

BPIE FACTSHEET *January 2015*

QUALIFICATION AND ACCREDITATION REQUIREMENTS OF BUILDING ENERGY CERTIFIERS IN EU28

A well-functioning and reliable EPC system could be the key driver for a market transformation towards more energy efficient buildings. The quality and accuracy of the certificate, and by extension, the reliability of the entire EPC scheme, depend to a large extent on the certifier skills. The certifier has the responsibility of collecting input data, making relevant assumptions, conducting calculations according to the national methodology, drawing recommendations and finally (in most Member States) issuing the certificate.

This factsheet summarises and further develops the qualification requirements and accreditation schemes for building energy certifiers. It additionally outlines who can issue EPCs, the required skills and how they are verified.

Who can issue EPCs for buildings?

The first EPBD (2002/91/EC)¹ introduced a requirement that the energy certification of buildings needs to be carried out in an **independent manner** by a **qualified and/or accredited expert** (Art. 10). The EPBD recast (2010/31/EU)² further compelled Member States (MS) to "take into account the experts" competence in the accreditation procedure" (Art. 17). In order to improve the process transparency, MS are also required to make publicly available the "information on training and accreditations", as well as to provide "regularly updated lists of qualified and/or accredited experts" (Art. 17).

Cross-border recognition of the professional skills is very limited and the EPC certifier profession is not yet officially recognised across Europe, despite the European Commission's intention to continue its activities on developing guidelines and recommendations for EU-wide training standards. The framework condition in this regard is specified in the Energy Performance of Buildings Directive (EPBD), but the implementation is to be made at the national (or regional) level.



What is the certifiers' responsibility?

The certifier is responsible for the EPC accuracy, reliability and compliance with the national energy performance calculation method. In case of poor quality, lack of required qualifications or questionable work independency, he/she may be penalised. The EPBD recast obliges MS to set the *rules on penalties for non-compliance* that are *"effective, proportionate and dissuasive"* (Art.27).

To monitor the quality of EPCs, and therefore the work of certifiers, MS are required to introduce an independent control system (Art. 18). Verifying EPCs and their quality should be based on the options within EPBD's Annex 2 and take into account: validity check of the input data and results stated in the EPC (option A); check of the input data and verification of the results, including the recommendations (option B); and full check of the input data, including an on-site visit to the building when needed and full verification of the results and recommendations (option C). Otherwise MS can opt for equivalent measures. The checks have to be performed on a "statistically significant percentage of all the EPCs issued annually" and selected randomly.

What are the minimum requirements for qualified and/or accredited experts?

The **requirements for qualification and/or accreditation** vary across Europe and usually depend on the building type (e.g. residential or non-residential; new or existing), the building complexity (e.g. capacity of the technical installations to be certified), the certifier's professional experience and level of education. **Table 1 (see pg.5) presents a detailed country-by-country overview of the minimum qualification and accreditation requirements.**

In most MS, both the minimum qualifications (such as relevant education and training or prior professional experience) and the competence-based accreditation of experts are considered. Only Austria, Spain, Germany and most of the Italian regions do not require the mandatory accreditation procedure. In this case, the EPC certifiers operate under their trade licence (e.g. via professional associations) and have a personal responsibility to comply with the minimum qualification requirements specified in the national legislation.

There are **minimum education requirements** in twenty two countries and they vary among MS, with twelve countries opting for relevant higher education, and often specifically an engineering degree. In three countries there are no minimum education requirements, provided there is either relevant professional experience, completed training or an exam passed. In seventeen countries, professional experience is required and it usually varies between two and five years depending on the building type and complexity (e.g. non-residential buildings may require extended experience) or according to the level of education. Mandatory examination is required in twenty three countries (in some cases only as an alternative to an engineering degree); the most common method in the accreditation process is to verify the certifiers' skills.

In fifteen MS, **Continuous Professional Development** programmes are foreseen with a required attendance for certifiers to renew their accreditation periodically, based on a mandatory exam (e.g. in Czech Republic, Bulgaria, Ireland, Hungary) and/or training (e.g. in France, Croatia) or other proof of experience (e.g. in Romania).

