

iBRoad2EPC outreach documentation

Overview report

Authors — Sympraxis Team

Marianna Papaglastra

Alexander Deliyannis

Layout

Sympraxis Team

Cover illustration

Depositphotos.com / vlastas

Published in August 2024 by iBRoad2EPC.

© iBRoad2EPC 2024. All rights reserved. Reproduction is authorised provided the source is acknowledged.

All of iBRoad2EPC's reports, analysis and evidence can be accessed from ibroad2epc.eu

The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the views of the European Commission. Neither the CINEA nor the European Commission are responsible for any use that may be made of the information contained therein.

EXECUTIVE SUMMARY

For iBRoad2EPC to penetrate the markets and achieve its decarbonisation ambitions, a key priority is to support awareness raising, recognition, interest and participation, and to promote the project results, both at local and EU level. This has been highlighted during discussions at project, EU or national level, as well as through interaction with stakeholders.

This report summarises the project's Outreach Documentation contributing to this priority; it includes the following specific activities:

- News alerts
- Digital information hubs
- Professional media
- Infographics

Stakeholders' feedback confirms that the aim has been reached and iBRoad2EPC has established a strong presence, name and position in the market. What remains next is for public authorities to grab the opportunity and take up iBRoad2EPC as part of their EPBD recast transposition processes.

TABLE OF CONTENTS

Executive summary.....	3
Introduction	5
Background and context.....	5
Objectives and structure of this report.....	5
Summary of activities.....	6
News Alerts	6
Digital information hubs.....	6
Professional media	6
Infographics.....	11
Success factors and Outcomes	16
Annex I. Indicative iBRoad2EPC posts on BUILD UP.....	17
Annex II. Indicative iBRoad2EPC posts on Construction 21	31

INTRODUCTION

Background and context

The iBRoad2EPC project, funded by the EU's Horizon 2020 programme (2021-2024), aims to support the decarbonisation of the EU building stock by combining EPCs with certain elements of a building Renovation Passport or roadmap, particularly the renovation guidance. The project has developed and tested a simplified and modular version of the Renovation Passport to meet the diverse needs of EU Member States markets and EPC frameworks. By combining the strengths of EPCs and renovation passports into a single flexible tool, it enhances user perception and motivates building owners towards energy-efficient renovations. It consists of a basic module, which incorporates the staged renovation advice, and additional modules (covering energy demand, investment, indoor environmental quality, smart readiness indicator, measured energy performance indicator, and other areas) that can be added as needed. With these features incorporated, **iBRoad2EPC is a ready-to-use, flexible, adaptable, modular and affordable model Renovation Passport, designed to be optionally integrated into existing EPC schemes, that has proven to have significant potential to support the implementation of the 2024 EPBD recast and help meet the EU's building decarbonisation targets.**

Objectives and structure of this report

As highlighted during discussions at project or national level and through interaction with stakeholders, key priority for iBRoad2EPC to penetrate the markets and achieve its decarbonisation ambitions is to support awareness raising, recognition, interest and participation, and to promote the project results, both at local and EU level. This report summarises the project's Outreach Documentation to contribute to this. It brings together the outputs of the project's following specific activities, around which the report is structured:

- News alerts
- Digital information hubs
- Professional media
- Infographics.

SUMMARY OF ACTIVITIES

News Alerts

Brief email updates sent to the project contacts list when new material is posted on the website.



iBRoad2EPC sample News Alert

Digital information hubs

The EC has been supporting since many years the BUILD UP portal as a centralised database of resources on energy efficiency policies. It is thus considered incremental for iBRoad2EPC’s outreach and recognition that public deliverables, important news, announcements and outcomes have been posted to the BUILD UP portal. More than 15 original posts have been submitted to BUILD UP in total, including public deliverables, press releases, and other. An overview of the related posts to BUILD UP, as shown through [Search | BUILD UP](#) is included in Annex I.

Another relevant and broadly known digital information hub is Construction 21. Two targeted posts were made to Construction 21 as included in Annex II.

Professional media

iBRoad2EPC’s media work was initiated to further enhance widespread outreach of project related news. Ad hoc, specially drafted and press ready summaries of outcomes in the form of posts, website articles, journal/newspaper articles, interviews, press releases, blogs, etc. were shared by project partners through their networks. Key highlights are presented below.

A first presence in the European Energy Innovation autumn 2022 edition was arranged in collaboration with the Next Generation EPCs Cluster.

europaen energyinnovation
Connecting Europe's Stakeholders in Energy and Transport

EU SUSTAINABLE ENERGY WEEK

REPowerEU

INNOVATIVE RENEWABLES

RAW MATERIALS

Includes national coordinators from:

- Morten Heberg Petersen (MCP)
- Karina Dell (KDP)
- Sean Kelly (SKP)

www.europeenergyinnovation.eu

Autumn 2022 Communication 29

Next Generation Energy Performance Certificates cluster

2019: QualDeEPC, U-CERT, X-tendo

2020: D²EPC, ePANACEA, EPC RECAST

2021: crossCert, EUB SuperHub, iBRoad2EPC, TIMEPAC

2022: Smart Living EPC, CHRONICLE

These projects have received funding from the European Union's Horizon 2020 and Horizon Europe research and innovation programmes. The European Union is not liable for any use that may be made of the information contained in this document, which is merely representing the authors' view.

Next Gen EPC cluster – Next Generation Energy Performance Certificates cluster

The Next Generation Energy Performance Certificates cluster of sister projects funded by the Horizon 2020 and Horizon Europe research and innovation programmes gathers 8 projects that started their activities in 4 successive generations:

- 2019: QualDeEPC, U-CERT & X-tendo
- 2020: D²EPC, E-ONCE, ePANACEA, EPC RECAST
- 2021: crossCert, EUB Super Hub, iBRoad2EPC, TIMEPAC
- 2022: CHRONICLE, SmartLivingEPC

The main mantra of the Next Gen EPC cluster is going further together as opposed to going fast alone for

allowing an open co-creation process maximizing quality, relevance, utility and effectiveness while avoiding reinventing the wheel and ensure a coordinated and convergent approach. This approach empowers decision makers at both EU and Member State levels and the overall EPBD-related stakeholder community to swiftly leverage the emerging results of this family of projects for the continuous EPBD transportation, implementation and monitoring process and the way the package of policy instruments are meaningfully weaved together.

Energy performance certificates (EPCs) are becoming the centre piece of the EPBD being linked to all the other policy instruments (e.g. SR, Digital Building Logistics, Renovation Roadmaps & Passports, Level(s)) and soon to be used as reference for financing building performance activities. Thus, they will add the highest potential to ensure an ERB coherence framework for all instruments to flawlessly work together. Together the Next Gen EPC cluster sister projects greatly support the digital and green transformation of the EU's building stock which in turn will enable and facilitate to arrive by 2050 at healthy, safe, efficient, flexible and zero-emission buildings for the people.

www.europeenergyinnovation.eu

30 COMMUNICATION

QualDeEPC – High-quality Energy Performance Assessment and Certification in Europe Accelerating Deep Energy Renovation

QualDeEPC stands for the high-quality energy performance assessment and certification in Europe accelerating deep energy renovation. The project partners work on the EU-wide convergence of the building assessment and the issuance, and verification of quality-enhanced EPCs as well as their recommendations for building renovation. The aim is to generate a coherent link between these recommendations and a deep energy renovation towards a nearly-zero energy building stock by 2050. To create consensus in the participating countries and EU-wide, and to implement as many improvements as possible during the project period, an intensive dialogue involving the important stakeholders at all levels takes place. Together with national experts the partners defined seven priorities QualDeEPC develops further to improve the long-term reliability and utilisation of EPC schemes and to tackle the grand challenge of the harmonization of EPCs across the EU: improving the recommendations for renovation, provided on the EPCs, towards deep energy renovation. Online tool for comparing EPC recommendations to deep energy renovation recommendations. Creating deep renovation network platforms. Regular mandatory EPC assessor training. High user-friendliness of the EPC. Voluntary mandatory advertising guidelines for EPCs, and improving compliance with the mandatory use of EPCs in real estate advertise-ments. Visit QualDeEPC and have a look at results so far. Website: <https://qualdeep.eu/> Twitter: @qualdeep Twitter: @qualdeep LinkedIn: QualDeEPC project

U-CERT – Towards a new generation of user-centred Energy Performance Assessment and Certification; facilitated and empowered by the EPB Center

U-CERT is a Horizon 2020 Coordination and Support Action project (September 2019 – November 2022) with the main aim to introduce a next generation of user-centred Energy Performance Assessment and Certification Scheme to value buildings in a holistic and cost-effective manner.

- Encourage the development and application of holistic user-centred innovative solutions, including the Smart Readiness Indicator for buildings and Indoor Environmental Quality
- Encourage and support users in decision making (e.g. on deep renovation), nudge for better choices and instil trust by making visible added (building) value, using EPCs

U-CERT has a focus on strengthening actual implementation of the EPBD by providing and applying insights from a user perspective and creating a level playing field for sharing implementation experience to all involved stakeholders, facilitated and empowered by the EPB Center Website: <https://u-certproject.eu/> Twitter: @u-cert Twitter: @u-cert Facebook: @u-certproject

D²EPC – Next-generation Dynamic Digital EPCs for Enhanced Quality and User Awareness

D²EPC ambitiously aims to set the grounds for the next generation of dynamic Energy Performance Certificates (EPCs) for buildings. The proposed framework sets its foundations on the smart-readiness level of the buildings and the corresponding data collection infrastructure and management systems. It is fed by operational data and adopts the 'digital twin' concept to advance Building Information Modelling, calculate a novel set of energy, environmental, financial, and human comfort/wellbeing indicators, and through the EPC classification of the building in question. Under the project vision, the proposed indicators will render dynamic EPCs a realistic, accurate and comprehensive tool that can lead the transformation of the European building stock into zero-energy buildings and stimulate an energy-efficient behavioural change in the building occupants. D²EPC proposes a digital platform that will enable the issuance and update of new EPCs on a regular basis, integrate a GIS environment and provide services including user-centred recommendations for energy renovation, benchmarking and forecasting of building performance as well as performance verification services. The proposed scheme will contribute to the redefinition of EPC-related policies and to the update of current standards, along with guidance for their implementation. Website: <https://www.d2epc.eu/en/> Twitter: @D2EPC LinkedIn: D2EPC

ePANACEA – Smart European Energy Performance Assessment and Certification

After 10 years of track record, the current EPC schemes across the EU face several challenges which have led to a not full accomplishment of their initial objectives: lack of accuracy, a gap between theoretical and real consumption patterns, absence of proper protocols for inclusion of smart and novel technologies, little coverage across Europe, lack of trust in the market and very little user awareness related to energy efficiency.

The objective of the ePANACEA project is to develop a holistic methodology for energy performance assessment and certification of buildings that can overcome the above-mentioned challenges. The vision of ePANACEA is to become a relevant instrument in the European energy transition through the building sector.

ePANACEA comprises the creation of a prototype (the Smart Energy Performance Assessment) making use of the most advanced techniques in dynamic and automated simulation modelling, big data analysis and machine learning, inverse modelling or the estimation of potential energy savings and economic viability check.

A relevant part of the project is to have a fluent dialogue with European policy makers, certification bodies, end-users and other stakeholders through two types of participatory actions: a feedback loop with policy makers, carried out through the so-called Regional Exploitation Boards (REBs) covering EU-27/UK-Norway on the one hand, and dialogue with end-users, established by means of specific thematic workshops, on the other.

