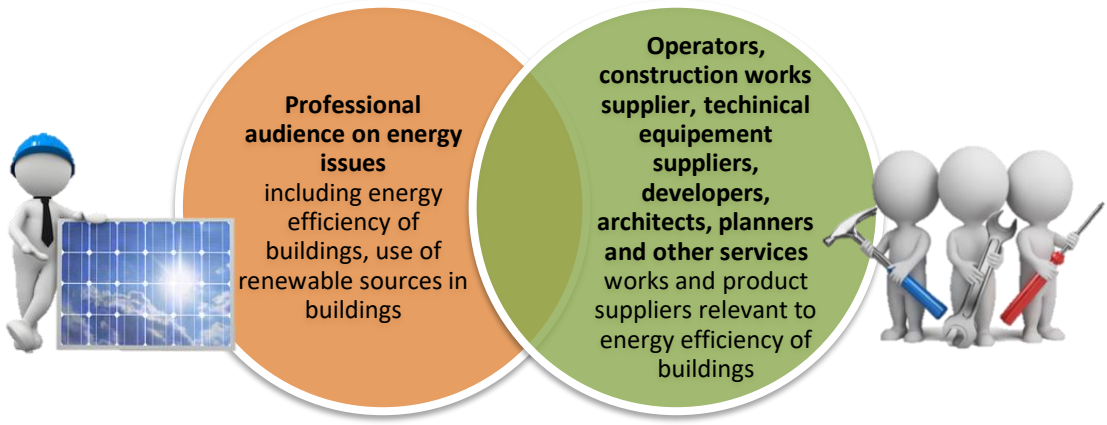
▶ Activity

The standardization proposal includes the standardized BIM training, the standardized BIM qualification scheme and the standardized BIM certification scheme. if accepted, it could ensure the recognition and repeatability of the BIM model throughout the EU.

BIM Qualification Models schemes will be presented to regulation body (EN) with the scheme for the recognition of BIM professional profiles to CEN/BT/WG/215 "Building Information Modelling (BIM)".

The delivery 5.4 give evidences about this measure.

▶ Target Users



▶ How the measure has supported the achieved results?

The standardization process will ensure the possibility for the BIM Qualification Models to be repeated within across the EU (D5.3 – D31, D5.4 – D32).

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2.2 Best practices Database

▶ **Activity**

The database is a table. Each row contains information on the partner who entered it, the topic and the description of the good practice. The topic can be one of the following: partnership management, training activities planning, standardization processes, communication strategy, and dissemination and exploitation strategy.

Partners had to insert new good practices during the project. These good practices will be promoted during public events and could be used for the creation of new projects. The database must be accessible from the month 23rd (in May 2019).

Nowadays (31/10/2019), the partners have inserted 35 records as you can see from the following tables (Tab.1 and Tab.2).

Tab. 1: Repartition of records, based on topics	
Topics	N° of Records
Training activities planning	20
Partnership management	5
Dissemination and exploitation strategy	4
Standardization	4
Communication strategy	2
Total	35

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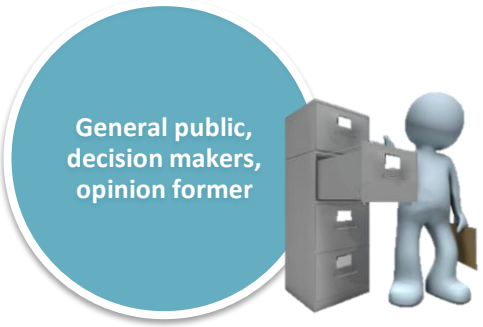
Tab. 2: Best practices inserted (table updated until 08/01/2020)		
Countries	Partners	N° of insertions
Italy	CSA	2
	ENEA	11
Spain	FLC	2
	CSIC	0
Slovak	UVS	1
	ViaEU	1
Croatia	CSA HR	0
	FCE	5
Estonia	EGLC	2
	TUT	5
Lithuania	DIG.CON.	4
	VGTU	2
Netherlands	BeR	1
	ISSO	2
Total		38

The delivery D6.6 shows evidences about the best practices database, here is available the link on the project web site: **BEST PRACTICES DATABASE**

▶ Target Users



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▶ **How the measure has supported the achieved results?**

Best Practices disseminate:

- identification of requirements (D2.2 – D11);
- development of BIM Qualification Models (WP3);
- validation of BIM Qualification Models (WP4).
- standardization of BIM Training & BIM Qualification and Certification Schemes (D5.3 – D31 / D5.4 – D32);

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2.3 Publications

▶ **Activity**

Publications are articles reported on company magazines, company websites and specialized press. These articles provide information on the project results such as the 3D matrix with target groups, professional profiles and competences.
Partners committed themselves to making 99 publications during the project (see Tab. 3).
In following pages (13, 14, 15, 16, 17, 18, 19), we enclose the publications evidences.

Tab. 3: Publications for each partner

Countries	Partners	Numbers	Month/Year
Italy	CSA IT	6	12/2017
			06/2018
			12/2018
			02/2019
			04/2019
			12/2019
	ENEA	5	07/2017
			01/2019
			02/2019
			09/2019
			10/2019
Spain	FLC	45	06/2017
			06/2017
			06/2017
			07/2017
			10/2017
			11/2017
			02/2018
			07/2018
			07/2018
			10/2018
			10/2018
			01/2019
			01/2019

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			01/2019
			04/2019
			04/2019
			04/2019
			05/2019
			05/2019
			05/2019
			07/2019
			07/2019
			09/2019
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			10/2019
			11/2019
			11/2019
			11/2019
			11/2019
			11/2019
			11/2019
			11/2019
	CSIC	1	05/2019
Slovak	UVS	2	04/2019
	ViaEU		04/2019
Croatia	FCE	8	05/2018

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			10/2018
			11/2018
			03/2019
			04/2019
			06/2019
			09/2019
			10/2019
Estonia	EGLC	3	01/2019
			05/2019
			11/2019
	TUT	2	12/2018
			01/2019
Lithuania	DIG.COM.	18	09/2017
			01/2018
			03/2018
			05/2018
			12/2018
			12/2018
			12/2018
			03/2019
			06/2019
			10/2019
			11/2019
			11/2019
			12/2019
			2019-1
			2019-2
			2019-3
			2019-4
			2019-5
	VGTU	8	09/2017
			12/2017
			06/2018
			12/2018
			04/2019
			05/2019

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			07/2019
			12/2019
Netherlands	ISSO	1	11/2018
		1	11/2018
		1	(online)
		1	11/2019
	Total	102	

▶ Publication Links:

CSA 12/2017

CSA 06/2018

CSA 12/2018

CSA 02/2019

CSA 04/2019

CSA 12/2019

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ENEA 05/07/2017

ENEA 31/01/2019

ENEA 26/02/2019

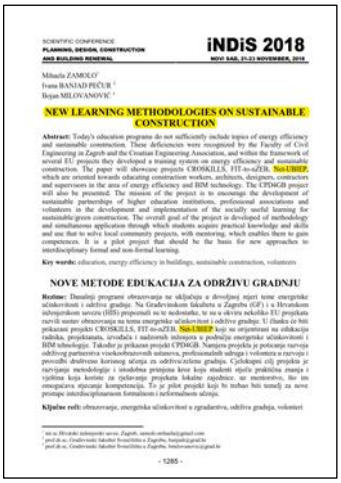
ENEA 28/09/2019

ENEA 02/10/2019

ViaEU, UVS 04/2019

ViaEU, UVS 04/2019

FCE iNDis 11/2018



CSIC 05/2019

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FCE SMSS C. 03/2019

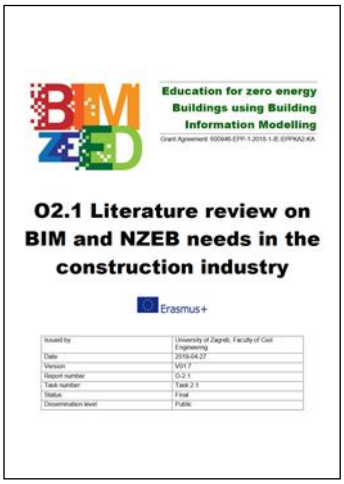

International Conference on Sustainable Materials, Systems and Structures (SMSS 2019)

POSSIBILITIES OF USING BIM FOR DEEP ENERGY RENOVATION ANALYSES

Abstract

INTRODUCTION

FCE BIMzeED 04/2019


Education for zero energy Buildings using Building Information Modelling

02.1 Literature review on BIM and NZEB needs in the construction industry

Erasmus+

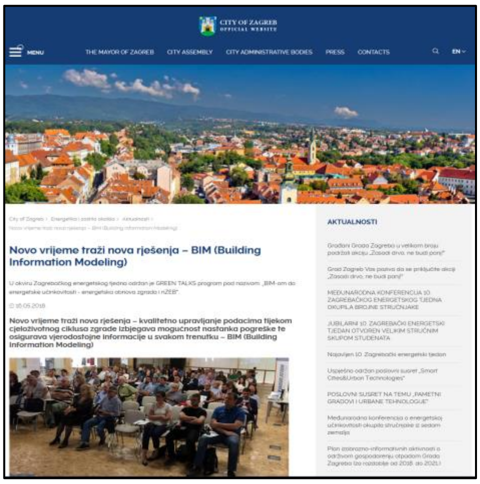
FCE OTMC C. 09/2019


Improving Competences of Engineers and Workers in the AEC Industry for Delivering NZEBs

Abstract

Introduction

City of Zagreb 16/05/2018


CITY OF ZAGREB

Novo vrijeme traži nova rješenja – BIM (Building Information Modelling)

AKTUALNOSTI

FCE HKIG conference 06/2019


Hrvatska komora inženjera građevinarstva

Dani Hrvatske komore inženjera građevinarstva – Opatija, 13.–15. lipnja 2019.