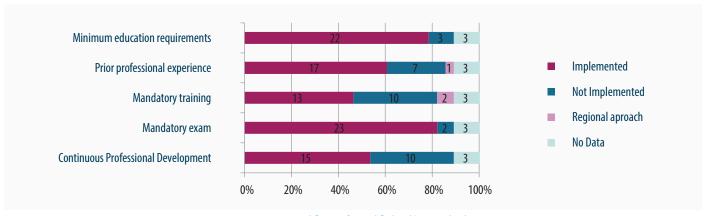


Figure 1 - Minimum qualification for qualified and/or accredited expert

In twelve MS, the **accreditation process** is conducted by government bodies (i.e. the relevant Ministry or its agencies) based on qualification recognition criteria, such as the mandatory exam results or accreditation guidance. In France, Latvia and the United Kingdom, the bodies responsible for the accreditation procedures are third-party bodies (i.e. institutions / companies) having an agreement with the government. In Hungary and Greece, professional associations are responsible for the accreditation procedure. In some countries (e.g. in Croatia, Poland and in the Walloon Region of Belgium), qualified experts need to be covered by liability insurance to complete the accreditation procedure.

Denmark is the only MS not allowing self-employed experts to issue EPCs. Only accredited companies implementing ISO 9001 quality management systems are accepted.

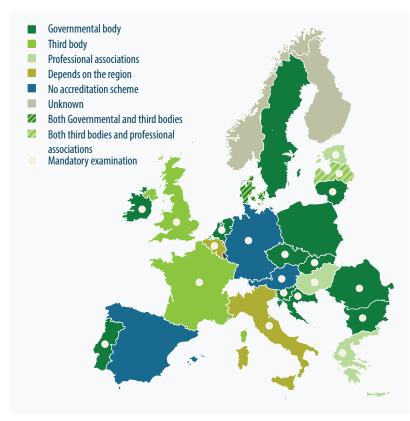


Figure 2 - Bodies in charge of the certifiers' accreditation

All MS have made publicly available, entirely or partially, the list(s) of experts and organisations qualified and/or accredited to issue EPCs. Most of the information is available in a centralised database where experts may be differentiated by type (e.g. in Belgium - Brussels Region, there is a distinction between experts for new and existing buildings). In three countries (Austria, Italy and Spain), lists of experts are published by regions and/or provinces. In Germany, instead of one central list (register), there are multiple voluntary databases of the certifiers.

How is the quality of EPCs monitored and what are the penalties for EPC certifiers?

Although the EPBD recast has been transposed in all MS, its implementation and the enforcement of new requirements is still ongoing, such as the independent control system for certificates and penalties for non-compliance.

Following the request by the European Commission³ to implement independent control systems, only

sixteen MS⁴ performed **quality checks** on EPCs in 2013. As presented in figure 3, out of all the national reports submitted, only 10 countries considered a detailed EPC verification equivalent to option C of the EPBD's Annex 2, i.e. including full check of input data, results and recommendations as well as on-site visit (if possible).

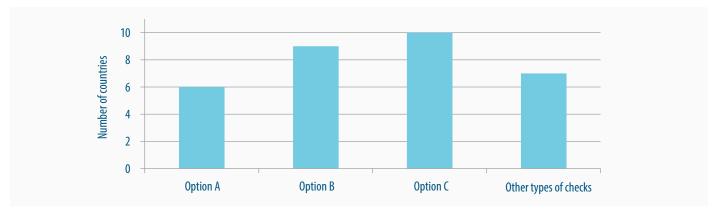


Figure 3 - Quality check of the EPC in 2013 across Europe 3

It is worth noting that some jurisdictions, e.g. Belgium (Wallonia, Flanders), France, Portugal, Romania, the Netherlands and Scotland, decided to perform checks of EPCs based on the certifiers' profile (i.e. selected a random sample of certifiers, whose EPCs are checked). In some of the national reports, this was included in the category of "other types of checks" or under the options indicated as A, B or C.