Thanks to these participatory actions, the acceptance of the ePANACEA approach will be tested and validated in order to become aligned with and meet the needs of national public bodies, end-users and other stakeholders.

ePANACEA will demonstrate and validate reliability, accuracy, user-friendliness and cost-effectiveness of its methodology through 15 case studies in 9 European countries. Website: <https://epanacea.eu> Twitter: @EPANACEA LinkedIn: H2020 ePANACEA project

EPC RECAST – Next Generation of Energy Performance Assessment & Certification

EPC RECAST aims to engage building owners towards deep renovation by making EPCs more user-friendly, reliable and accurate. One of the key elements identified by the European Commission to trigger investments into retrofitting was the improvement of Energy Performance Certificates (EPCs).

To turn them into a robust market tool that can both be trusted and useful for users, a next generation of EPCs is needed. To engage building owners towards deep renovation, structured and tangible pathways need to be provided to reach an energy efficient building.

When it comes to reliability there is still a large variance between EPC assessors in terms of input data and calculation tools, as well as a general lack of understanding on predicted and real energy performance. The EPC RECAST toolbox aims to tackle both issues by providing innovative on-site data collection solutions for assessors, develop a cloud system to improve data interoperability and establish input/output links between EPCs, digital logbooks, renovation passports. This will include information on smart technologies in EPCs with recommendations for control & monitoring systems based on SR. Website: <https://epc-recast.eu/> Twitter: @epcrecast LinkedIn: EPC-RECAST

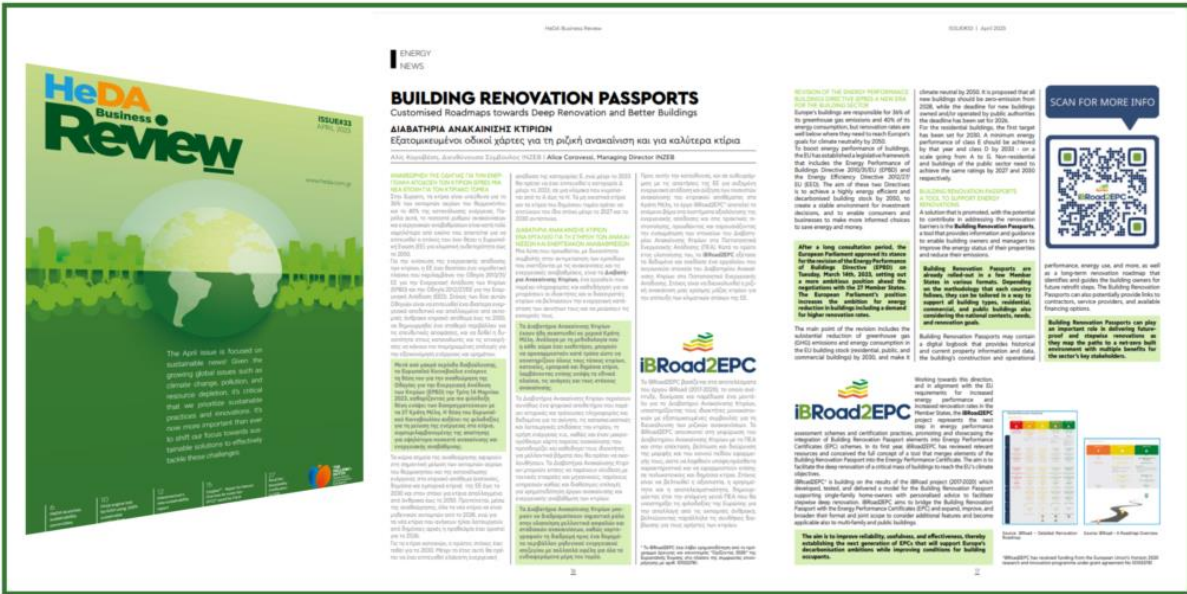
iBRoad2EPC – Integrating Building Renovation Passports into Energy Performance Certification schemes for a decarbonised building stock

The Horizon 2020 iBRoad2EPC project conceals a practical next step in energy performance assessment schemes and certification practices, showcasing the integration of Building Renovation Passport (BRP) elements into Energy Performance Certificates (EPC) and related schemes. iBRoad2EPC builds on the results of the Horizon 2020 iBRoad project (2017-2020) which developed, tested and delivered a model for the BRP supporting angles: energy performance assessment and certification practices, showcasing the integration of Building Renovation Passport (BRP) elements into Energy Performance Certificates (EPC) and related schemes. iBRoad2EPC builds on the results of the Horizon 2020 iBRoad project (2017-2020) which developed, tested and delivered a model for the BRP supporting angles: energy performance assessment and certification practices, showcasing the integration of Building Renovation Passport (BRP) elements into Energy Performance Certificates (EPC) and related schemes. iBRoad2EPC builds on the results of the Horizon 2020 iBRoad project (2017-2020) which developed, tested and delivered a model for the BRP supporting angles: energy performance assessment and certification practices, showcasing the integration of Building Renovation Passport (BRP) elements into Energy Performance Certificates (EPC) and related schemes.

iBRoad2EPC projects activities are clustered around four main pillars: (1) assess the needs, potentials and practicability of merging the EPC with the BRP; (2) adapt the iBRoad concept to become part of EPCs; (3) test and evaluate the applicability of iBRoad2EPC in six countries (Bulgaria, Greece, Poland, Portugal, Romania and Spain), including training for energy auditors and EPC issuers; (4) facilitate the adoption and exploitation of the iBRoad2EPC model across Europe. Website: <https://iBRoad2EPC.eu/> Twitter: @iBRoad2EPC LinkedIn: Horizon 2020 iBRoad2EPC

iBRoad2EPC featured in European Energy Innovation autumn 2022 edition

An article drafted by partner INZEB was included in HeDA's (Hellenic Dutch Association) Business Review which was disseminated in 1,500 printed copies available in key spots, such as the KLM business lounge at the Athens Airport, major central hotels in Athens and all member companies of the Association.



iBRoad2EPC featured in Hellenic Dutch Association Business Review

Partner ADENE prepared an article that was included in a large national distribution newspaper (61,533 daily paid digital and printed copies), in the dedicated buildings market section “Público Imobiliário”.

Os direitos de propriedade intelectual de todos os conteúdos do Público – Comunicação Social S.A. são pertença do Público. Os conteúdos disponibilizados ao Utilizador assinante não podem ser copiados, alterados, ou distribuídos salvo com autorização expressa do Público – Comunicação Social S.A.

Quarta-feira, 17 de Junho de 2024 | imobiliário | **Opinião** | 11

Passaportes de renovação dos edifícios como ferramenta para a descarbonização



João Ceteo
Gestor de Projetos na Direção de Estratégia, Políticas e Projetos da ADENE

Um dos grandes desafios das próximas décadas, a escala mundial, europeia e nacional, será a renovação dos edifícios até 2050, para que se atinja um parque edificado mais eficiente e sustentável e que possa garantir um dos direitos mais fundamentais na nossa sociedade: uma habitação digna conforme consagrado no artigo 65.º da Constituição da República Portuguesa. A renovação adequada dos edifícios onde vivemos e trabalhamos tem impactos positivos na redução das emissões de gases com efeito de estufa (tanto as emissões diretas e indiretas na fase de operação como aquelas associadas ao ciclo de vida dos produtos incorporados nos edifícios), na resiliência às alterações climáticas, no combate à pobreza energética e na transição para uma economia mais sustentável e “empregos verdes”, garantindo ao mesmo tempo condições de trabalho justas e dignas.

Se estes objetivos de longo prazo parecem uma inevitabilidade, a realidade é hoje bem mais complexa. O quinto relatório de monitorização da Estratégia de Longo Prazo para a Renovação dos Edifícios, na qual a ADENE – Agência para a Energia tem um papel fundamental como membro do Grupo de Coordenação, revela que, apesar da trajetória de redução de emissões e de consumo de energia primária, a taxa de renovação dos edifícios fica aquém da meta definida: um valor acumulado de 6,2% de edifícios renovados entre 2018 e 2020 face aos 69% definidos para 2020. Adicionalmente, o processo de renovação de um edifício ou fração pode ser complexo, dispendioso, difícil de organizar e demorado, envolvendo diversos profissionais e entidades. Muitas vezes, a única forma de fazer esta renovação é estendendo-a ao longo de vários anos e etapas.

É neste contexto que surge o passaporte de renovação dos edifícios como ferramenta de apoio à reabilitação, sendo uma das muitas disposições incluídas na reformulação da diretiva europeia relativa ao desempenho energético dos edifícios (publicada no Jornal Oficial da União Europeia a 8 de maio de 2024). Para além dos passaportes, constam também da diretiva objetivos ambiciosos como padrões mínimos de desempenho energético e trajetórias para uma

renovação progressiva de parque edificado, eliminação progressiva de sistemas com recurso a combustíveis fósseis e a ligação a infraestruturas para a mobilidade sustentável, entre muitos outros. O passaporte de renovação, cujo conceito havia já sido introduzido na anterior versão desta diretiva, sai agora reforçado sendo definido como um “roteiro adaptado para a renovação profunda de um determinado edifício num número máximo de etapas que melhorarão significativamente o desempenho energético deste”.

Foi com o objetivo de estudar possíveis modelos de passaporte e formas de operacionalização

com 11 parceiros e as ferramentas desenvolvidas foram testadas em seis países: Bulgária, Espanha, Grécia, Polónia, Portugal e Roménia. A ADENE, como parceira deste projeto, teve como responsabilidade acompanhar o desenvolvimento da plataforma e ferramenta de emissão de passaportes de renovação, a ligação ao Sistema de Certificação Energética dos Edifícios, a formação de Peritos Qualificados na metodologia e a coordenação da fase de testes em Portugal. Foram avaliados 10 edifícios de diferentes tipologias (escritórios, escolas, edifícios multi e unifamiliares), fruto da colaboração e apoio da Santa Casa Misericórdia de Lisboa, da empresa Construção Pública E.P.E. e da GEBALIS – Gestão do Arrendamento da Habitação Municipal de Lisboa, E.M. S.A.

Como exemplo, num dos edifícios multifamiliares estudados, foi possível estabelecer um plano que permite evoluir da classe energética F para a A+ em quatro etapas. Atualmente é um edifício em mau estado de conservação, com patologias que afetam a qualidade do ambiente interior e uma situação muito provável de pobreza energética dos residentes. A renovação proposta passa pela remodelação da envolvente, a instalação de solar térmico para a preparação de água quente sanitária, com apoio de uma bomba de calor, janelas eficientes (classe A+ pelo sistema de classificação CLASSE+ da ADENE) e sistema a biomassa para aquecimento ambiente. Estima-se, assim, atingir uma redução na emissão de gases com efeito de estufa da ordem dos 98%, de 58% no consumo de energia final e de 95% da fatura energética, melhorando significativamente a qualidade do ambiente interior e dotando o edifício de inteligência. Tudo isto se traduz numa oportunidade de planejar e realizar investimentos coerentes e realistas que garantem um edifício preparado para o futuro, valorizam o ativo imobiliário detido e aumentam a qualidade de vida dos residentes atuais e futuros, respondendo também a necessidades prementes como as patologias do edifício e prováveis situações de pobreza energética.