PRIMARNA ENERGIJA KOD PROJEKTIRANJA I CERTIFICIRANJA ZGRADA

PRIMARY ENERGY IN BUILDING DESIGN AND ENERGY PERFORMANCE CERTIFICATION

ZRAKONEPROPUSNOST I INFRACRVENA TERMOGRAFIJA KAO VAŽNE MJERE ZA POSTIZANJE KVALITETE

AIR TIGHTNESS AND THERMAL IMAGING TESTING AS IMPORTANT QUALITY CONTROL MEASURES

Sažetak

Summary

FCE Jutarnji list 13/10/2018


NEKRETNINE

ENERGETSKA OBNOVA Cilj je Europske unije obnoviti 3 % zgrada javnog sektora. No, s kojim stručnim ljudima?

"Premalo je radnika u graditeljstvu, a one koje imamo, treba doškolovati"

FCE Promogradnja Journal 10/2019


Proizvodi

WÜRTH

ZRAKOPROPUSNOST ZGRADE | PROPISI

Blizu. Bliže. Würth!

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TUT 12/2018

TUT 01/2019

EGLC 01/2019

EGLC 05/2019

EGLC 11/2019

VGTU 09/2017

VGTU 12/2017

VGTU 06/2018

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VGTU 12/2018

VGTU 04/2019

VGTU 05/2019

VGTU 07/2019

VGTU 12/2019

ISSO 11/2018

ISSO 11/2018

ISSO (ONLINE)

ISSO 11/2019

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FLC 06/2017-1

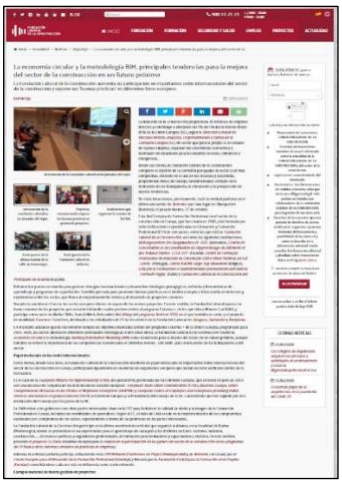
FLC 06/2017-2

FLC 06/2017-3

FLC 07/2017

FLC 10/2017

FLC 11/2017



FLC 02/2018

FLC 07/2018-1

FLC 07/2018-2

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FLC 10/2018-1

FLC 10/2018-2

FLC 01/2019-1

FLC 01/2019-2

FLC 01/2019-3

FLC 04/2019-1

FLC 04/2019-2

FLC 04/2019-3

FLC 05/2019-1

www.net-ubiep.eu - netubiep.project@net-ubiep.eu

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FLC 05/2019-2

FLC 05/2019-3

FLC 07/2019-1

FLC 07/2019-2

FLC 09/2019-1

FLC 10/2019-1

FLC 10/2019-2

FLC 10/2019-3

FLC 10/2019-4

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FLC 10/2019-5

FLC 10/2019-6

FLC 10/2019-7

FLC 10/2019-8

FLC 10/2019-9

FLC 10/2019-10

FLC 10/2019-11

FLC 10/2019-12

FLC 10/2019-13

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FLC 10/2019-14

FLC 10/2019-15

FLC 11/2019-1

FLC 11/2019-2

FLC 11/2019-3

FLC 11/2019-4

FLC 11/2019-5

FLC 11/2019-6

FLC 11/2019-7

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DIG.CON. 09/2017

DIG.CON. 01/2018

DIG.CON. 03/2018

DIG.CON. 05/2018

DIG.CON. 11/12/2018

DIG.CON. 12/12/2018

DIG.CON. 12/11/2018

DIG.CON. 03/2019

DIG.CON. 05/06/2019

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DIG.CON. 30/10/2019

DIG.CON. 05/11/2019

DIG.CON. 14/11/2019

DIG.CON. 14/12/2019

DIG.CON. PORTAL 1

DIG.CON. PORTAL 2

DIG.CON. PORTAL 3

DIG.CON. PORTAL 4

DIG.CON. PORTAL 5

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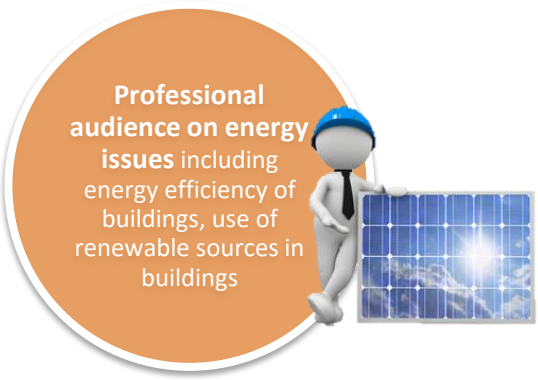
▶ Target Users



▶ How the measure has supported the achieved results?

Scientific Articles have disseminated a list of competences on energy performance needed for each Professional Profiles (D2.4 – D13) and a three-dimensional matrix for the implementation of roles and competences about energy performances for each target group when implementing BIM for energy performance (D3.1 – D14).

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2.4 Open Days

▶ **Activity**

The open day has been the moment to explore the value of BIM through speeches from national actors involved in the project. It was composed by:

- A conference in the morning;
- A thematic group discussion held in the afternoon in which representatives from target groups have been invited to participate and express their personal experience in BIM Qualification Model.

Partners have organized at least a Net-UBIEP Open Day per country to disseminate project results among stakeholders. The following tables list, for each country, the Open Days dates and, when it is available, the number of participants:

Tab. 4: List of 1st Open Days (Planned for Jul 2019)

Country	City	Dates	Participants
Italy	Frascati	03/07/2019	50
	Napoli	23/07/2019	30
Spain	Madrid	25/04/2019	52
Slovak *	Bratislava	28/03/2019	35
Croatia	Rijeka	01/07/2019	37
Estonia	Tallinn	05/11/2018	100
	Tallinn	22/02/2019	
Lithuania	Vilnius	26/04/2019	350
Netherlands	Delft	23/01/2018	11
		Total	665

* The practical demonstration for technicians has been followed by 35 participants (signed list) but the stand at the exhibition was visited by 875 people (no signed lists possible).

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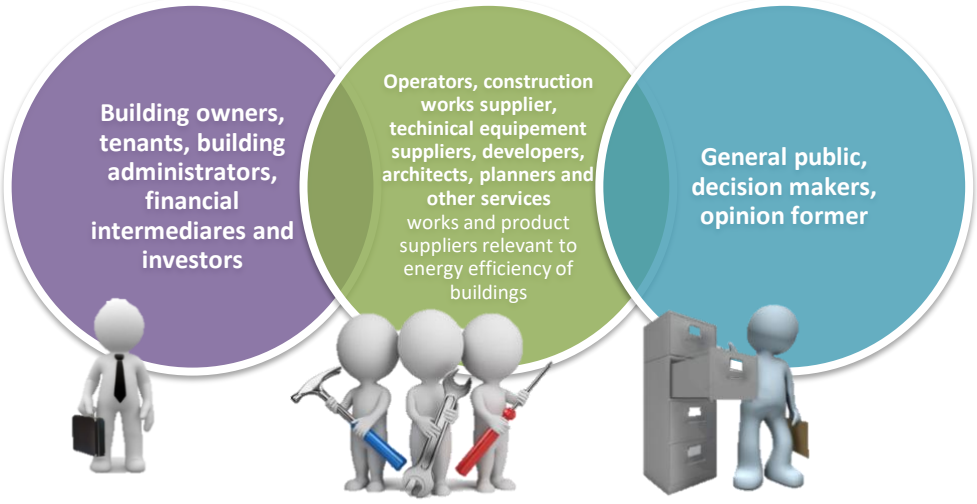
Tab. 1: List of 2nd Open Days (Planned for Nov 2019)			
Country	City	Dates	Participants
Italy	Roma	24/09/2019	20
	Pescara	27/11/2019	40
Spain	Madrid	30/10/2019	374
Slovak	Bratislava	19/09/2019	129
Croatia	Rijeka	29/10/2019	22
Estonia	Tallinn	08/11/2019	151
Lithuania	Vilnius	07/11/2019	47
The Netherlands	Woerden	24/06/2019	17
		Total	800

The deliveries D6.3 and D6.4 report the evidences of Open Days.

▶ **Target Users**



▶ **How the measure has supported the achieved results?**

Net-UBIEP Open Day disseminate:

- ✓ BIM Qualification Models (WP4);
- ✓ BIM Qualification and Certification Schemes (D5.3 – D31 / D5.4 – D32).

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2.5 Events

▶ Activity

Well-targeted events, combined with a strong message are one of the mayor vehicles to maximise the visibility and the impact of the project, to disseminate information about the project results and outputs, to transfer information to organizations and other interested stakeholders. They include industrial events, fairs or thematic workshops.

Partners have committed themselves to participate in 42 events. Among these we remember the event during the sustainable Energy Week in Brussels which have brought Net-UBIEP closer to a wide expert public, but above all in the research and development area.

Tab. 6: Repartition of the events, based on the country	
Countries	Number of events
Italy	15
Spain	15
Slovak	6
Croatia	24
Estonia	9
Lithuania	10
Netherlands	3
Total	82

See page 25 and 26 for Events Details.