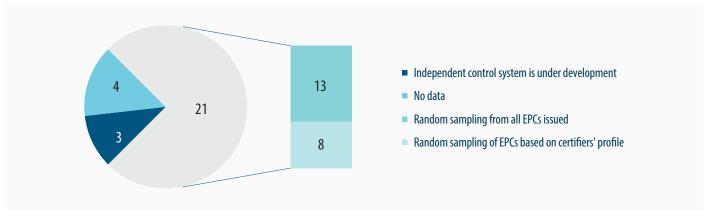


Figure 4 - Selection process for the independent quality control of EPCs across EU 28 (number of schemes)

The **penalties for non-compliance** are also a relatively new mechanism introduced in most MS only after 2012. Administrative penalties are foreseen in more than half of the MS for experts who do not comply with the national transposition of the EPBD. Administrative penalties may include: a warning procedure (e.g. Finland), mandatory training (e.g. Belgium-Wallonia), a periodic suspension of licence (e.g. in Greece and Hungary for up to 3 years and in Portugal for up to 2 years), and in the worst case scenario, loss of accreditation (e.g. France, Czech Republic, Lithuania, Poland).

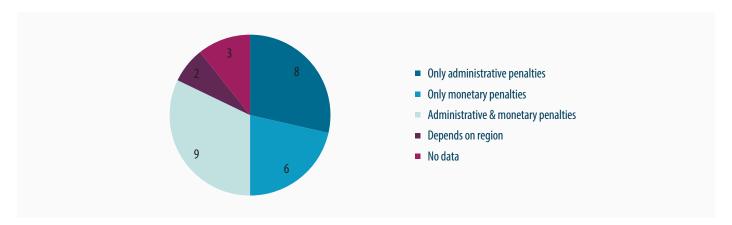


Figure 5 - Penalty system for qualified experts and/or companies for poor quality of EPC issued (number of countries)

In fifteen MS, monetary penalties might be imposed on qualified experts for non-compliance with the EPBD. The maximum penalty varies between MS, as well as between individual experts (physical persons) and legal entities, as seen in Fig 5. To date, the most common penalty across MS is an official warning to the qualified experts and re-issuing of the EPC: only in a few cases are fines imposed, i.e. in Austria, Flanders, Portugal and the Netherlands. In Flanders, in 2011, control of the qualified experts resulted in 76 fines of €500. In the Netherlands, in 2012, 50 companies were penalised with administrative fines due to the low quality of issued EPCs. In a number of countries, monetary penalties have not yet been imposed in practice (i.e. Bulgaria, Czech Republic, Hungary, Croatia and Slovenia).



Figure 6 - Maximum penalties that might be imposed for the certifiers (physical person and legal entity) for non-compliance (examples)

In Ireland and Latvia, the quality control of certifiers is performed in parallel with the independent control of EPCs. In both cases, the resulting penalties targeting the experts are based on a point-system differentiated depending on the type of errors. E.g., in Ireland 3 penalty points are credited in cases with a high potential to compromise the fundamental integrity of the EPC scheme, i.e. to damage public confidence or otherwise negatively impact the reputation of the scheme. Consequently, in Ireland, if 10 or more points are accumulated over a period of 2 years, the certifiers' licence may be suspended (for a period of 3 to 12 months) or terminated (at a second or subsequent offence). In Latvia, the licence is terminated for 6 months if the expert has received 7 or more penalty points and for 12 months if more than 10 points have been accumulated.

Table 1 - Overview of the minimum requirements for qualified and/or accredited experts in EU28