Fica assim evidente que, com os devidos incentivos, e a integração dos passaportes e ferramentas como o portal casa+, uma plataforma desenvolvida pela ADENE, que centraliza

que foi desenvolvido o projeto **iBRoad2EPC – Desenvolvimento e Integração de Passaportes de Renovação dos Edifícios no Sistema de Certificação Energética dos Edifícios, cofinanciado pelo programa Horizonte 2020 da União Europeia**. O iBRoad2EPC contou

“Tudo isto se traduz numa oportunidade de planejar e realizar investimentos coerentes e realistas que garantem um edifício preparado para o futuro, valorizam o ativo imobiliário detido e aumentam a qualidade de vida dos residentes atuais e futuros”

iBRoad2EPC featured in Público Imobiliário

Three major articles were especially drafted to focus on specific topics and were shared through the projects' contacts Horizon magazine, BUILD UP portal, Balkan Green Energy News, ECEEE, CORDIS and the BPIE website:

- Press release *“Positive perspectives for the iBRoad2EPC model Renovation Passport following field testing in six EU countries”*. Drafted by partner Sympraxis, this press release utilised a double momentum, that of the completion of the iBRoad2EPC field tests in six pilot countries with that of the publication of the EPBD recast, to announce the iBRoad2EPC evaluation results and highlight the value and potential of iBRoad2EPC as perceived by the energy auditors and building owners that took part in the testing.
- *“A blueprint for success: How a modular renovation passport can accelerate deep renovation”* is a think piece drafted by BPIE with support from Sympraxis, as a summary of the EU policy roadmap for accelerating deep renovation in the EU with the iBRoad2EPC Renovation Passport. It delves into how iBRoad2EPC aligns with the provisions of the EPBD recast, and in particular Art. 12 and Annex VIII for renovation passports, and proposes actions to support effective transposition of the EPBD recast as concerns the renovation passport.
- *The event summary “EU-funded projects focused on next generation Energy Performance Certificates (EPCs), present their results in support of the implementation of the recast Directive on Energy Performance of Buildings”* includes detailed proceedings of the joint final conference of the Next Generation EPC cluster projects crossCert, EPC RECAST, EUB SuperHub and iBRoad2EPC, titled *“Next Generation Energy Performance Certificates Conference - EPBD recast edition”*. The conference was held on 23 May 2024 physically at Mundo Madou in Brussels, and was live streamed online. Aim of the conference was for the projects to bring forward valuable insights and applicable outcomes in the context of the 2024 recast Energy Performance of Buildings Directive and to discuss these with their peers. The event summary was drafted by Sympraxis on behalf of the four projects and was widely shared across the clusters' networks and means.

A series of articles were drafted by partners and shared through the partners' own websites, social media and newsletters. Among these, a short interview on iBRoad2EPC was published on the Portuguese Energy Agency's newsletter



3 Perguntas a...Marianna Papaglastra

Marianna Papaglastra | Gestora de Projetos, Gabinete de Gestão do projeto Horizonte 2020 iBRoad2EPC | 16/04/2024 | 6 min de leitura

1 - O que são os Passaportes de Renovação de Edifícios e de que forma podem dar resposta a desafios críticos da União Europeia, como a descarbonização total dos edifícios até 2050, abordando simultaneamente questões sociais, como a pobreza energética, que afetam sobretudo as populações familiares mais vulneráveis?

A renovação de um edifício pode ser complexa, dependente, difícil de organizar e demorada, por vezes ao longo de vários anos e etapas.

O Passaporte de Renovação de Edifícios é uma ferramenta que fornece um roteiro claro para renovações por etapas, ajudando proprietários e investidores a fazer o melhor uso do tempo e a melhor alocação das intervenções. Com cerca de 40 milhões de europeus incapazes de adquirir adequadamente as suas casas, as renovações ajudam a combater a pobreza energética. Todas estas alterações podem ser integradas num único Passaporte de Renovação, garantindo a coordenação mais eficiente das intervenções e incluindo os múltiplos benefícios que uma renovação bem planeada pode proporcionar, tais como poupanças de energia e de custos, melhoria do conforto térmico, qualidade do ar interior, bem-estar acústico, segurança e muito mais.

Estes Passaportes também permitem que as autoridades nacionais e locais dirijam as ações de renovação em determinadas regiões mais vulneráveis, incluindo as populações vulneráveis que têm as maiores e mais urgentes necessidades, alargando assim maior impacto social.

2 - Como é que o iBRoad2EPC responde aos novos desafios da EPBD (Diretiva de Desempenho Energético dos Edifícios)? Mais especificamente, como pode apoiar os objetivos dos Padrões Mínimos de Desempenho Energético e dos Planos Nacionais de Renovação de Edifícios?

A nova EPBD é significativamente ambiciosa, implicando, por exemplo, a eliminação progressiva das combustíveis fósseis, que pode exigir a manutenção gradual de várias intervenções. A abordagem passo a passo dos Passaportes pode permitir que as prioridades de edifícios sejam partilhadas de maneira simples, direta, e por etapas, com compromissos de intervenções futuras.

O iBRoad2EPC é uma ferramenta que combina as Certificações Energéticas (CE) com elementos do Passaporte de Renovação de Edifícios, nomeadamente as intervenções em matéria de renovação, agregando os benefícios de ambas as ferramentas. O iBRoad2EPC integra ainda todas as dimensões relevantes, por exemplo, requisitos obrigatórios, obrigações futuras, etc., conforme previsto nos regulamentos relevantes. Mais especificamente, o iBRoad2EPC inclui, por default, muitos requisitos a integrar em dados específicos, como se descreve nos Estratégias de Renovação a Longo Prazo dos Edifícios, que foram de ser atualizadas para o Plano Nacional de Renovação de Edifícios e que devem estar em conformidade com os Planos Nacionais de Energia e Clima.

A EPBD também exige o âmbito para além da eficiência energética durante a fase de construção dos edifícios, por exemplo, através da inclusão de disposições para a redução das emissões de carbono em todo o ciclo de vida. O iBRoad2EPC é uma ferramenta modular aberta que pode integrar módulos adicionais ao longo do caminho, controlando essas novas etapas.

3 - O iBRoad2EPC desenvolveu uma ferramenta para apoiar os países na definição de Passaportes de Renovação de Edifícios. Esta ferramenta estará disponível para replicação? Como podem outros países tirar partido desta ferramenta para integrar os Passaportes de Renovação nos seus sistemas de certificação energética dos edifícios?

Embora o conceito tenha sido adaptado, traduzido e testado em seis países específicos (Bulgária, Grécia, Polónia, Portugal, Roménia e Espanha), pode ser adaptado a qualquer país que implemente a EPBD. O iBRoad2EPC foi concebido desde o início como uma ferramenta modular aberta, adaptável e escalável que permite uma boa integração com os sistemas nacionais.

Em conformidade com os novos requisitos da EPBD, os Estados-Membros que optaram por integrar o iBRoad2EPC no seu sistema de certificação terão de validar as recomendações do Certificado Energético para fornecerem o iBRoad2EPC, ou seja, devem disponibilizar para um edifício específico. Devem igualmente assegurar que os resultados são compatíveis no âmbito do quadro nacional sobre o desempenho energético dos edifícios e adotados através do Digital Building Logbook (Sistema Digital do Edifício).

As autoridades interessadas em integrar o iBRoad2EPC nos seus sistemas nacionais de certificação do desempenho energético podem e devem contactar o contacto através do site do projeto.



Subscrição a ADENE News

Sobre o entrevistado

Marianna Papaglastra, Gestora de Projetos, Gabinete de Gestão do projeto Horizonte 2020 iBRoad2EPC – Integração dos Passaportes de Renovação de Edifícios nos Sistemas de Certificação do Desempenho Energético com vista à descarbonização do edifício (2021-2024) na Grécia. Com 21 anos de experiência de trabalho na área, Marianna é especializada em atividades de gestão de projetos e comunicação de projetos financiadas pela União Europeia nas áreas de Eficiência Energética, Ambiente e Sustentabilidade.

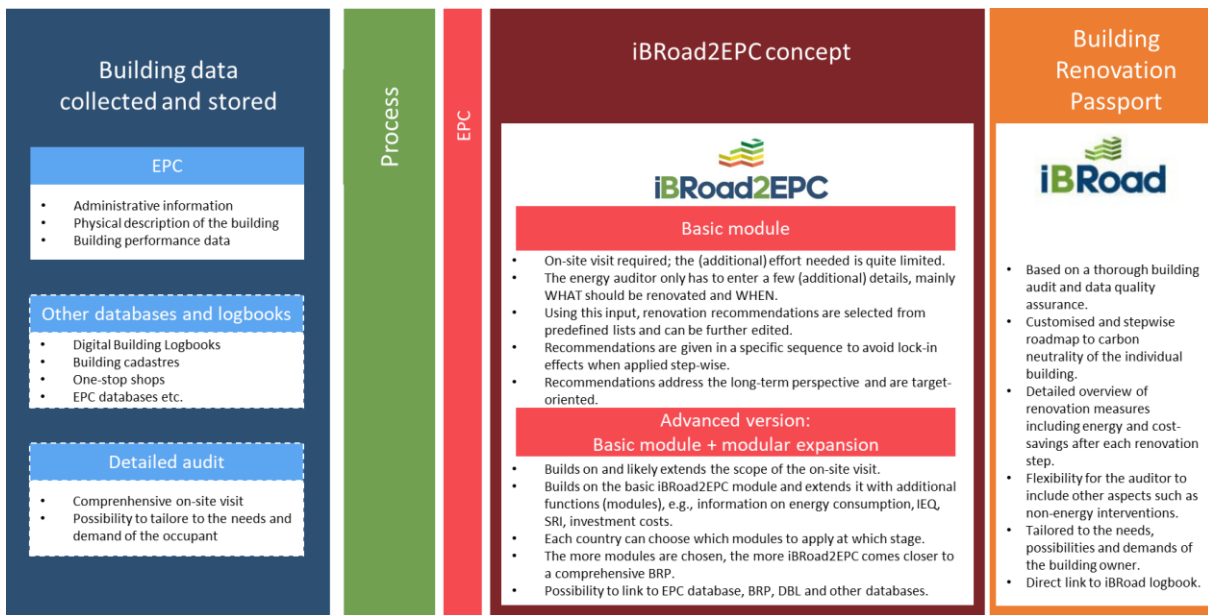
iBRoad2EPC featured in ADENE's newsletter

Last but not least among the main highlights, the BUILD UP portal has requested a written interview on the iBRoad2EPC concept from Sympraxis, to be included under the Topic of the Month “Energy Certification and Energy Labelling of buildings”, soon to be released.