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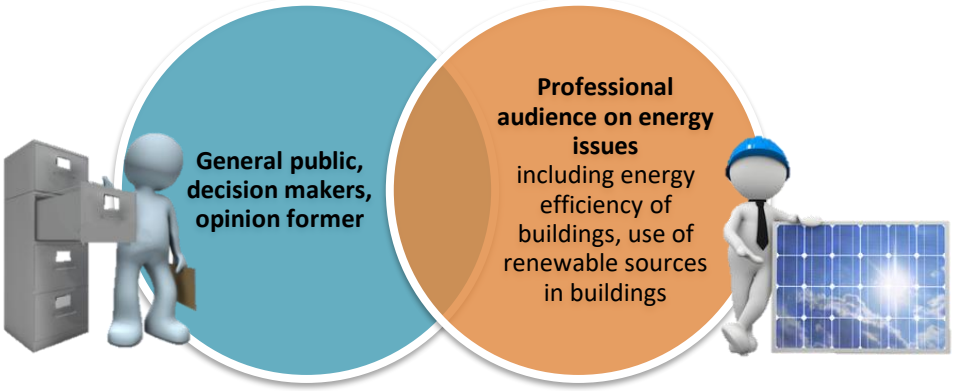
▶ Target Users



▶ How the measure has supported the achieved results?

Participations in national and international events have disseminated and exploited:

- Validation of BIM Qualification Models (WP4).
- Standardization of BIM Training & BIM Qualification and Certification Schemes (D5.3 – D31 / D5.4 – D32);

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Partners	Events	Participants	Dates		
			2017	2018	2019
CSA (IT)	AICQ Annual conference by Environment & Energy Committee	200		2nd February 2018	
	Restructura. 2017	12.000	16th /19th of November -Turin		
	Financial Energy Renovation in Building in IT-HR-SL		16th of November – Milan		
	Digital &BIM Italia		19th /20th of October – Bologna		
	Chinese Delegation Visit in AICQ		29th of November - Milan		
	EcoBuild 2018			6th/8th of March – London	
	Steering Committee CBEET			11th /12th of April – Nice	
CSA (HR)	Annual Conference by Croatian Chamber of Civil Engineers			2nd week of June – Opatija	
	Second BIM Conference – Croatian Chamber of Architects	100	December – Zagreb		
	Interreg Italia – Croazia Info Day			April 2018	
	Financial Energy Renovation of Building in IT-HR-SL		16th of November – Milan		
	Med Info Day April-2018			April 2018	
	Rilem Spring Convention and Conference				18th/22nd of March - Roviji
ENEA (IT)	Forum for the Public Administrations	15.000	23th /25th of May - Rome		
	DigitalBIM				21st of November 2019
	BuildingSMART international summit 2019, Pechino				28th of October 2019
	Condominio in fiera 2019				05th of October 2019
VGTU (LT)	The 13th International Conference “Modern Building Materials, Structures and Techniques”	200			16 – 17th of May - Vilnius
	EURO 2018, 29th European Conference on Operational Research	3.000		8th/11th of July - Valencia	
	Seminar at Vilnius Municipality	42		11th of December – Vilnius	
	Seminar at Klaipeda municipality	37			4th of April – Klaipeda
	The 13th International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2019	230+			6th / 9th of July - Orlando, Florida, USA
	Second Open Day	47			7th of November, Vilnius
	EURO 2018, 29th European Conference on Operational Research	3.000		8th/11th of July - Valencia	
ISSO (NL)	Annual Conference	150			
BuildUpSkills (NL)	Annual Conference	100	7th of September – Arnhem		
Installation Sector (NL)	Meeting organized by branch organizations OTIB and Uneto-VNI	8.000			
FCE (HR)	Annual Conference by Croatian Chamber of Civil Engineers	1.000		14th/ 16th of June – Opatija	13th / 15th June – Opatija
	OTMC 2017 Conference	100	27th/30th of September – Porec		4th / 7th Semptember - Zagreb
	H2020 info day	50	2nd October Zagreb		
	Second BIM Conference – Croatian Chamber of Architects	100	December - Zagreb		
	Rilem Spring Convention and Conference				18th/22nd of March - Roviji
	Zagreb Energy Week – BIM and Energy Efficiency			10th of May – Zagreb	16th Mary 2019
	Passive house days in Croatia	50	10th / 12th November - Zagreb	9th / 11th November - Zagreb	8th / 10th November - Zagreb
	Buildings 2020+	300			21st February - Zagreb
	Nearly Zero Energy Buildings	250			22nd February - Zagreb
	Croatian association of roofers conference	80			1st March - Vodice
	BUS Supeus conference (The future of sustainable housing)	150			18th May 2019 - Zagreb
	NZEB & BIM the new reality	150			19th March 2019 - Zagreb
	BIM workflow workshop	70			31st May 2019 - Zagreb
	INDIS conference	100		21st – 23rd November – Novi Sad	
	Bhenefit meeting	50		11th September – Karlovac	
	EN-eff workshop Croatian Chamber of commerce Varazdin	35		22nd May - Varaždin	

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	19th Croatian conference on quality and 10th international science convention of Croatian society for quality.	50			15th – 18th May 2019 - Vodice
TUT/EGLC (EE)	Annual National Conference BIM Summit	100		19th of April	11th of April
	Annual National Conference Knowledge-based Construction	250		26th of April	23rd of April
	Ehituse Technoloogia Konverents	200			22nd of February
	Modern Construction Methods Conference	150	14th of November – virtual	5-6th of November	7-8th of November
	Eesti 3D kaksiku uuringu tulemused				15th of May
	EKVÜ seminar			14th of November	
	RKAS seminar	200			14th of February
	Modern Construction Design Management Conference	85	26th of October – virtual		
	BIM Qualification Certification Discussion	10	9th of October – virtual		
FLC/CSIC (SP)	REFORME Conference	30	24th of March - Dusseldorf		
	Foro técnico ANDECE 2018. Consumo de energía casi nulo. Soluciones constructivas industrializadas en hormigón	60		14th of June - Madrid	
	Conference presentation of the project of the Working Group Housing Industrialisation Project (PIV): university institutions, architecture and engineering firms, developers, construction companies, manufacturers and installers, etc.	21		12nd of July - Madrid	
	1st Net-UBIEP seminar with Owners	23		16th of October - Madrid	
	1st Net-UBIEP seminar with PA	23		17th of October - Madrid	
	ePower&Building the Summit, I Congreso Europeo de Construcción, Habitabilidad, Economía y Liderazgo, Construtec'18: presentation of the projects of Fundación Laboral, between Net-Ubiep was referenced. 100 Spanish triptychs distributed.	+80		13rd-17th of November – Madrid	
	Training Workshop in BIM and nZEB for engineers and architects	52			25th of April - Madrid
	Retos de la descarbonización del sector de la edificación. La transición energética	50			8th of May - Barcelona
	Dissemination of Net-Ubiep in the "Digital construction skills: enabling the energy transition in Europe's building stock" workshop, organizated by Build Up Easme from European Commission, at Construmat'19 fair. 100 English triptychs distributed.	+80			16th of May - Barcelona
	Debate sobre la reinvenciòn del proceso de edificaciòn de industrializacion de vivienda. SimaPro	+10			29th of May – Madrid
	Ciclo de Conferencias. Valdebernardo 2019. Eficiencia energètica de los edificios. La energìa en Casa	+50			18th of June - Madrid
	Presentation of Net-Ubiep to representatives of the Chilean Chamber of Construction	5			30th of August - Madrid
	Presentation of Net-Ubiep in ReBuild'19	50			17th of September - Madrid
	Edificios de Vivienda industrializada. La transformaciòn Digital. CONPAT MEXICO 2019	75			10th of October – Chiapas- Mexico
	Impacto del Cambio Climàtico en edificaciòn. Estrategias internacionales, europeas y nacionales	+90			12nd of November - Badajoz
Skaitmeninė Statyba (LT)	Annual Conference Digital Construction	350	26th of April – Vilnius		
	Seminar at Vilnius Municipality	42		11th of December – Vilnius	
	Seminar at Klaipeda municipality	37			4th of April – Klaipeda
	Annual Conference Digital Construction (First Open Day)	350			26th of April – Vilnius
	Stakeholders meeting	10			16th of-October – Vilnius
	BIMLink conference	200			14th of November – Vilnius
	Seminar for estimators	18			20th of November– Vilnius
ViaEU/UVS (SK)	Conference of the Association of Construction Entrepreneurs	150			28th of March 2019 - Bratislava
	International BIM Conference	68		5-6th of June 2018 – Prague	
	Annual BIM Conference	200		18th of October 2018	
	CZ-SK-HU-AT Regional Meeting of Construction Industry with promoting Net-Ubiep qualification framework	56		04th December 2018	
	Annual BIM Conference 2019 with promoting Slovak Net-Ubiep BIM Academy	250			19th of September 2019 - Bratislava
ViaEU (SK)	Workshop on digitalization in the construction sector with promoting Slovak Net-Ubiep BIM Academy	65			16th of May 2019 - Barcelona

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2.6 Awareness raising activities

▶ **Activity**

Awareness raising activities are organized to reach owners and facility managers, one conference per country will presents the benefits that derive from the application of BIM in the management of energy performance in buildings.

Awareness campaign realized for tenants about BIM advantages is likely to prepare the ground for investments. Indeed, owners which have participated in dissemination activities on BIM will be induced in asking for BIM solutions next time they have to unroll building works.

Tab. 7: Conferences (From June 2019 to November 2019)

Country	City	Dates	Participants
Italy	Roma	14/09/2018	95
	Roma	19/09/2019	25
	Oristano	29/03/2019	107
	Roma	05/10/2019	60
	Bologna	22/11/2019	20
Spain	Madrid	17/09/2019	50
Slovak	Bratislava	19/09/2019	250
Croatia	Zagreb	16/05/2019	120
	Zagreb	12/11/2019	350
Estonia	Tallinn	08/11/2019	150
Lithuania	Klaipėda	04/04/2019	37
	Vilnius	26/04/2019	350
	Vilnius	16/05/2019	147
	Orlando	06/07/2019	230
	Vilnius	16/10/2019	10
	Vilnius	14/11/2019	200

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	Vilnius	20/11/2019	18
Netherlands	Utrecht	03/10/2018	30
	Amsterdam	04/10/2019	20
		Total	2.269

▶ Target Users

▶ How the measure has supported the achieved results?

Net-UBIEP Open Day has disseminated:

- BIM Qualification Models (WP4);
- BIM Qualification and Certification Schemes (D5.3 – D31 / D5.4 – D32).

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2.7 Teaching activities

▶ Activity

The training activities are summarized in the WP 4. Shortly, they have taken place in each country partner in two different periods. In the first period they are realized to validate training materials elaborated in WP3. Therefore, Professionals (architects and engineers) have taken part in classroom courses and training has been focused on "how to work with BIM implementing the energy performance requirements". Instead Technicians have been trained through a e-learning course on "how to read a BIM Model and correctly interpret the data".

In the second period, training activities restart, both for professionals and technicians, with e-contents uploaded on e-learning platforms of each partner.

By the end of the project we expected to train 2.100 operators: 1.000 professionals (500 Architects + 500 Engineers) and 1.100 technicians. Overall, the ratio between the effective number and the expected number of operators trained, is 3.545/2.100=1,64.

Tab.11: Overview of the number of training participants surveyed

Countries	Course type	Participants	T. Eff.	T. Plan.
Croatia	1st classroom course for professionals	21	692	330
	2nd classroom course for professionals	34		
	3rd classroom course for professionals	37		
	E-learning for professionals	544		
	E-learning for technicians			
	1st classroom course for PA Owner Tenant BA	42		
	2nd classroom course for PA Owner Tenant BA	14		
Estonia	1st classroom course for professionals	51	507	320
	2nd classroom course for professionals	-		
	3rd classroom course for professionals	-		
	E-learning for professionals	123		
	E-learning for technicians	164		
	1st classroom course for PA Owner Tenant BA	95		
	2nd classroom course for PA Owner Tenant BA	74		

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Italy	1st classroom course for professionals	41	1098	560
	2nd classroom course for professionals	19		
	3rd classroom course for professionals	42		
	E-learning for professionals	58		
	E-learning for technicians	177		
	1st classroom course for PA Owner Tenant BA	107		
	2nd classroom course for PA Owner Tenant BA	38		
	Other teaching activities	616		
Lithuania	1st classroom course for professionals	24	306	240
	2nd classroom course for professionals	19		
	3rd classroom course for professionals	17		
	E-learning for professionals	39		
	E-learning for technicians	135		
	1st classroom course for PA Owner Tenant BA	34		
	2nd classroom course for PA Owner Tenant BA	38		
Slovakia	1st classroom course for professionals	15	218	120
	2nd classroom course for professionals	13		
	3rd classroom course for professionals	12		
	E-learning for professionals	60		
	E-learning for technicians	66		
	1st classroom course for PA Owner Tenant BA	39		
	2nd classroom course for PA Owner Tenant BA	13		
Spain	1st classroom course for professionals	54	366	290
	2nd classroom course for professionals	-		
	3rd classroom course for professionals	-		
	E-learning for professionals	265		
	E-learning for technicians			
	1st classroom course for PA Owner Tenant BA	23		
	2nd classroom course for PA Owner Tenant BA	24		
The Netherlands	1st classroom course for professionals	11	267	240
	2nd classroom course for professionals	9		
	3rd classroom course for professionals	15		
	E-learning for professionals	Ongoing		
	E-learning for technicians	1		
	1st classroom course for PA Owner Tenant BA	200		
	2nd classroom course for PA Owner Tenant BA	11		
	3rd classroom course for PA Owner Tenant BA	20		
		IN TOTAL	3.454	2.100

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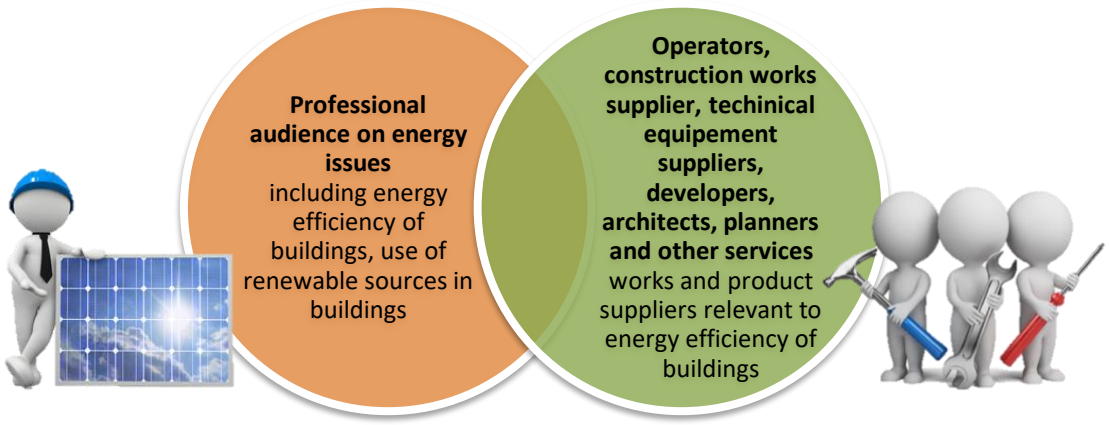
Tab. 12: Ratio between total effective and total planned	
Countries	Tot. Eff./Tot. Plan.
Croatia	2,10
Slovakia	1,82
Estonia	1,58
Italia	1,96
Lithuania	1,28
Spain	1,26
The Netherlands	1,11
All together	1,64

In the Work Package 4 we have evidences about the training activities.

- **Target Users**



- **How the measure has supported the achieved results?**

For three years after the end of the project Net-UBIEP will provide tools to Public Administrations, Professionals, Technicians and Owners, tenant, building administrator to increase their competences on BIM related to Energy Efficiency.

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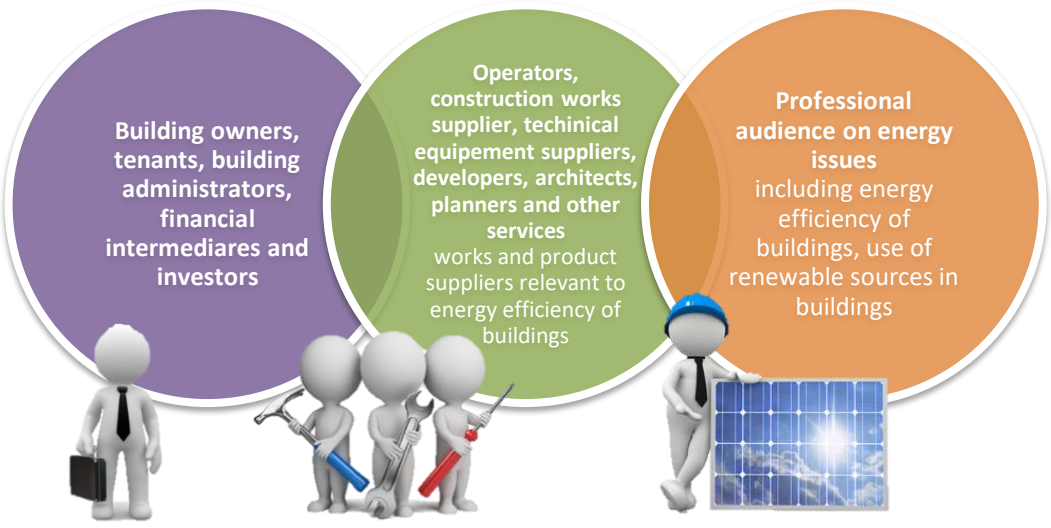
2.8 E-contents freely available on Net-UBIEP platforms

▶ Activity

E-contents are training materials used by architects, engineers and technicians during the training courses (validation process). They are available on Net-UBIE platforms and now they can be used to spread information and results about the project, in addition to increase competences of professionals and technicians who will use them.

ENEA will realize a general overview to ensure the continuity and functioning of the Platform. This will be possible thanks to the sponsorship of RES material produced, technician associations and professional association who join the Net-UBIEP Support and Association Partners Network. Furthermore, every year ENEA, will realize a report with information about the diffusion of BIM Qualification Model and its implementation and will diffuse it to project partners, support partners and stakeholders.

▶ Target Users



▶ How the measure has supported the achieved results?

For three years after the end of the project Net-UBIEP will provide tools to Public Administrations, Professionals, Technicians and Owners, tenant, building administrator to increase their competences on BIM related to Energy Efficiency.