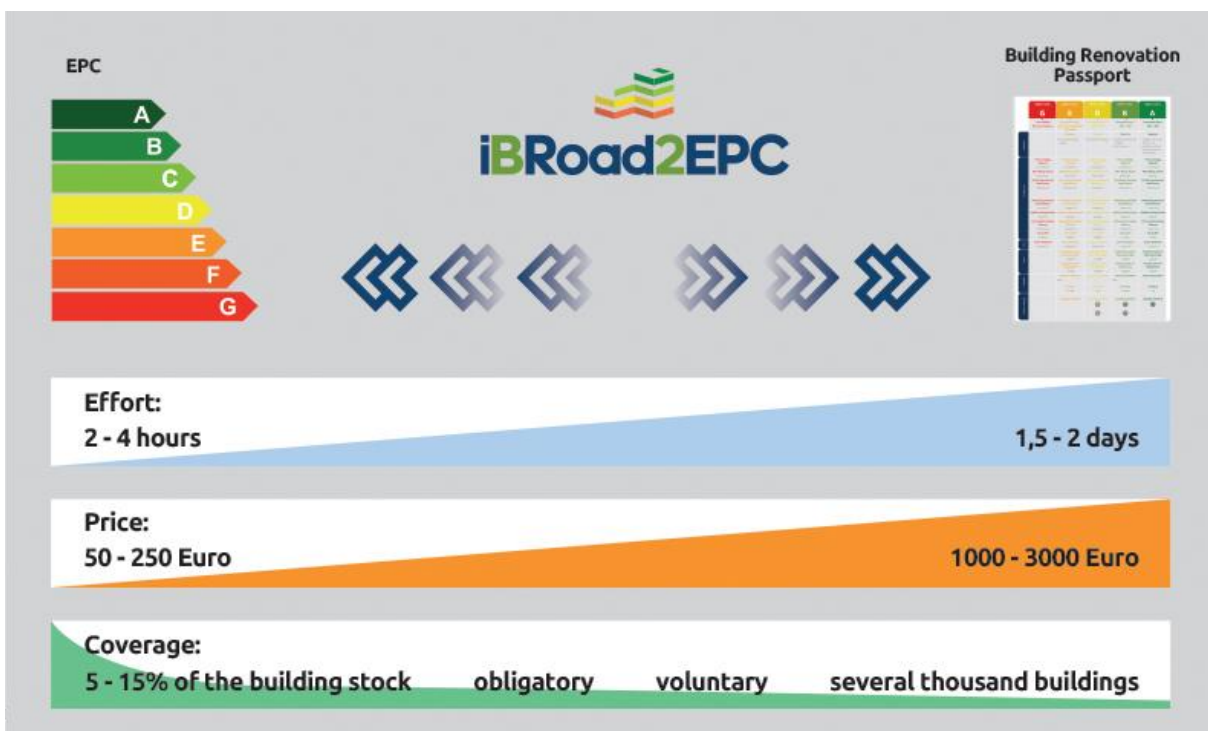
Infographics

One picture stands for 1,000 words. iBRoad2EPC’s outreach, promotion and dissemination activities would thus be so much poorer without its key infographics: simple visuals designed to present in a clear, comprehensive and attractive way key facts of the project. The infographics were included in various project deliverables, website and newsletter articles, social media posts, etc.

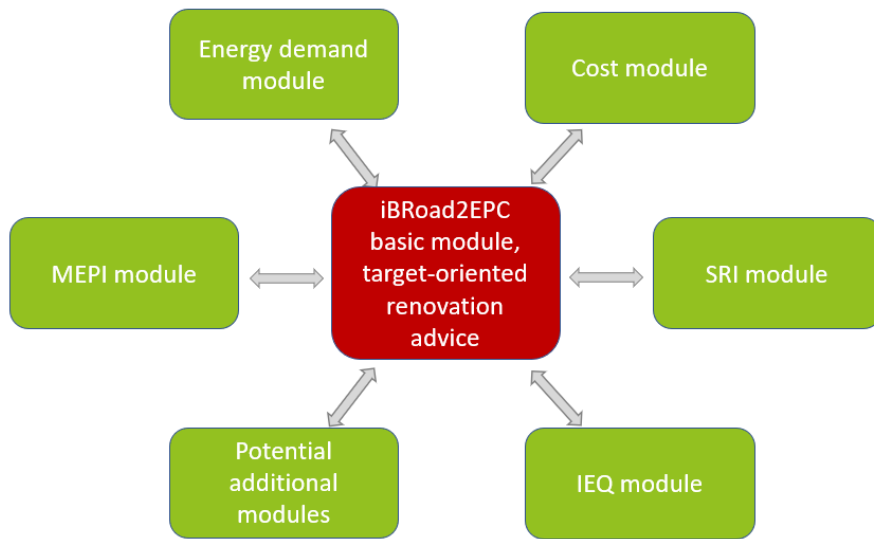
The first infographics were developed by ifeu, BPIE and Sympraxis early on to visualise a) the project concept, b) the strategic placement of iBRoad2EPC between existing EPCs and the Building Renovation Passport and the implications for pricing and market penetration and c) the modularity of iBRoad2EPC.



Infographic: The iBRoad2EPC concept

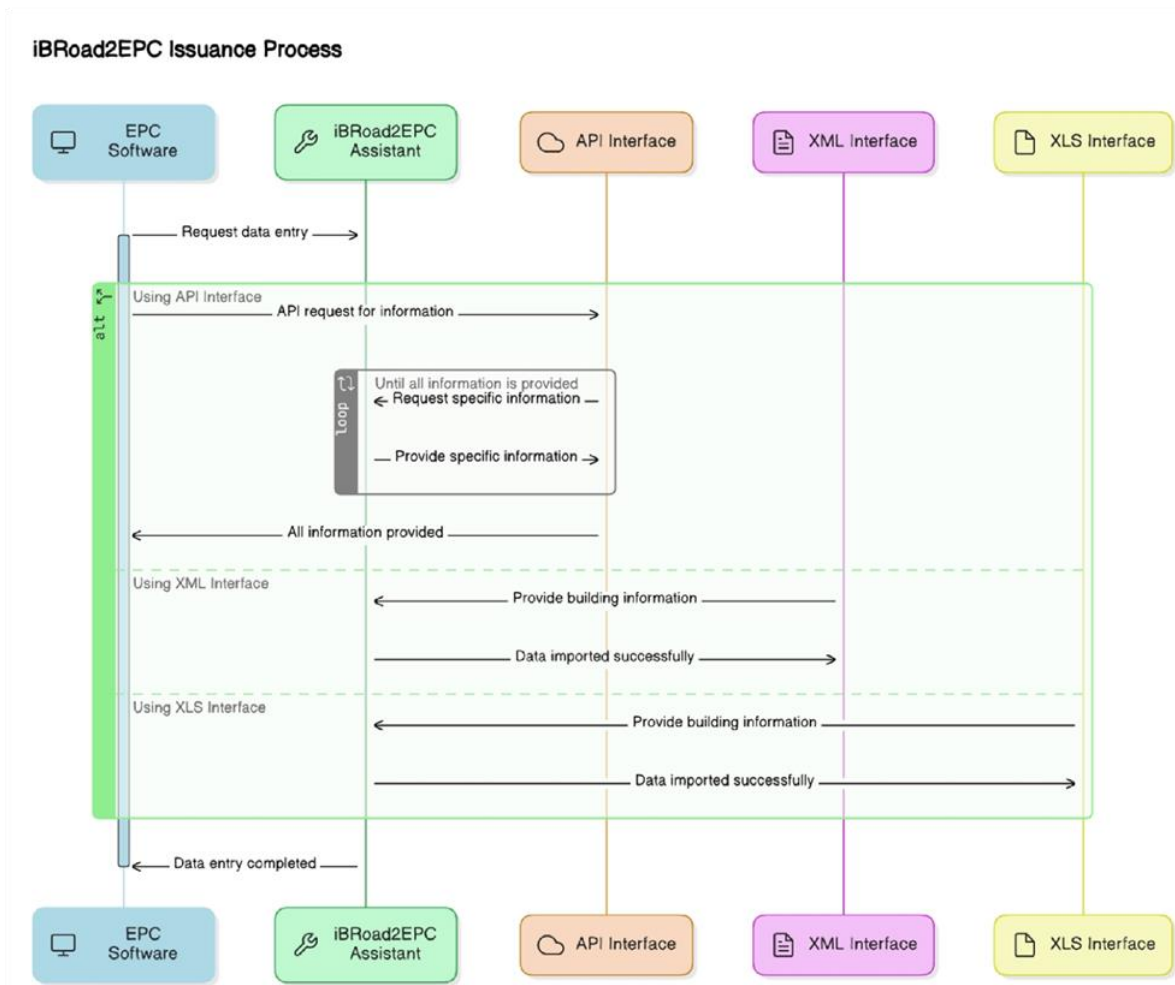


Infographic: The iBRoad2EPC strategic placement



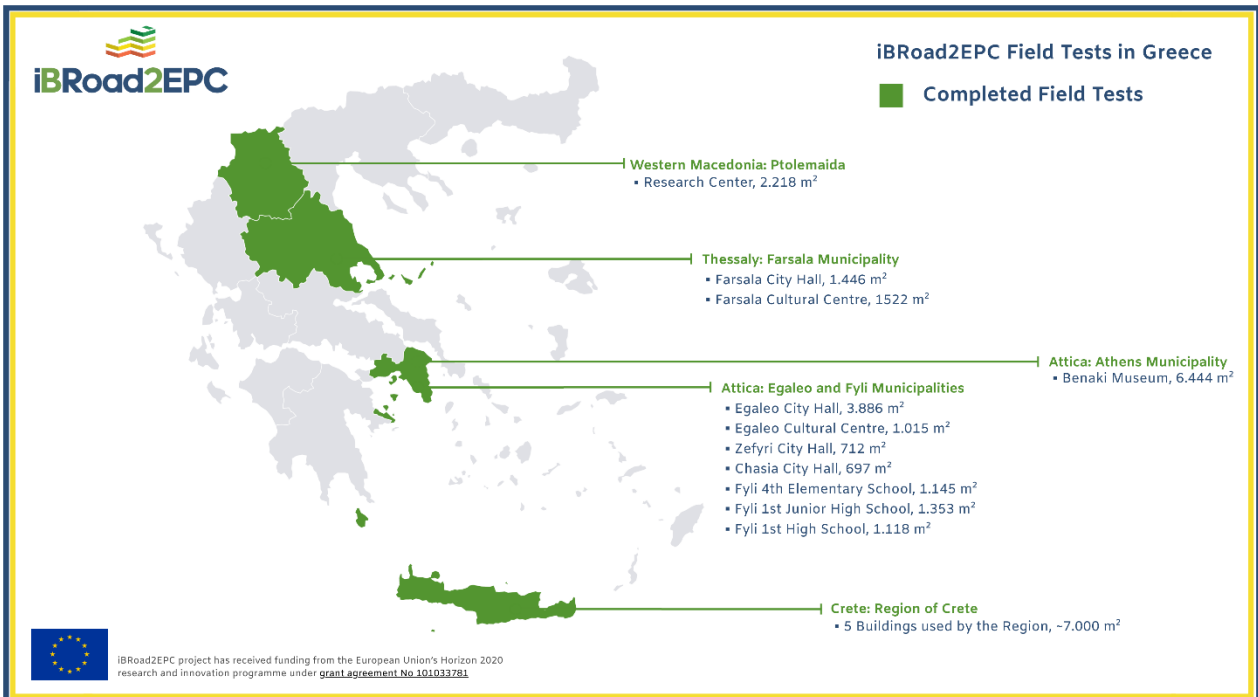
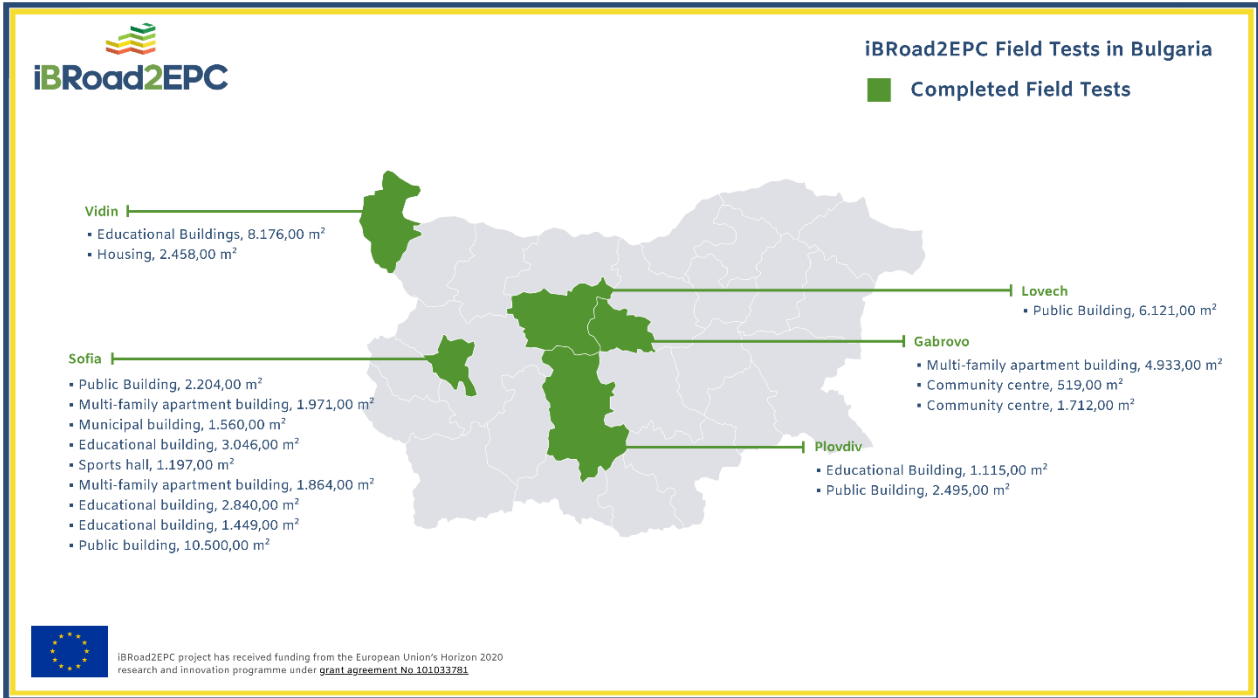
Infographic: The iBRoad2EPC modularity


Various more technical infographics were developed by ifeu to showcase and explain the ways in which iBRoad2EPC integrates technically with the EPC software.



Infographic: Technical description of the iBRoad2EPC issuance process and how iBRoad2EPC integrates technically with the EPC software.


A series of factsheet/map infographics was produced by INZEB to visualise the field testing in the six pilot countries.






iBRoad2EPC Field Tests in Poland

■ Completed Field Tests



Warsaw, Masovian Voivodeship

- Multifamily Building, 691,80 m²
- Multifamily Building, 845,55 m²
- Multifamily Building, 2.886,22 m²
- Multifamily Building, 879,70 m²
- Multifamily Building, 1.699,15 m²
- Multifamily Building, 3.888,50 m²
- Multifamily Building, 2.873,68 m²
- Multifamily Building, 2.873,68 m²
- Multifamily Building, 1.913,60 m²
- Multifamily Building, 1.844,02 m²



iBRoad2EPC project has received funding from the European Union's Horizon 2020 research and innovation programme under [grant agreement No 101033781](#)



iBRoad2EPC Field Tests in Portugal

■ Completed Field Tests



North Region, Porto Metropolitan Area, Porto

- Single family house, 28,96 m²

Central Region, Leiria Region, Pombal

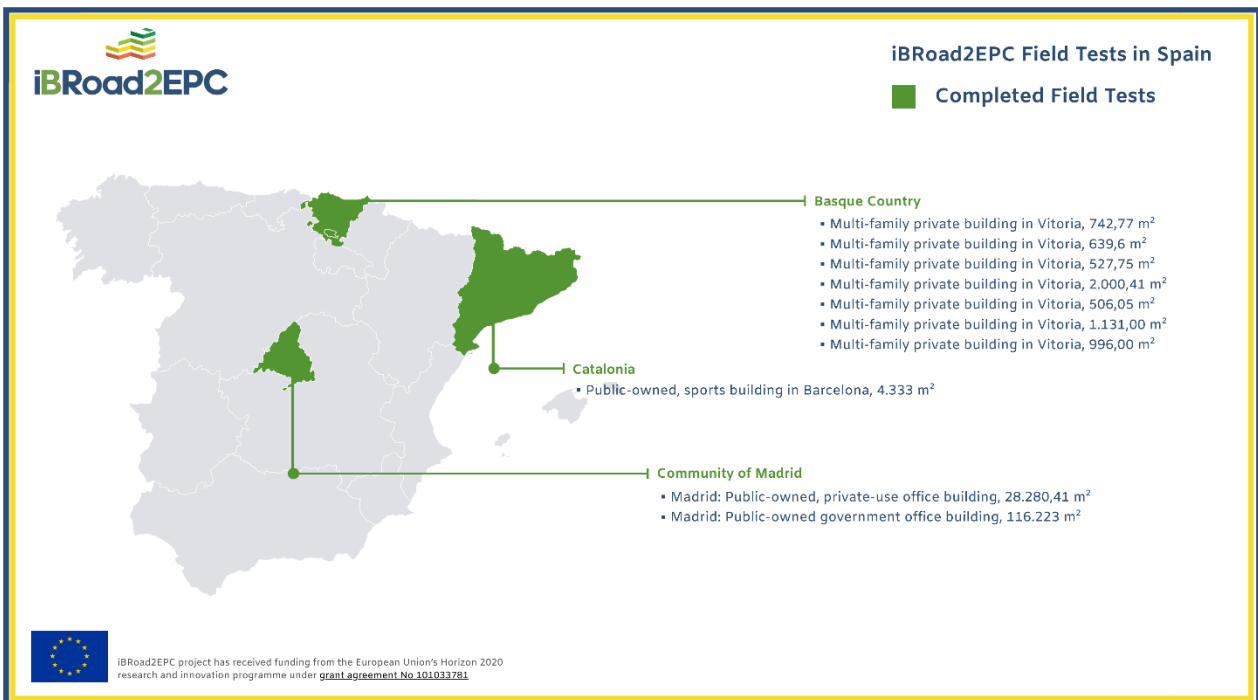
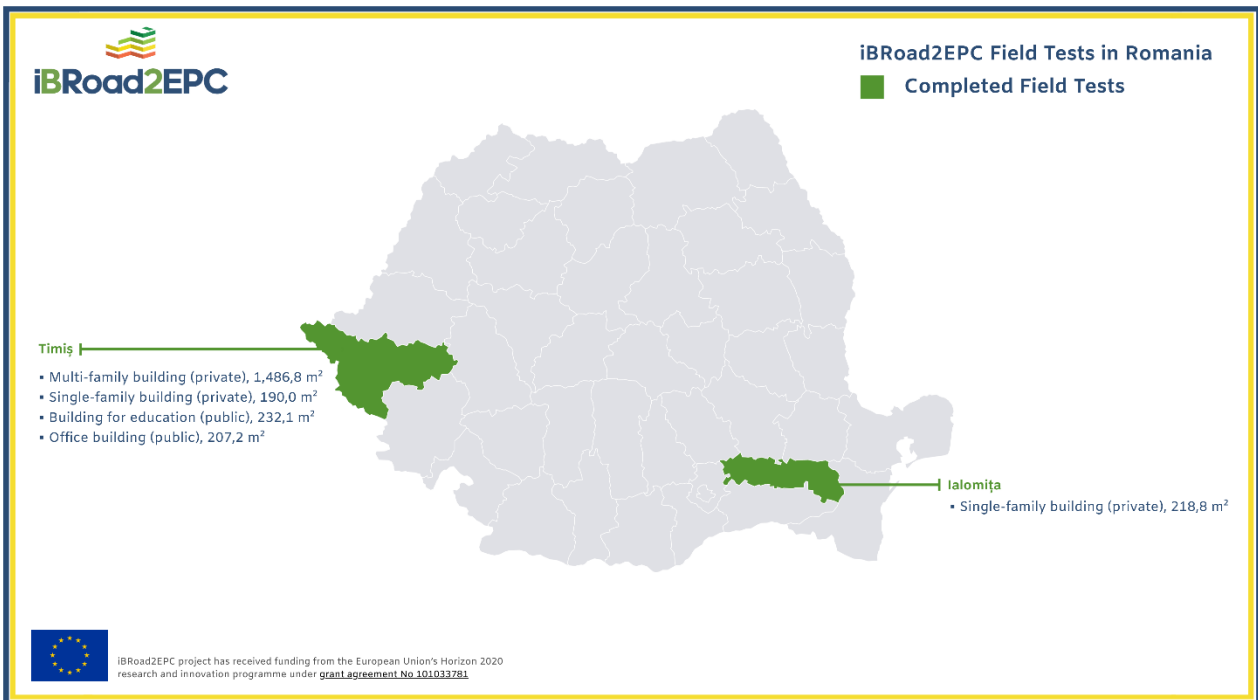
- Secondary school in Pombal (central Portugal) – managed by Construção Publica E.P.E. Public Company, 10.638,17 m²

Greater Lisbon, Lisbon

- Large non-residential building – Offices - headquarters' of Construção Publica E.P.E. Public Company, 31.578,40 m²
- Multifamily building owned by SCML – social services institution and privately rented to residents, 479,75 m²
- Multifamily building (social housing building managed by GEBALIS – Lisbon Social Housing company), 2.160,00 m²
- Multifamily building (social housing building managed by GEBALIS – Lisbon Social Housing company), 1.026,00 m²
- Single family house building (owned by SCML – social services institution and privately rented to residents), 291,91 m²
- Single family house (social housing building managed by GEBALIS – Lisbon Social Housing company), 17,31 m²
- Single family house (social housing building managed by GEBALIS – Lisbon Social Housing company), 51,67 m²
- Bi-family house (owned by SCML – social services institution and privately rented to residents), 66,60 m²



iBRoad2EPC project has received funding from the European Union's Horizon 2020 research and innovation programme under [grant agreement No 101033781](#)



Infographics: The iBRoad2EPC country maps on field tests

SUCCESS FACTORS AND OUTCOMES

In iBRoad2EPC, all communication materials are drafted and designed so as to be used, reused and utilised in parallel or across multiple and all available means & channels, in order to reinforce and recreate buzz around the project, its outcomes and the principles it stands for. In this respect, infographics are included in website articles, deliverables and social media both at national and at EU level, drafted press releases are also shared through social media or EU networks, event summaries serve for both networking and dissemination, etc.

Dedicated reports further summarise different Communication & Dissemination activities, e.g.

- Straightforward guidance for better buildings - iBRoad2EPC's Layman's report
- iBRoad2EPC outreach documentation – Overview report
- iBRoad2EPC national outreach: National events and networking briefings
- iBRoad2EPC: EU-Focused Stakeholder Engagement and Dissemination

In practice, it was almost not possible to mention one activity under only one context/report. So, even though each of these deliverables is prepared as a stand-alone report on its own, all of the above reports are interconnected.

Stakeholders' feedback confirms that the aim has been reached and iBRoad2EPC has established a strong presence, name and position in the market. What remains next is for public authorities to grab the opportunity and uptake iBRoad2EPC as part of their EPBD recast transposition processes. The iBRoad2EPC consortium will be ready to support them in this endeavour towards a decarbonised and sustainable future for EU's building stock.