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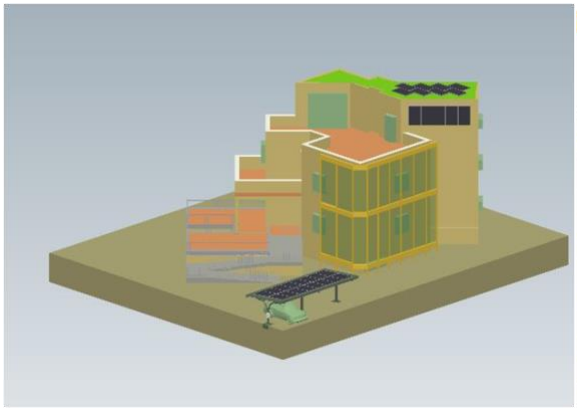
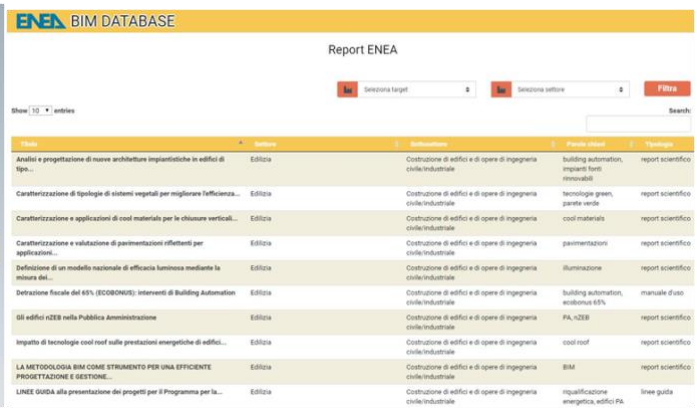
▶ Other E-content tool

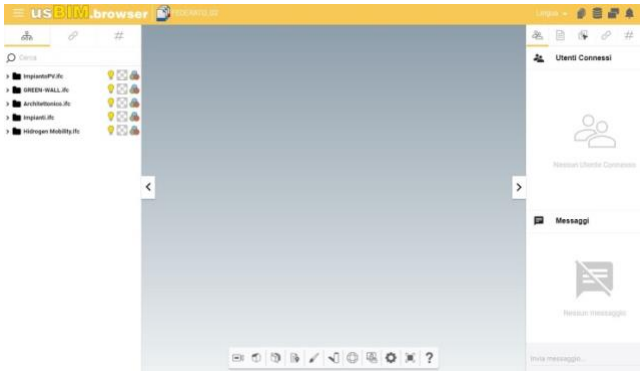
"*BIM for training"* it's a tool created to:

- demonstrate the potential deriving from operating in an OpenBIM environment and innovative associated functions;
- facilitate learning processes and make various levels of detail possible in relation to the basic skills possessed by the user.

The tool allows you to browse the 3D model of the ENEA School of Energy and query the various parametric objects (walls, roofs, floors, fixtures and installations) populated with information regarding the school building-plant system, technical sheets associated with the components opaque and transparent casing containing good practices for the correct energy efficiency.







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2.9 People contacted by the Project Partners

1) Contacts taken by the social network Facebook Outside the Partner Member States

Facebook Pages	Ref. Partners	Countries	Fans
HR	FCE	Austria	2
HR	FCE	Belgium	1
HR	FCE	Bosnia & Herzegovina	1
HR	FCE	Bulgaria	1
HR	FCE	China	1
HR	FCE	Croatia	142
HR	FCE	Estonia	1
HR	FCE	Germany	6
HR	FCE	India	1
HR	FCE	Iran	1
HR	FCE	Italy	4
HR	FCE	Luxembourg	1
HR	FCE	Macedonia	1
HR	FCE	Poland	1
HR	FCE	Romania	2
HR	FCE	Serbia	2
HR	FCE	Slovakia	3
HR	FCE	Sweden	2
HR	FCE	UK	2
HR	FCE	USA	1
IT	CSA	Australia	1
IT	CSA	Austria	2
IT	CSA	Belgium	1
IT	CSA	Bulgaria	1
IT	CSA	Croatia	62
IT	CSA	Estonia	3
IT	CSA	Finland	1
IT	CSA	Germany	2
IT	CSA	Iran	1
IT	CSA	Italy	72
IT	CSA	Lithuania	7
IT	CSA	Macedonia	1
IT	CSA	Netherlands	2
IT	CSA	Perù	1
IT	CSA	Slovakia	10
IT	CSA	Spain	6
IT	CSA	Sweden	2
IT	CSA	Ukraine	3

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IT	CSA	UK	1
IT	CSA	USA	1
EE	TUT	Australia	1
EE	TUT	Canada	1
EE	TUT	Croatia	1
EE	TUT	Denmark	1
EE	TUT	Estonia	132
EE	TUT	Finland	2
EE	TUT	Israel	1
EE	TUT	Jordan	1
EE	TUT	UK	2
EE	TUT	USA	1

2) Contacts taken with the registration to the Net-UBIEP Portal

Countries	References	Targets of the References
Albania	Altin Maraj	engineers and architects
Albania	Orges Deraj	engineers and architects
Andorra	Relreola	owner of buildings
Australia	Woodrowgluche	Financial institutes
Austria	Apeksha Shandilya	engineers and architects
Costa Rica	Paolo Di Biase	engineers and architects
Estonia	Jevgeni Turin	engineers and architects
Estonia	Toomas Rähmonen	engineers and architects
Estonia	Tõnis Teppand	engineers and architects
Finland	Tarja Häkkinen	other
Greece	Dimitrios Ioannis Dimopoulos	engineers and architects
Ireland	Ruy Camacho	other
Isle of Man	Yufaggsardili	owner of buildings
Italy	Marco Pietrobon	public administration
Italy	Liliana Bonfiglio	other
Italy	Alberto Sozza	engineers and architects
Italy	Alessandro Gasparetto	engineers and architects
Italy	Antonio Molinelli	engineers and architects
Italy	Guido Leali	owner of buildings
Italy	Matteo Vesco	engineers and architects
Italy	Enrico Giordano	public administration
Italy	Salvatore Frezza	ESCOs
Italy	Michele Laurino	constructor
Italy	Martina Cufari	engineers and architects
Italy	Fausto Boccabella	public administration
Italy	Marcozzi Alfonso	engineers and architects
Italy	Luigi D'Alessandro	engineers and architects

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Italy	Giuseppe Sgroi	engineers and architects
Italy	Giuseppe Sgroi	engineers and architects
Italy	Massimo La Spada	engineers and architects
Italy	Salvatore Saglimbeni	engineers and architects
Italy	Salvatore Saglimbeni	engineers and architects
Italy	Silvana Mondello	public administration
Italy	Giacomo Villari	public administration
Italy	Francesca Sanna	ESCOs
Italy	Alessandro Trovato	other
Japan	Lisqituqqdili	owner of buildings
Lithuania	Audronė Kučinskienė	professionals associations
Lithuania	Laurynas Dvareckas	engineers and architects
Macedonia	Dijana Likar	engineers and architects
Madagascar	Effimi	ESCOs
Mongolia	Checkvilheili	constructor
Portugal	Pedro Lucas Martins	engineers and architects
Portugal	Jason Stockdale	engineers and architects
Romania	Constantin Vinau	non government organizations
Slovakia	Slovadam	professionals associations
Slovenia	Terwixonse	constructor
Spain	María Del Mar Martínez Cerro	engineers and architects
Swaziland	Matthewhot	engineers and architects
UK	John Hyde	professionals associations
Venezuela	Maria Rosell	other

3) Contacts taken from the BIM Alliance initiative

Projects	Countries	Organizations
BIMPLEMENT	Belgium	Conseil des Architectes d'Europe
BIMPLEMENT	France	Alliances Villes Emploi
BIMPLEMENT	France	Astus-Construction
BIMPLEMENT	Lithuania	Regioninis Inovaciju Vadybos Centras
BIMPLEMENT	Poland	Mostotal Warszawa
BIMPLEMENT	Spain	Instituto Valenciano De La Edificacion
BIMPLEMENT	The Netherlands	Huygen Installatie Adviseurs
BIMEET	Finland	Technical Research Centre of Finland
BIMEET	Finland	Metropolia University of Applied Sciences
BIMEET	France	Centre Scientifique et Technique du Bâtiment
BIMEET	France	La platforme Formazion & Evaluation de L'INES
BIMEET	Greece	Center for Renewable Energy Sources
BIMEET	Luxembourg	Luxembourg Institute of Science and Technology
BIMEET	Luxembourg	House of Training
BIMEET	United Kingdom	Building Research Establishment

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BIMEET	United Kingdom	Cardiff University
BIMCERT	Croatia	Energy Intitute Hrvoje Požar
BIMCERT	Ireland	Technological University Dublin
BIMCERT	Ireland	Future Analytics Consulting
BIMCERT	Macedonia	Inst. for research in environment, Civil Eng. and Energy
BIMCERT	Portugal	Instituto Superior Tecnico
BIMCERT	United Kingdom	Belfast Metropolitan College
BIMCERT	United Kingdom	Construction Industry Training board

4) Contacts taken from EUBIM project

Countries	Organizations	Contact reference
Estonia	Estonia's Ministry of Economic Affairs and Communications	Virgo Sulakatko
France	CSTB on behalf of France's PTNB	Souheil Soubra
Italy	Italian BIM Commission and Ministry of Infrastructure and Transport	Pietro Baratono
Italy	Italian BIM Commission and Ministry of Infrastructure and Transport	Angelo Ciribini
Norway	Norway Statsbygg, Special Adviser to the EU BIM Task Group	Diderik Haug
Spain	Ineco on behalf of the Spanish Ministerio de Fomento	Jorge Torrico
Spain	Ineco on behalf of the Spanish Ministerio de Fomento	Elena Puente Sanchez
Sweden	Trafikverket, Swedish Transport Administration	Ingemar Lewen
Sweden	Trafikverket, Swedish Transport Administration	Jennie Carlstedt
The Netherlands	Netherlands' Rijkswaterstaat	Benno Koehorst
The Netherlands	Netherlands' Rijkswaterstaat	Hester van der Voort
UK	UK Government's BIM Task Group and Digital Built Britain	Mark Bew MBE
UK	UK Government's Department for Business, Energy and Industrial Strategy	Barry Blackwell
UK	Project manager for the EU BIM Task Group	Richard Lane
UK	Chair of the EU BIM Task Group	Adam Matthews

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UK	Deputy-chair of the EU BIM Task Group	Ilka May