[Conceptualising iBRoad2EPC](#)
[BUILD UP](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

About BUILD UP News & Events Themes Resources & Tools BUILD UP Skills

[Home](#) > [Resources & Tools](#) > [Publications](#) > [Conceptualising iBRoad2EPC](#)



Conceptualising iBRoad2EPC

Publication Pan European

Conceptualising iBRoad2EPC

19 July 2024

How Energy Performance Certificates (EPCs) can be upgraded with Building Renovation Passport (BRP) elements: the iBRoad2EPC concept.

Marianna Papaglastra

This report investigates the maturity and potential of the market in the six iBRoad2EPC implementing countries (Bulgaria, Greece, Poland, Portugal, Romania, Spain) to expand their **Energy Performance Certificates (EPCs)** through the integration of **Building Renovation Passport (BRP)** elements, such as customised recommendations for staged **deep renovations**.

An overview of the key concepts and policy measures is presented, as well as the analysis of the status quo of the **EPC** market in the six implementing countries, the EPC methodology (covering the on-site visit, the calculation method and software), quality assurance (covering quality control and requirements for EPC experts) and databases (including EPC databases, **digital building logbooks** and other relevant databases).

01/02/2025

BPIE - Buildings Performance Institute Europe

Original source:

[Read the original source](#)

[The iBRoad2EPC project | BUILD UP](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

[About BUILD UP](#) [News & Events](#) [Themes](#) [Resources & Tools](#) [BUILD UP Skills](#)

[Home](#) > [Resources & Tools](#) > [Links](#) > [The iBRoad2EPC Project](#)

[Link](#) [Pan European](#)

The iBRoad2EPC project

01 June 2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.101035781.

General Team

Integrating Building Renovation Passports into Energy Performance Certification schemes for a decarbonised building stock.

iBRoad2EPC represents the next step in energy performance assessment schemes and certification practices, promoting and showcasing the integration of Building Renovation Passport elements into EPC schemes.

Building on the results of the iBRoad project (2017-2020) which developed, tested and delivered a model for the Building Renovation Passport supporting single-family homeowners with personalized advice to facilitate stepwise deep renovation, iBRoad2EPC aims to bridge the Building Renovation Passport with the EPC, and expand, improve and broaden their format and joint scope to consider additional features and become applicable also to multi-family and public buildings.

The aim is to improve reliability, usefulness and effectiveness, thereby establishing the next generation of EPCs that will support Europe's decarbonisation ambitions while improving conditions for building occupants. This will be done by clustering the project's activities around four main pillars:

1. Assess the needs, potential and feasibility of merging the EPC with the Building Renovation Passport;
2. Adapt the iBRoad concept to become part of EPCs;
3. Test and evaluate the applicability of iBRoad2EPC in six countries (Bulgaria, Greece, Poland, Portugal, Romania and Spain), including testing for energy audits and EPC issues;
4. Facilitate the adoption and exploitation of the iBRoad2EPC model across Europe.

Implementing authorities in the six countries will be directly involved in the process of conceptualisation, development and testing of iBRoad2EPC to become an integral part of existing relevant schemes. Targeted communication, dissemination and exploitation activities at national and European level will support further acceptance and uptake. The project will leverage existing knowledge from other projects to expand EPC features and contribute back policy proposals as well as training and capacity building modules.

Partners

- SYMPHONIA TEAM PLC
- BUILDING PERFORMANCE INSTITUTE EUROPE ASBL
- IEU - INSTITUT FÜR ENERGIE- UND UMWELTFORSCHUNG HEIDELBERG GMBH
- TECHNISCHE UNIVERSITÄT WIEN
- INEES ASPIC IN ARCHITECTONIC STUDIOS
- BLUE PLANET SOCIETY & CONSULTING S.R.L.
- FONDOPRIVAT - DIVIZIA DE ENERGII ȘI MEDIUL ÎNCONJURĂTOR - ENERGET
- AGENCIA ARABICA PARA EL ENERGIA
- AGENCIA ARABICA PARA EL ENERGIA
- INSTITUTUL NATIONAL DE CERTIFICARE-DEBITARE LA CONSTRUCȚII URBANEM ȘI DEZVOLTARE TERITORIALA DURABILA URBAN-INEPC
- GREEN BUILDING CONSULTING-ESPANA PARA LA CERTIFICACION SOSTENIBIL-ESPANA
- DDC&A ARCHITECTURAL SOC.

Start date: 1 May 2021 - End date: 30 April 2024

Original source:

[Read the original source](#)

[iBRoad2EPC Training toolkit](#) | [BUILD UP](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

About BUILD UP News & Events Themes Resources & Tools BUILD UP Skills

[Home](#) > [Resources & Tools](#) > [Tools](#) > iBRoad2EPC Training Toolkit



Training toolkit

📄 Tool

iBRoad2EPC Training toolkit

📅 17 July 2024

Training toolkit guiding energy experts and EPC issuers on how to create an iBRoad2EPC as a complement to the Energy Performance Certificate (EPC).

Editorial Team

The iBRoad2EPC training toolkit contains all the information and training materials required to teach energy assessors how to create an iBRoad2EPC as a complement to the **Energy Performance Certificate (EPC)**. It is designed for training institutions that organise regular training courses for energy experts and EPC issuers in the six iBRoad2EPC pilot countries (Bulgaria, Greece, Poland, Portugal, Romania and Spain). The training toolkit can either be integrated into regular EPC-curricula or be offered as a separate course.

The training toolkit consists of the following elements:

- iBRoad2EPC Handbook for energy auditors**

The handbook provides guidance and advice for energy auditors on how to issue the iBRoad2EPC in general, what principles to respect and how to define the renovation steps in collaboration with the building users. Additional functionalities are also explained, i.e., the assessment of the energy demand, investment cost, indoor environmental quality, measured energy consumption and smart readiness.
- iBRoad2EPC training presentations for energy auditors**

The basic presentation (available in English) is aimed for concrete use during the trainings. It shows the use of the tools and the implementation procedures and explains them step-by-step. Additional country specific and/or translated presentations are available for Bulgaria, Greece, Poland, Portugal, Romania and Spain.
- Checklist for the preparation of the iBRoad2EPC on-site visit**

The checklist aims to support the preparation of the mandatory on-site visit.
- Blank template for the on-site visit**

The blank template is intended to support the energy experts during the on-site visit. With the help of the template, experts can guide building owners and decision-makers to contribute in defining their individual solutions for a target-oriented renovation plan.

👤 Developer: ifeu – Institute for Energy and Environmental Research

Original source:

[Read the original source](#)

[iBRoad2EPC Assistant software | BUILD UP](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

About BUILD UP

News & Events

Themes

Resources & Tools

BUILD UP Skills

[Home](#) > [Resources & Tools](#) > [Publications](#) > iBRoad2EPC Assistant Software



Publication

European Countries

iBRoad2EPC Assistant software

11 September 2024

This report describes the IT Implementations of the iBRoad2EPC back-end tool.

Marianna Papaglastra

This report describes the IT implementations carried out and the relevant architecture, features, modules and functionalities of the iBRoad2EPC back-end tool, the so-called iBRoad2EPC Assistant, including API (Application Programming Interface) versions 1.0 and 2.0.

The tools developed in iBRoad2EPC are aimed at **energy auditors** for issuing the model **renovation passport**, software developers for building an interface between these and their own databases or tools, and public authorities wishing to take iBRoad2EPC up and integrate it into their national policy framework.

Parties interested in the iBRoad2EPC tools can send an e-mail to contact@ibroad2epc.eu to receive an account or information in order to get started.

01/05/2024

BPAC

Original source:

[Read the original source](#)

[Enhancing incentives through iBRoad2EPC | BUILD UP](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

About BUILD UP ▾
News & Events ▾
Themes ▾
Resources & Tools ▾
BUILD UP Skills ▾

Home > [Resources & Tools](#) > [Publications](#) > Enhancing Incentives Through iBRoad2EPC



Enhancing incentives through iBRoad2EPC

Publication

Enhancing incentives through iBRoad2EPC

19 July 2024

How to best use financial and non-financial incentives for renovation in implementing markets.

Marianna Papaglastra

The primary added value of the iBRoad2EPC concept is that it can significantly enhance the quality of **EPCs** and the effectiveness and acceleration of **deep renovation** interventions. Financial and non-financial incentives play a key role in facilitating these **deep renovations**, which are associated with high costs. The integration of iBRoad2EPC into financial and non-financial incentive programmes can improve their effectiveness by:

1. prescribing clearer guidelines for public administrations on what renovation interventions should be incentivised with priority;
2. tying the exact amount of funds to specific and measurable energy improvements, and
3. providing building owners with clear, reliable and actionable information, thus making renovations more accessible.

This report examines how the approach developed in the iBRoad2EPC project can be used in incentive schemes for renovation in the six iBRoad2EPC pilot countries – Bulgaria, Greece, Spain, Poland, Portugal and Romania. It starts by individually assessing the role of EPCs in various current **financial and non-financial incentive programmes for building renovation** and their alignment with the **Long Term Renovation Strategies (LTRSs)**. It then identifies opportunities and provides recommendations for integrating the iBRoad2EPC concept into incentive programmes to increase their effectiveness.

 01/11/2023

 BPiE – Buildings Performance Institute Europe

Original source:

[Read the original source](#)

[Specification for the iBRoad2EPC software tools](#)
| [BUILD UP](#)



[Log in](#) [Translate this page](#) [Search](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

[About BUILD UP](#) [News & Events](#) [Themes](#) [Resources & Tools](#) [BUILD UP Skills](#)

[Home](#) > [Resources & Tools](#) > [Publications](#) > Specification For The iBRoad2EPC Software Tools



Publication

Specification for the iBRoad2EPC software tools

15 July 2024

Report on adaptation requirements for roll-out countries.

Marianna Papaglastra

iBRoad2EPC builds on the **Energy Performance Certificate (EPC)** and works on the integration of **building renovation passport** elements and new parameters into existing EPC schemes to improve the EPC recommendations and **guide renovation**, either in one or several steps. In this way, iBRoad2EPC can ensure consistent design, programming, and quality assurance with the national EPC schemes. Thus, when implementing iBRoad2EPC in individual Member States, various features need to be adapted to country-specific requirements. The process of **adaptation to the specific requirements of implementing countries** Bulgaria, Greece, Poland, Portugal, Romania and Spain is described in this report. This can serve as a model for other countries that intend to implement iBRoad2EPC at a later stage.

Adaptations concern, among others, specific target building types, customer groups and energy performance scales, and comprise for example prefabricated text blocks for renovation advise including milestones, targets and notes to avoid lock-in effects, etc., as well as indicators, images and the format of iBRoad2EPC. The adaptations are made in the **iBRoad2EPC database** where both the contents of the iBRoad2EPC output document and that of the iBRoad2EPC Assistant tool are stored.

The objective of this report is to explain the context, target groups and methodology for country specific adaptation, and thereby the approach for embedding, use and structure of the iBRoad2EPC. The report is accompanied by an excel spreadsheet containing the country specific templates and main content of the database as well as the translations of the content to the respective languages of the participating countries.

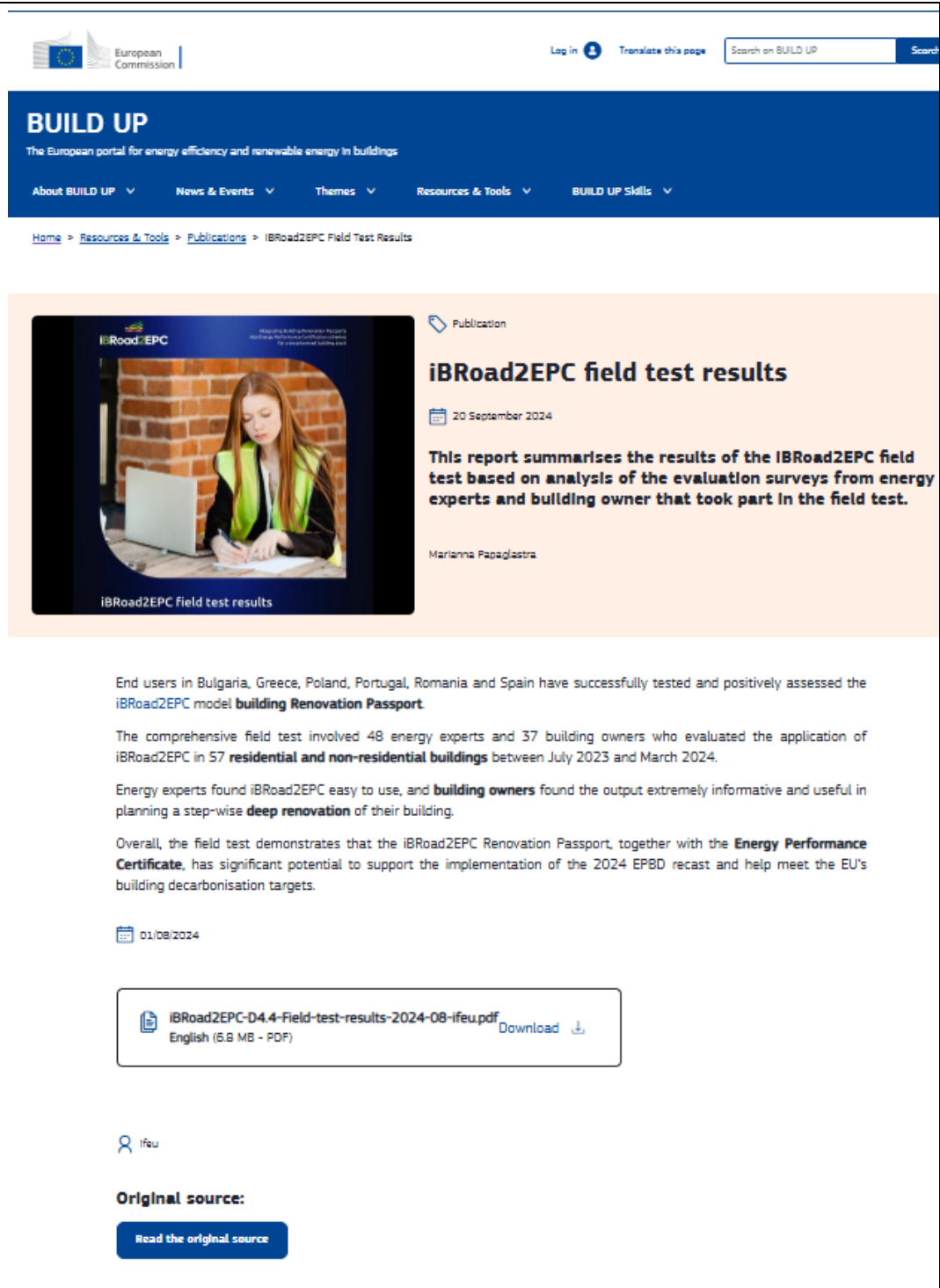
[Read the original source](#)

01/11/2023

Ifeu – Institute for Energy and Environmental Research

Share this page

[iBRoad2EPC field test results | BUILD UP](#)



The screenshot shows the BUILD UP website interface. At the top, there is a navigation bar with the European Commission logo, a search bar, and links for 'Log in' and 'Translate this page'. Below the navigation bar, the main header reads 'BUILD UP' and 'The European portal for energy efficiency and renewable energy in buildings'. A secondary navigation bar contains links for 'About BUILD UP', 'News & Events', 'Themes', 'Resources & Tools', and 'BUILD UP Skills'. The breadcrumb trail indicates the current page is 'Home > Resources & Tools > Publications > iBRoad2EPC Field Test Results'. The main content area features a large image of a woman in a high-visibility vest working on a laptop, with the text 'iBRoad2EPC field test results' overlaid. To the right of the image, the publication title 'iBRoad2EPC field test results' is displayed, along with the date '20 September 2024' and a summary: 'This report summarises the results of the iBRoad2EPC field test based on analysis of the evaluation surveys from energy experts and building owner that took part in the field test.' The author's name, 'Marianna Paoglastra', is listed below. A paragraph of text follows, stating that end users in Bulgaria, Greece, Poland, Portugal, Romania, and Spain have successfully tested and positively assessed the iBRoad2EPC model building Renovation Passport. It further details that the comprehensive field test involved 48 energy experts and 37 building owners who evaluated the application of iBRoad2EPC in 57 residential and non-residential buildings between July 2023 and March 2024. The text notes that energy experts found iBRoad2EPC easy to use, and building owners found the output extremely informative and useful in planning a step-wise deep renovation of their building. Overall, the field test demonstrates that the iBRoad2EPC Renovation Passport, together with the Energy Performance Certificate, has significant potential to support the implementation of the 2024 EPBD recast and help meet the EU's building decarbonisation targets. Below the text, there is a date '01/08/2024' and a download button for the PDF file 'iBRoad2EPC-D4.4-Field-test-results-2024-08-ifeu.pdf' (English, 5.8 MB - PDF). At the bottom, there is a user profile icon for 'ifeu' and a button labeled 'Original source:' with a sub-button 'Read the original source'.

[iBRoad2EPC Advisory package for public authorities | BUILD UP](#)


European Commission

[Log in](#) [Translate this page](#)

[Search](#)

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

[About BUILD UP](#) |
 [News & Events](#) |
 [Themes](#) |
 [Resources & Tools](#) |
 [BUILD UP Skills](#)

[Home](#) > [Resources & Tools](#) > [Publications](#) > iBRoad2EPC Advisory Package For Public Authorities



Advisory Package for public authorities

Publication

iBRoad2EPC Advisory package for public authorities

13 September 2024

Aiding public authorities in advancing deep energy renovation.

Marianna Papaglastra

This iBRoad2EPC Advisory Package is specifically developed for public authorities to enhance their expertise, capacity and access to resources for the design and implementation of efficient **deep renovation policies**.

It includes a comprehensive resource package, comprising guidelines, templates and best practices, to facilitate the design, implementation and monitoring of **EPC** and **renovation passport** programmes, as well as training and financing schemes for **energy renovation strategies**.

The goal of the advisory package is to encourage the incorporation of deep, and where necessary staged, **energy renovation** topics, including the renovation passport, into existing training programmes and curricula for public authorities involved in planning, design, implementation and monitoring of national and local energy-related programmes. By doing so, it aims to serve as a foundational resource for fostering collaboration with training and educational institutions, specialised EU-financed projects, and networks of local authorities to further disseminate relevant knowledge and practices.


01/06/2024


EnEffect

Original source:

[Read the original source](#)

[iBRoad2EPC training material for construction professionals | BUILD UP](#)




Log in  [Translate this page](#) [Search](#)

BUILD UP



The European portal for energy efficiency and renewable energy in buildings

[About BUILD UP](#) [News & Events](#) [Themes](#) [Resources & Tools](#) [BUILD UP Skills](#)


[Home](#) > [Resources & Tools](#) > [Publications](#) > iBRoad2EPC Training Material For Construction Professionals



Training module for construction professionals

 Publication  Pan European

iBRoad2EPC training material for construction professionals

 14 March 2024

iBRoad2EPC training material for staged renovation design and construction.

Marianna Papaglastra


Building Renovation Passports are gaining more and more visibility as a tool with excellent potential to stimulate renovation action across Europe. Bridging the **Building Renovation Passport** with the **EPC** will lead to improved reliability, usefulness and effectiveness, thereby establishing the next generation of EPCs.


To raise awareness of **building professionals** around EPC-integrated Building Renovation Passports and support their **upskilling**, according to their role in the investment process, for **on-site application** of the measures and specifications described in the EPC-integrated Building Renovation Passports, a set of training materials have been prepared by the **iBRoad2EPC project**.

The training materials are organised in 8 topics as follows:



- Identify opportunities for energy savings
- Interpret iBRoad2EPC and the underlying documentation
- Step-by-step recommendations
- Explain the project proposal to different specialist/stakeholders
- Manage and oversee the project implementation
- Components of the building envelope, ensuring optimal airtightness and elimination of thermal bridges
- Heating, cooling, ventilation, and DHW system
- Relationship between building systems and building envelop

[Read the original source](#)

 01/04/2023

 EnEffect

[Positive perspectives for the iBRoad2EPC model Renovation Passport | BUILD UP](#)


European Commission
Log in  Translate this page


Search

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

[About BUILD UP](#)
[News & Events](#)
[Thematic](#)
[Resources & Tools](#)
[BUILD UP Skills](#)

[Home](#) > [News & Events](#) > [News](#) > Positive Perspectives For The iBRoad2EPC Model Renovation Passport



Positive perspectives for the iBRoad2EPC model Renovation Passport

20 September 2024

Field studies confirm iBRoad2EPC as a useful tool supporting the deep renovation of the EU building stock under the provisions of the 2024 Energy Performance of Buildings Directive (EPBD) recast.

Carla Mourão Flores

Energy experts in Bulgaria, Greece, Portugal, Romania and Spain have successfully tested and positively assessed the iBRoad2EPC model building Renovation Passport, developed as part of the iBRoad2EPC Horizon 2020 funded project. The comprehensive field test involved 48 energy experts and 37 building owners who evaluated the application of iBRoad2EPC in 57 residential and non-residential buildings between July 2023 and March 2024. Energy experts found iBRoad2EPC easy to use, and building owners found the output extremely informative and useful in planning a step-wise deep renovation of their building. Overall, the field test demonstrates that the iBRoad2EPC Renovation Passport, together with the Energy Performance Certificate, has significant potential to support the implementation of the 2024 EPBD recast and help meet the EU's building decarbonisation targets.

A flexible tool that complements EPCs

The ambition of the iBRoad2EPC project has been to develop a capable tool that is sufficiently flexible and affordable to trigger a major increase in the number of deep (nearly zero or zero emissions) building renovations, across varying country contexts. In this sense, it was conceived as a complement to existing national Energy Performance Certificate (EPC) schemes, to be jointly issued by a qualified or certified energy expert, following an on-site visit.

The developed iBRoad2EPC is a flexible model Renovation Passport that brings together the benefits of the EPC, as an established tool to assess the energy performance of a building, with those of a tailored roadmap for its deep renovation in a maximum number of steps, significantly improving the building's energy performance. Adding new components to this combined approach –covering, e.g., Energy Demand, Investment Cost, Smart Readiness, Indoor Environmental Quality, Measured Energy Performance and others– iBRoad2EPC aims to give renovation a significant push and contribute to the improvement of the energy performance of European buildings, while providing for health, comfort, cost-effectiveness and energy security.

Designed as a modular tool, the iBRoad2EPC Renovation Passport allows adaptation to various existing EPC schemes or country-specific ambitions and contexts. Such flexibility is now reflected in the provisions of the 2024 EPBD recast that allow Member States to determine the extent to which Renovation Passports and EPCs should be linked. As such, the results of the iBRoad2EPC project are highly relevant and provide Member States with a set of solutions that can be immediately applied to the transposition and/or implementation of this, as well as other important EU policy instruments.