5) Contacts taken through the sharing of other European projects

Countries	Organizations	People	Target/Project
Austria	Energy Agency Styria	Alexander Ebner	BUS Crosscraft
Austria	Austrian Energy Agency	Georg Trnka	BUS Crosscraft
Belgium	ULB	Patrick Hendrick	MEnS
Belgium	COWI	Jean-Baptiste Laffitte	BUS Evaluation
Bulgaria	Bulgarian Construction Chamber	Stiliyan Ivanov	BUS EnerPro
Bulgaria	EnEffect Group	Alexander Stankov	BUS EnerPro
Bulgaria	EnEffect Group	Dragomir Tzanev	Train-to-NZEB
Cyprus	Cyprus Energy Agency	Panayiotis Kastanias	BUS WE-Qualify
Cyprus	Ministry of Labour, Walfare and Social	Andreas Polydorou	eedf
Czech Republic	SEVEn	Jiri Karasek	IngREes
Czech Republic	ENVIROS	Lucie Kochova	BUILD UP Skills CZ
Denmark	Viegand Maagøe	Anne Svendsen	BUS Evaluation
Finland	TTS Work Efficiency Institute	Minna Kuusela	BUS BEEP
Finland	Motiva Services	Irmeli Mikkonen	BUS BEEP
France	Alliance Villes Emploi	Marie-Pierre Establie D'Argencé	BUS France
France	Alliance Villes Emploi	Loëva Labye	BUS France
France	Espace Inter-Initiatives	Henri Le Marois	BUS France
Germany	FBH	Aline Goldberg	BUS Qualitrain
Germany	German Confederation of Skilled Crafts e.V	Ursel Weissleder	BUS Qualitrain
Greece	Centre for Renewable Energy Sources and Saving	Charalampos Malamatenios	BUS
Greece	Technical University of Crete-Renewable and Sustainable Energy Systems Lab	Theocharis Tsoutsos	BUS UPSWING

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Hungary	ÉMI Non-profit Limited Liability Company for Quality Control and Innovation in Building	Károly Matolcsy	BUS TRAINBUD
Hungary	AFIOE - Association for Building Engineering	Attila Zoltán	BUS TRAINBUD
Ireland	Institute of Technology Blanchardstown	Mark Keyes	BUS Qualibuild
Ireland	Limerick Institute of Technology	Elisabeth O'Brien	BUS Qualibuild
Latvia	Latvian Environmental Investment Fund	Silvija Bruna	BUS FORCE
Latvia	Riga Planning Region	Agris Kamenders	BUS FORCE
Luxembourg	myenergy	Christiane Conrady	BUS LuxBuild
Luxembourg	Chambre des Métiers	Christiane Hoffmann	BUS LuxBuild
Macedonia	Economic Chamber of Macedonia	Jadranka Arizankovska	BUS BEET
Macedonia	Association of business and consultancy	Risto Ivanov	BUS BEET
Portugal	National Laboratory of Energy and Geology	Susana Camelo	BUS FORESEE
Portugal	National Laboratory of Energy and Geology	Helder Goncalves	BUS FORESEE
Romania	National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial Development	Horia Petran	BUS QualiShell
Sweden	Teknologisk Institut	Peter Bergermark	BUS SWEBUILD
Sweden	Teknologisk Institut	Sara Karlsson	BUS SWEBUILD
Sweden	Energy Agencies of Sweden	Per-Johan Wik	BUS SWEBUILD

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6) Total contacts in each country

Countries	Totals	Countries	Totals
Albania	2	Japan	1
Andorra	1	Jordan	1
Australia	3	Latvia	2
Austria	7	Lithuania	10
Belgium	5	Luxembourg	5
Bosnia & Herz.	1	Macedonia	6
Bulgaria	5	Madagascar	1
Canada	1	Mongolia	1
China	1	Netherlands	2
Costa Rica	1	Norway	1
Croatia	206	Perù	1
Cyprus	2	Poland	2
Czech Republic	2	Portugal	5
Denmark	2	Romania	4
Estonia	140	Serbia	2
Finland	8	Slovakia	14
France	8	Slovenia	1
Germany	10	Spain	10
Greece	4	Swaziland	1
Hungary	2	Sweden	9
India	1	The Netherlands	3
Iran	2	Ukraine	3
Ireland	5	UK	15
Isle of Man	1	USA	3
Israel	1	Venezuela	1
Italy	102		

Total contacts: 627

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3. Capitalization Strategy

Besides the above already planned activities, the partners have identified, in each country, the decision makers at national and regional level to present the results of the project to promote the use of BIM in all the construction industry. In particular they:

- have contacted **public administration** (competent minister and/or regional departments) to introduce BIM model for energy performance in the building regulation, updated to 08th January 2020:

Countries	Number of contacts
Italy	275
Lithuania	9
Netherlands	9
Croatia	37
Spain	90
Slovakia	17
Estonia	4

- have promoted the new BIM profiles among **architects and engineers**, updated to 08th January 2020:

Countries	Number of contacts
Italy	28
Lithuania	0
Netherlands	29
Croatia	80
Spain	251
Slovakia	21
Estonia	10

- have promoted awareness among **associations and NGOs**, updated to 08th January 2020:

Countries	Number of contacts
Italy	302
Lithuania	16
Netherlands	0
Croatia	46
Spain	28
Slovakia	5
Estonia	0

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- have promoted the use of BIM libraries integrated with energy performances parameters among **technicians and producers** of materials and components for BIM industries, updated to 08th January 2020:

Countries	Number of contacts
Italy	1
Lithuania	10
Netherlands	14
Croatia	419
Spain	18
Slovakia	14
Estonia	0

- have promoted the importance of developing a BIM model for the energy facilities among **owners, tenants and facilities managers**, updated to 08th January 2020:

Countries	Number of contacts
Italy	11
Lithuania	2
Netherlands	4
Croatia	11
Spain	12
Slovakia	3
Estonia	2

- have promoted the importance of developing a BIM model among **Financial Institutions and ESCO's**, updated to 08th January 2020:

Countries	Number of contacts
Italy	1
Lithuania	5
Netherlands	0
Croatia	1
Spain	1
Slovakia	1
Estonia	0

For a detail of the complete data base of the stakeholders examine the Dropbox folder "H2020 NET-UBIEP Project" (Stakeholders database). It is possible to find the Stakeholders database in the Dropbox folder (H2020 NET-UBIEP / WP7).

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4. Relation to Communication tools

As it is important to disseminate the project Net-UBIEP, a Steering Committee and the Communication Board have decided the Communication Strategy showed in the Communication and Endorsement Strategy (D41 – D7.1).

4.1. Project visual identity

In order to share the same project "trademark", all project partners used the same graphical design collected in the Dropbox folder (H2020 NET-UBIEP / General Communication Document). All managers engaged in the project are responsible for the compliance of visual identity in all communication tools related to the project.
Project visual identity had been subcontracted to Archimedes 181, a Company for Architecture, Design and Graphic which is in charge of elaborating a Project Visual Identity Tool Kit (H2020 / WP7 Communication / General Communication Materials) with:

- logo;
- official colors;
- project overview presentation;
- presentation layout;
- e-newsletter layout;
- brochure;
- banner layout;
- letterhead layout;
- list of attendance layout

4.2. Project web-portal and Partner website

The web site (www.net-ubiep.eu) plays a key role in the dissemination strategy of Net-UBIUEP. It contains all relevant information regarding the project and its result, updated in a regular time.
The principal areas are:

- partner and project description;
- promotional clips to promote the project objectives and results as well as partners' role;
- clip of training activities;
- link to the training activities;
- seminars, classroom courses;
- recorded workshop and/or lectures to promote project activities

4.3. Social network

Each partner disseminates the project in their social network sites:

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Tab.9: Social Networks and Followers for each partner			
Partner	Social Network	Followers	
		Planned	Effective
CSA	LinkedIn	4.400	29.113
	Facebook		5.766
	Twitter		50
ENEA	LinkedIn	6.500	31.621
	Facebook		18.909
	Twitter		11.898
FLC	LinkedIn	3.665	29.443
	Facebook	5.600	11.000
	Twitter	9.351	13.000
	Google+	268	268
	Instagram		2.052
	YouTube		9.037
ISSO/B&R	LinkedIn	1.882	2.279
	Twitter	1.360	1.615
FCE	LinkedIn Net-UBIEP HR		41
	Facebook Net-UBIEP HR		177
DIG.CON.	LinkedIn	50	
	Facebook	100	523
ViaEU & UVS	Facebook		889
	Twitter		77
VGTU	LinkedIn	23.440	31.442
	Facebook	25.771	31.667
	Twitter	399	0
EGLC	LinkedIn		12
	Facebook		60
	Totals	82.786	230.939

Facebook is useful to promote a viral campaign;
Vimeo/YouTube to upload video clip of the project, record lectures and seminars;
LinkedIn reaches professionals and promotes project activities and group discussions;
Twitter could be useful to disseminate Project #Hashtag).
It is possible to find the confirmation of Social Network's posts published time by time in the Deliverables D7.7 and D7.8.

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4.4. Newsletter

Newsletter want to inform about progress made and new facts concerning the project activities and the program. In addition, newsflash aspire to inform about the last updates on the websites or about recent document published.

Each partner has a newsletter with different periodicity and a different number of people reached:

Tab.10: Number of newsletter and average number of reached people for each partner

Countries	Partners	Newsletter sent	Average number of reached people	
			Planned	Effective
Italy	CSA	21	7.500	3.839
	ENEA	(ENEA N.) 1	6.000	3.000
		(Project N.) 3		2.500
Spain	FLC	24	28.000	233.333
	CSIC	2	10.000	XXX
Slovak	UVS	3	6.000	5.485
	ViaEU			
Croatia	CSA (HR)			
	FCE	7	5.000	6.511
Estonia	EGLC	3		4600
	TUT			
Lithuania	DIG.CON.		2.000	
	VGTU *	4		11.169
Netherlands	BeR	5		1.965
	ISSO	(ISSO N.) 1	3.000	
		(BIM loket N) 2		125
Totals**		76	12.230	76.601

* Assumption made that VGTU posted newsletters were red at least by VGTU employees (1.569) and VGTU students (9.600). Average number of reached people calculated by aggregation of both numbers. The number of outside VGTU community was not assessed.
** The total average is calculated with a weighted average.