Testing

A field test in six pilot countries (Bulgaria, Greece, Poland, Portugal, Romania and Spain) examined how iBRoad2EPC is perceived by relevant end-users (energy experts and building owners/building managers).

Before field testing, a total of 202 energy experts in the six pilot countries were trained on how to issue the iBRoad2EPC. The overall evaluation following the training showed predominantly positive feedback:


- 80% of trained experts saw potential in merging iBRoad2EPC and EPCs
- 81% said they would offer an iBRoad2EPC to their clients

Of the energy experts trained, 48 participated in the field test and issued 57 iBRoad2EPCs, covering a built area of almost 280,000 m², of both residential and non-residential buildings, with a particular focus on public buildings. An overview and main highlights of the iBRoad2EPC field test are summarised below:

Main outcomes

The experience of the experts and the building owners/building managers who took part in the testing was collected through a survey. The key findings of the evaluation are the following:


- Both experts and owners favoured the voluntary integration of iBRoad2EPC alongside the EPC, reflecting the tool's potential to enhance energy efficiency and cost-effectiveness in building renovations.
- In terms of pricing, 32% of the experts and 21% of the building owners consider a surcharge of more than 100% on top of the price of the EPC to be reasonable. This demonstrates the perceived value and potential of iBRoad2EPC in contributing to energy-related renovations and climate prevention.
- Building owners reported that their main motivation for renovating is to save on energy costs, followed by introducing qualitative improvements to their buildings and contributing to climate change mitigation. While energy and cost considerations were important across all pilot countries, climate prevention was more important in some than in others, this suggests different national priorities. During the development of iBRoad2EPC, cost-effectiveness was not the priority focus, because cost-effective renovations do not always meet climate targets: there is a clear discrepancy between renovation costs and incentives on one hand, energy and CO₂ pricing on the other. However, to meet the market demand for information on cost savings through renovation, as evidenced in the field tests, a more detailed cost calculation for the first renovation step can be implemented in iBRoad2EPC as an additional improvement. The short time span until this first step allows for more reliable predictions and increases the confidence in the results of such a cost calculation.
- Building owners and property managers are largely supportive of the mandatory on-site visit component of iBRoad2EPC, despite the extra work involved for the experts.
- Overall, and across ages, on the usefulness of iBRoad2EPC for multi-family and public/administrative buildings, recognising its ability to provide essential insights for long-term renovation planning and proactive mitigation of risks in situations. Feedback from energy experts and building owners, alongside considerations for the iBRoad2EPC pricing structure, underscores the perceived value and potential of iBRoad2EPC in facilitating energy-related renovations and climate change mitigation efforts.


 [iBRoad2EPC Horizon 2020 project](#)

Original source:

[Read the original source](#)

[Initial national guides for the roll-out of iBRoad2EPC in the six pilot countries | BUILD UP](#)



Log in  Translate this page

Search on BUILD UP

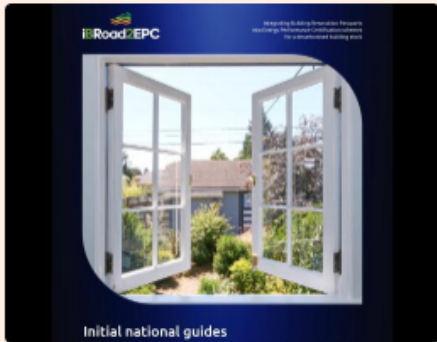
Search

BUILD UP

The European portal for energy efficiency and renewable energy in buildings

About BUILD UP News & Events Themes Resources & Tools BUILD UP Skills

Home > Resources & Tools > Publications > Initial National Guides For The Roll-out of iBRoad2EPC In The Six Pilot Countries



Initial national guides

Publication

Initial national guides for the roll-out of iBRoad2EPC in the six pilot countries

19 July 2024

iBRoad2EPC and national energy performance certification schemes of roll-out countries.

Marianna Papagiorga

Draft national guides for the roll-out of iBRoad2EPC in the six pilot countries, i.e., Bulgaria, Greece, Poland, Portugal, Romania, and Spain.

The initial national guides include, per country:

- an overview of the national energy targets and priorities
- the legislative framework regarding EPCs and Building Renovation Passports
- the national building stock characteristics
- the EPC issuing specific procedures/peculiarities
- the iBRoad2EPC vision
- provisions and estimations for the proposed cost and effort, the proposed modules
- envisaged interlinkages with other tools and software
- training procedures required in order for the energy auditors to use iBRoad2EPC
- an action plan, including a proposed timetable for the implementation of the actions, a list of identified priorities, as well as stakeholders that need to be engaged

01/12/2023

INZEB

Original source:

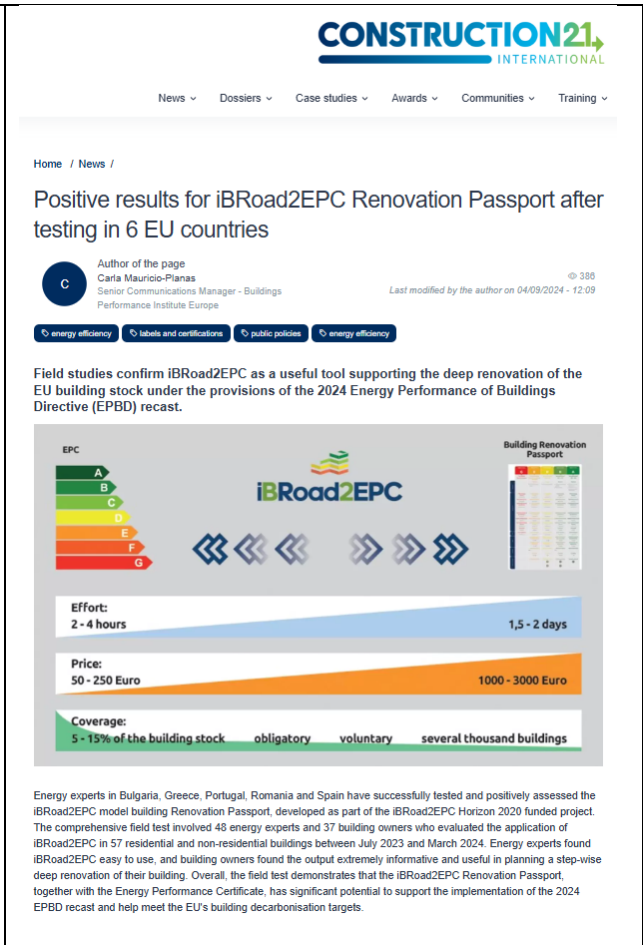
[Read the original source](#)

[iBRoad2EPC - Experience from other projects: Linking Energy Performance Certificates \(EPCs\) with the Building Renovation Passport \(BRP\) | BUILD UP](#)

The screenshot shows the BUILD UP website interface. At the top, there is the European Commission logo and navigation options like 'Log in', 'Translate this page', and a search bar. The main header is blue with the text 'BUILD UP' and 'The European portal for energy efficiency and renewable energy in buildings'. Below the header is a navigation menu with categories: 'About BUILD UP', 'News & Events', 'Themes', 'Resources & Tools', and 'BUILD UP Skills'. The breadcrumb trail reads: 'Home > Resources & Tools > Publications > iBRoad2EPC - Experience From Other Projects: Linking Energy Performance Certificates (EPCs) With The Building Renovation Passport (BRP)'. The main content area features a large image of a city street with buildings, overlaid with the text 'Experience from other projects'. To the right of the image, the title 'iBRoad2EPC - Experience from other projects: Linking Energy Performance Certificates (EPCs) with the Building Renovation Passport (BRP)' is displayed, along with the date '19 July 2024' and a summary: 'Summarising experience from other projects in relation to new features in view of their potential integration into iBRoad2EPC.' The author's name, 'Marianna Papaglastra', is listed below. A section titled 'Original source:' includes a button labeled 'Read the original source'.

ANNEX II. INDICATIVE IBROAD2EPC POSTS ON CONSTRUCTION 21

[Positive results for iBRoad2EPC Renovation Passport after testing in 6 EU countries](#)



CONSTRUCTION21
INTERNATIONAL

News ▾ Dossiers ▾ Case studies ▾ Awards ▾ Communities ▾ Training ▾

Home / News /


Positive results for iBRoad2EPC Renovation Passport after testing in 6 EU countries

Author of the page
Carla Mauricio-Planas
Senior Communications Manager - Buildings
Performance Institute Europe

© 388
Last modified by the author on 04/09/2024 - 12:09

energy efficiency labels and certifications public policies energy efficiency

Field studies confirm iBRoad2EPC as a useful tool supporting the deep renovation of the EU building stock under the provisions of the 2024 Energy Performance of Buildings Directive (EPBD) recast.



EPC
A
B
C
D
E
F
G

iBRoad2EPC

Building Renovation Passport

Effort:
2 - 4 hours 1,5 - 2 days

Price:
50 - 250 Euro 1000 - 3000 Euro

Coverage:
5 - 15% of the building stock obligatory voluntary several thousand buildings

Energy experts in Bulgaria, Greece, Portugal, Romania and Spain have successfully tested and positively assessed the iBRoad2EPC model building Renovation Passport, developed as part of the iBRoad2EPC Horizon 2020 funded project. The comprehensive field test involved 48 energy experts and 37 building owners who evaluated the application of iBRoad2EPC in 57 residential and non-residential buildings between July 2023 and March 2024. Energy experts found iBRoad2EPC easy to use, and building owners found the output extremely informative and useful in planning a step-wise deep renovation of their building. Overall, the field test demonstrates that the iBRoad2EPC Renovation Passport, together with the Energy Performance Certificate, has significant potential to support the implementation of the 2024 EPBD recast and help meet the EU's building decarbonisation targets.

[A blueprint for success: How a renovation passport can accelerate deep renovation](#)

CONSTRUCTION21
INTERNATIONAL

News ▾ Dossiers ▾ Case studies ▾ Awards ▾ Communities ▾ Training ▾

Home / News /

A blueprint for success: How a renovation passport can accelerate deep renovation

Author of the page
Carla Mauricio-Planas
Senior Communications Manager - Buildings
Performance Institute Europe

© 454
Last modified by the author on 04/09/2024 - 12:01

public policies renovation labels and certifications EPBD renovation retrofits

The building stock is far off track to achieve climate neutrality by 2050. Beyond decarbonisation, we also know that the negative consequences of unrenovated buildings on human health are significant, and rising energy prices are having a significant negative impact on citizens' purchasing power.

iBRoad2EPC

The 2024 recast of the Energy Performance of Buildings Directive (EPBD) has responded to this, laying the framework for an ecosystem of tools that should in principle upscale deep renovation, fast. Among other elements, for the first time ever, it introduces a framework for renovation passports in Article 12 as a voluntary tool, to facilitate and simplify the renovation process for building owners.

Renovation passports – a valuable tool for decision making in the renovation journey and asset valuation

The renovation passport is a valuable tool for building owners and investors to make informed decisions. It provides high-quality recommendations for staged deep renovations and actionable information to implement them.

Financial actors could use renovation passports as a fundamental tool for asset valuation and link them to green mortgage programmes, taking advantage of the ongoing programmes and in line with the EU taxonomy. The integration of EPC and renovation passports with incentive programmes could improve their effectiveness by (1) prescribing clearer guidelines for public administrations on what renovation interventions should be incentivised with priority; (2) tying the exact amount of funds to specific and measurable energy improvements; and (3) providing building owners with clear, reliable and actionable information, thus making renovations more accessible.



iBRoad2EPC

www.ibroad2epc.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 101033781