In the following pages, there are evidences about the newsletter

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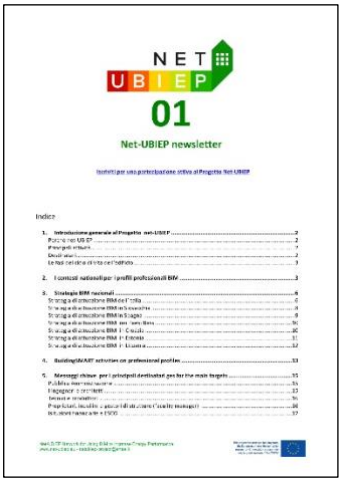
CSA 01/2018

CSA 02/2018

CSA 02/2018



CSA 03/2018

CSA 04/2018

CSA 05/2018

CSA 06/2018

CSA 07/2018

CSA 09/2018

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CSA 10/2018

CSA 11/2018

CSA 01/2019

CSA 02/2019

CSA 03/2019

CSA 04/2019

CSA 05/2019

CSA 06/2019

CSA 07/2019

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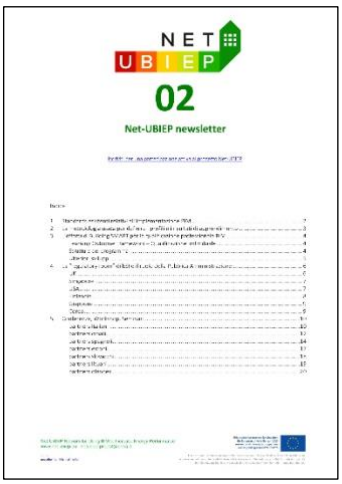
CSA 09/2019

CSA 10/2019

ENEA – CSA 1

ENEA – CSA 2



ENEA inform@

ViaEU 1

ViaEU 2

ViaEU 3

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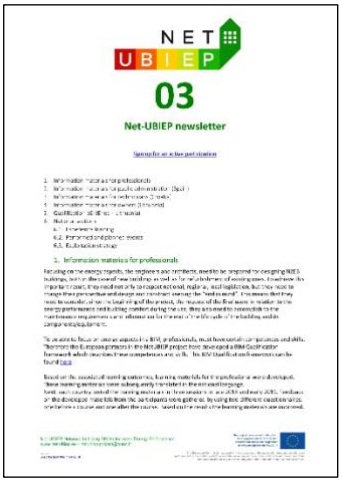
ISSO 01/2019

ISSO 2

ISSO 3



FCE 1

VGTU 12/2017

FLC BD 544 06/2017

FLC BD 550 07/2017

FLC BD 559 11/2017

FLC BD 572 02/2018

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FLC BD 590 07/2018

FLC BD 598 10/2018

FLC BD 622 05/2019

FLC BD 624 05/2019

FLC BD 625 05/2019

FLC BD 635 09/2019

FLC BD 639 10/2019

FLC BD 641 10/2019

FLC BD 642 10/2019

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FLC BD 643 11/2019

FLC BE 01 10/2018

FLC BE 02 01/2019

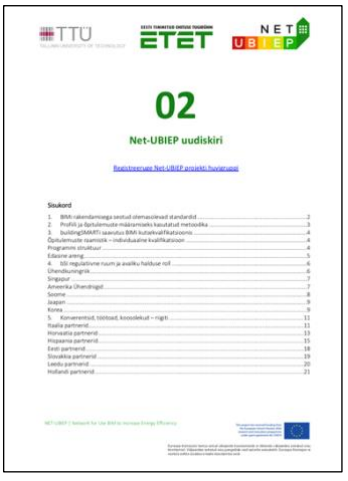
FLC BE 03 04/2019

FLC BE 04 07/2019

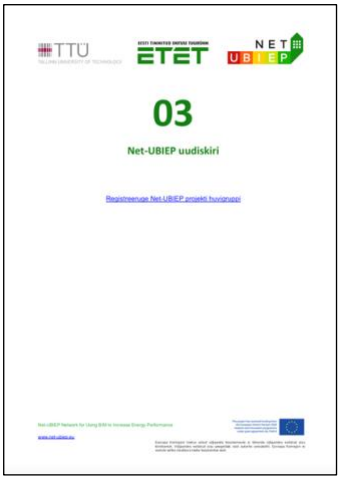
FLC BE 05 10/2019

EGLC 02/2018

EGLC 10/2018



EGLC 09/2019



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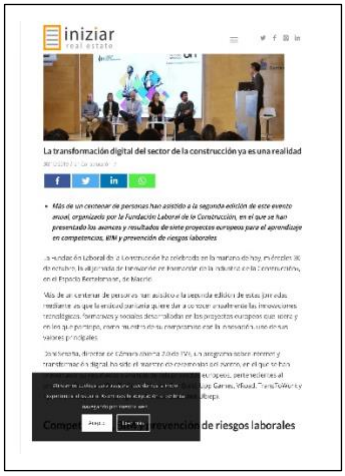
4.5. Press office

Press releases to local, regional and European newspaper and on-line news join press conferences to contribute to disseminate the project's results. It is possible to consult the chart below to a confirmation of the press office:

FLC – Iniziar Real Estate

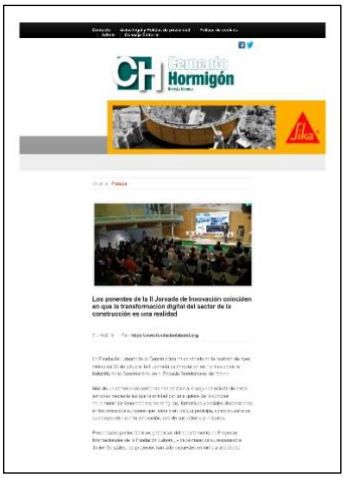


FLC – Política local

FLC - Promateriales

FLC - Smart Lighting

FLC – Cemento Hormigòn



FLC - Inmodiario

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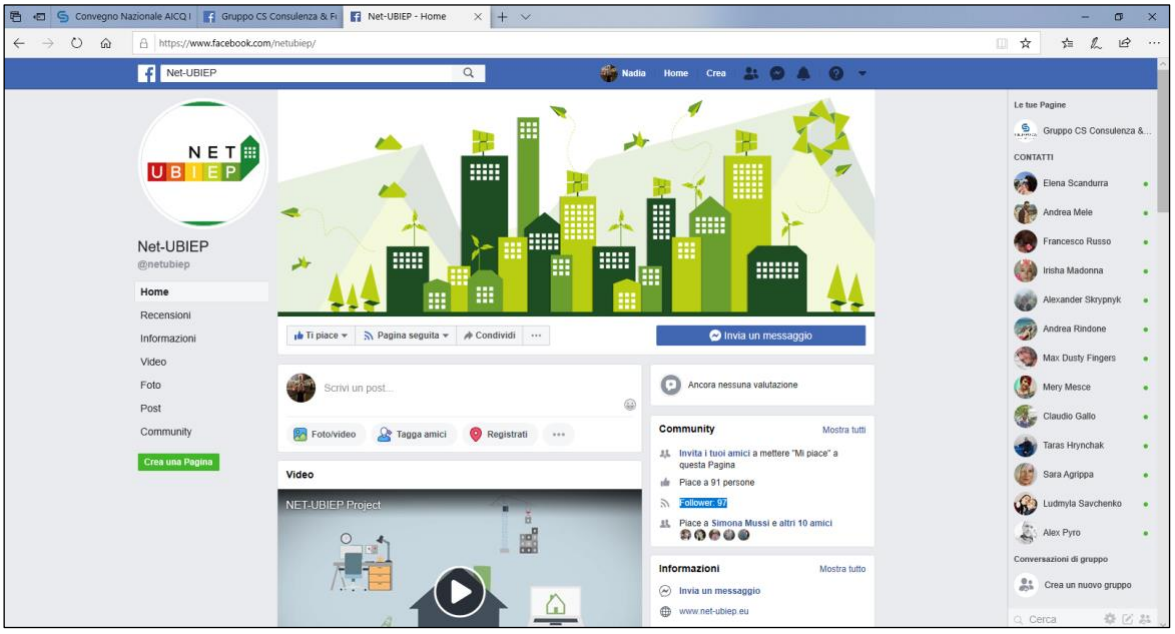
5 Impact monitoring

5.1 Social network activities

The evidences of partners social network activities (Facebook, LinkedIn, Twitter) are in the deliverables 7.7. and 7.8. Below we report some statistics related to Net-UBIEP social networks pages.

Facebook



The partners opened four Net-ubiep Facebook pages which differ according to the language: English (EN), Italian (IT), Croatian (HR), Estonian (EE). In the following there are the number of Likes updated until the beginning of December 2019.

Tab.11: Likes to each Facebook page

Facebook pages	Likes to pages
EN	97
IT	87
HR	176
EE	48
Totals	408

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Facebook make available for pages administrators some performance indicators. Two of them are the organic coverage and the paid coverage.

The organic coverage depends on interactions of users. If users interact with the post (clicks and reactions), then the collective of people reached will grow, otherwise it will block. Therefore, this indicator could be an estimator about the interest in the project.

Tab.12: Indicators in 2019 for each Facebook page

Pages	Posts	Coverages	Average C.	Interact.	Average I.
EN	40	13.615	340	805	20
IT	15	2.009	134	317	21
HR	65	25.546	393	1.245	19
EE	27	2.929	108	609	23
Totals	147	44.099	300	2.698	20

Tab.13: Indicators in 2018 for each Facebook page

Pages	Posts	Coverages	Average C.	Interact.	Average I.
EN	10	1.161	116	124	12
IT	9	1.461	162	115	13
HR	40	5.401	135	506	13
EE	16	2.676	167	511	32
Totals	75	10.699	143	1.256	17

Tab.14: Indicators in 2017 for each Facebook page

Pages	Posts	Coverages	Average C.	Interact.	Average I.
EN	1	55	55	20	20
IT	3	18	6	13	4
HR	23	240	10	13	1
EE	4	316	79	73	18
Totals	31	629	20	119	4

The average coverages has increased over the time. It may be due to an increased of interest in the project.

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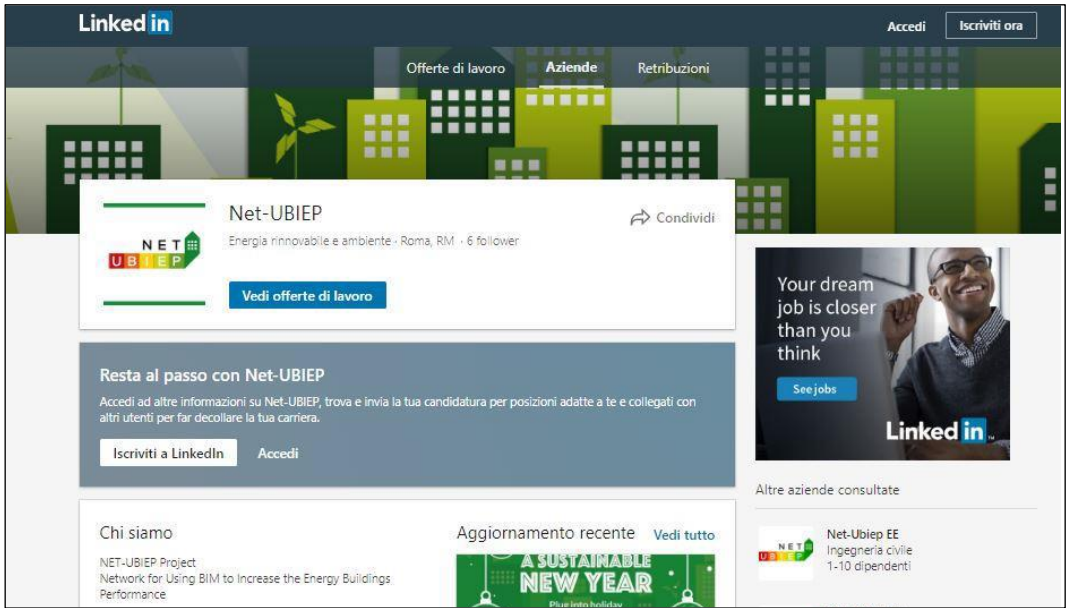
Twitter (Follower: 81 people)

LinkedIn (Follower: 12 people)



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5.2 Video

YouTube
videos: 19 - views: 2171


https://www.youtube.com/watch?v=S3qnlQ877xY

https://www.youtube.com/watch?v=FLeXtt4SsQ8

https://www.youtube.com/watch?v=_H8LTtWabKo

https://www.youtube.com/watch?v=8Q8pCsOzuWQ

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https://www.youtube.com/watch?v=nQfxYkzxMUM


https://www.youtube.com/watch?v=EXzd9oqqaVg


https://www.youtube.com/watch?v=U_Dn1sA8CBA

https://www.youtube.com/watch?v=N3hRBWnBabo


https://www.youtube.com/watch?v=-KxigIys68I

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https://www.youtube.com/watch?v=lyNPP4QaEZo

https://www.youtube.com/watch?v=AOaXVTelQwA

https://www.youtube.com/watch?v=hRVBKpBSdDo

https://www.youtube.com/watch?v=AUytljbVmI0

https://www.youtube.com/watch?v=yZK0id7Fa8U

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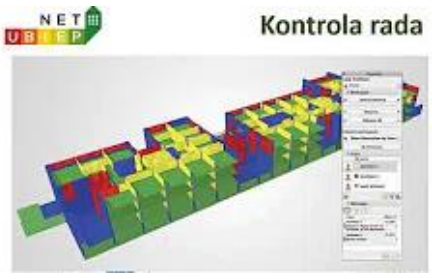
https://www.youtube.com/watch?v=zga04VA8BCA

https://www.youtube.com/watch?v=GoR8ATK3LGY

https://www.youtube.com/watch?v=T4JMJqs8uT4

https://www.youtube.com/watch?v=3oc2XZC7LmE



https://www.youtube.com/watch?v=8iw2Mi_13Gw

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5.3 Training and energy saving

Parameters

Number of operators trained in each country. The section 2.7 provide the number of professionals, technicians, PAs and Building administrators involved in training activities. Below we reported these number the totals.

Tab. 15: Operators trained with Net-UBIEP project

Countries	Total effective [M]	Total planned [M]
Italy	1.098	560
Spain	366	290
Croatia	692	330
Estonia	507	320
Slovakia	218	120
Lithuania	306	240
Netherlands	267	240
All countries	3.454	2.100

Employees of the construction sector. The International Labour Organisation provide data about employment by economic activity (according to the international Standard Industrial Classification of all economic activities (ISIC Rev. 4)) and occupation (according to the international Standards Classification of Occupations (ISCO-08)). According to the project needs we selected data representing the total number of people employed in the economic activity "Construction" (including the whole value chain) in the year 2015.

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Tab. 16: Employees of Construction Sector. Source: ILO	
Countries	Employees [M]
Italy	1.468.300
Spain	1.073.700
Croatia	109.400
Estonia	61.800
Slovakia	213.600
Lithuania	105.000
Netherlands	402.600

Quantification of Net-UBIEP impact on energy savings

let's proceed with the calculation of the energy saving triggered by the Net-UBIEP project. We can assume that the implementation of BIM in construction phases (conceptual design, structural design, construction, maintenance, refurbishment and eventual demolition) involves a reduction of energy consumption of 20% compared to traditional processes currently used. So, each operator trained in Net-UBIEP project can activate an energy saving equal to the 20%.

We can obtain the energy saving triggered by each operator (s), dividing the Annual Energy consumption for the Residential Sector by the number of employees in the construction sector and multiplying the result for 0.20.

Tab. 17: Energy saving triggered by each operator who works implementing BIM			
Countries	Annual Energy consumption for the Residential Sector [GWh/Y]	Employees of Construction Sector [M]	(s) Energy saving per each operator who works implementing BIM [GWh/(Y*M)]
Italy	343.619,98	1.468.300	0,0468052
Spain	171.068,00	1.073.700	0,0318651
Croatia	25.397,59	109.400	0,0464307
Estonia	10.342,56	61.800	0,0334711
Slovakia	22.702,92	213.600	0,0212574
Lithuania	16.364,57	105.000	0,0311706
Netherlands	106.084,21	402.600	0,0526996

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Thus, we can obtain the energy saving triggered by the project multiplying the energy saving triggered by each operator for the number of operators trained in each country with Net-UBIEP project. The effective numbers consider also the number of PAs and Building administrators who have been trained within the project, unlike the planned numbers which consider only the number of technicians and professionals.

Tab. 18: Total energy savings triggered by the project

Countries	Energy saving per each operator who works with BIM [GWh/(Y*M)]	Operators trained by Net-UBIEP by the project (Nov 2019) [M]		Total Energy saving per country (S) [GWh/Y]	
		Planned	Effective	Planned	Effective
Italy	0,0468052	560	1.098	26,21	51,39
Spain	0,0318651	290	366	9,24	11,66
Croatia	0,0464307	330	692	15,32	32,13
Estonia	0,0334711	320	507	10,71	16,97
Slovakia	0,0212574	120	218	2,55	4,63
Lithuania	0,0311706	240	306	7,48	9,54
Netherlands	0,0526996	240	267	12,65	14,07
Totals		2.100	3.454	84,16	140,40

Quantification of Net-UBIEP impact on the Renewable Energy produced

According to the benchmarks defined previously and to the selected method we can proceed in quantifying the project impacts calculating the production of Renewable Energy (RE) that can be triggered by each operator in the building sector. We assume that an operator trained with the Net-UBIEP project can triggered an increase of RE produced equal to 15%.

We can calculate the increase in the production of RE triggered by one operator who work applying BIM, dividing the annual RE produced by the number of operators in construction sector and multiplying the result for 0.15 (Tab. 15).

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Tab. 19: Increase of RE production triggered by each operator who works implementing BIM			
Country	Renewable Energy produced in a year [GWh/Y]	Operators in construction sector [M]	(i) Increase in RES production triggered per each operator who apply BIM [GWh/(Y*M)]
Italy	110.136,10	1.468.300	0,011251389
Spain	58.754,76	1.073.700	0,008208265
Croatia	16.377,72	109.400	0,022455746
Estonia	13.607,10	61.800	0,033026942
Slovakia	9.873,87	213.600	0,006933897
Lithuania	13.013,97	105.000	0,018591386
Netherlands	17.142,62	402.600	0,006386967

To know the total increase of RE production triggered by the Net-UBIEP project it is necessary to multiply the increase of RE production triggered by an operator for the number of operators trained in each country (Tab. 16). The effective numbers consider also the number of PAs and Building administrators who have been trained within the project, unlike the planned numbers which consider only the number of technicians and professionals.

Tab.20: Total Increase of RE production triggered by the project					
Country	Increase in RES production triggered per each operator who apply BIM [GWh/(Y*M)]	Operators trained by Net-UBIEP project Nov 2019 [M]		Increase in RES production per country (I) [GWh/Y*M]	
		Planned	Effective	Planned	Effective
Italy	0,011251389	560	1.098	6,30	12,35
Spain	0,008208265	290	366	2,38	3,00
Croatia	0,022455746	330	692	7,41	15,54
Estonia	0,033026942	320	507	10,57	16,74
Slovakia	0,006933897	120	218	0,83	1,51
Lithuania	0,018591386	240	306	4,46	5,69
Netherlands	0,006386967	240	267	1,53	1,71
Totals		2100	3.454	33,49	56,55

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