Country/ Territory	Minimum education requirements	Prior professional experience and/or additional training requirements		Verification of experts'	Accreditation of	Continuous Professional Development (CPD) ;	Public availability of certifiers and/or
		Professional experience	Training Mandatory or voluntary	competence (i.e. mandatory exam)	the certifiers	Renewal of licence	certifying companies' lists
AT	Technical education required	Not required	M (if no technical education)	X	X [1]	X	List of certifiers provided by region
BE - Brussels	Engineering degree required for certifiers of non-residential buildings	Not required	М	\checkmark	Based on exam results	X [2]	Differentiated by type of existing buildings and for new buildings or renovations
BE - Flanders	Engineering degree required for certifiers of non-residential buildings	2 years of prior professional experience (if no engineering degree)	М	\checkmark	Based on exam results	Desk support for certifiers (i.e. FAQ, phone line)	Differentiated by existing residential buildings and public buildings
BE - Wallonia	Engineering degree required for certifiers of non-residential buildings	2 years of prior professional experience (if no engineering degree)	M (if no engineering degree)	\	Based on exam results	Desk support for certifiers	Differentiated by <u>existing</u> and <u>new</u> <u>buildings</u>
BG	Technical education required	2-3 years of prior professional experience (depending on the level of education)	М	\	Based on exam results	Mandatory exam every 3 years	Differentiated by <u>certifier</u> or <u>company</u>
CZ	Technical education required	3-6 years of prior professional experience (depending on the level of education)	٧	\	Based on exam results	Mandatory training and exam every 3 years	Differentiated by type of certifier
DE	Technical education required or relevant training	2 years of prior professional experience (if no engineering degree)	M (if no engineering degree)	(if no engineering degree)	X [3]	X	X [5]
DK[4]	No minimum requirements, provided competence-based accreditation procedure	Required according to the type of certifier	M (additional training required as alternative to professional experience)	✓	Established by certified companies (EN ISO 9001)	Mandatory training every 3 years	Differentiated by type of buildings
EE	Engineering degree required, additional education required for the certifiers of non-residential buildings	2 years, additional experience required for the certifiers of non-residential buildings	М	✓	Based on exam results	Renewal of accreditation every 5 years	Differentiated by type of certifier
ES	Engineering degree	Not required	٧	X	X [1]	X	List of certifiers provided by region/ province
FI	Engineering degree or technical education required depending on the type of certifier	1 or 3 years of prior professional experience (depending on the type of certifier and level of education)	٧	\	Based on exam results	Renewal of accreditation every 7 years	Differentiated by type of certifier
FR	2 years of relevant higher education required for the certifiers of non-residential buildings	1-3 years of prior professional experience (depending on the level of education)	М	\	Based on exam results	Renewal of accreditation every 5 years based on mandatory training	Differentiated by type of buildings
GR	Engineering degree required	2 years of prior professional experience	М	\	Based on exam results	Renewal of accreditation every 10 years	Differentiated by type of certifier
HR	Engineering degree required	5 years of prior professional experience	М	\	Based on exam results	Renewal of accreditation every 3 years based on mandatory training every year	Differentiated by type of certifier
HU	Engineering degree required	1 year of prior professional experience	٧	✓	Based on exam results	Renewal of accreditation based on mandatory training and exam	Registered at chamber of <u>architects</u> or <u>engineers</u>

Country/ Territory	Minimum education requirements	Prior professional experience and/or additional training requirements		Verification of experts'	Accreditation of	Continuous Professional	Public availability of certifiers and/or
		Professional experience	Training Mandatory or voluntary	competence (i.e. mandatory exam)	the certifiers	Development (CPD) ; Renewal of licence	certifying companies' lists
IE	Technical education required	Not required	M (for certifiers of residential buildings) or voluntary training	√	Based on exam results and professional certification (if certifier for non-residential buildings)	Renewal of accreditation based on mandatory exam every 2 years and support of certifiers; [6]	Differentiated by <u>type of certifier</u>
IT	Technical education required	Not required	M (if no professional certification) or voluntary training	(if training required)	Depend on region; not required [1] or based on exam results	X	List of certifiers provided by region/ province
LT	Engineering degree required	3 years of prior professional experience	М	✓	Based on exam results	Renewal of accreditation every 5 years based on exam	Differentiated by type of certificates issued
LV	Engineering degree required (except for certified building specialists)	2 years of prior professional experience (except for certified building specialists)	V	(except for certified builing specialists)	Based on exam results or professional certification (if certified building specialists)	? [6]	Differentiated by type of certificates issued
NL	No minimum requirements, provided competence-based accreditation procedure	Not required	V	√	Based on the qualification recognition according to BRL 9500 guidance assessment	X	Differentiated by <u>certifier</u> or <u>company</u>
PL	Relevant higher education required (except for certified building specialists)	Not required	V	\checkmark	Based on qualification	X	Differentiated by type of certifier
PT	Engineering degree required according to the type of certifier	5 years of prior professional experience	V	✓	Based on exam results	X	Distinguished per type of building
RO	Engineering degree required	3-5 years (depending on the type of certifier)	М	✓	Based on exam results	Renewal of accreditation every 5 years (i.e. proof of experience)	Differentiated by type of certifier
SE	Technical education required	5 years of prior professional experience	V	✓	Based on exam results	Renewal of accreditation every 5 years based on exam	Differentiated by type of certifier
SI	Engineering degree required	2 years of prior professional experience	М	✓	Based on exam results	Renewal of accreditation every 5 years based on mandatory training	Differentiated by <u>certifier</u> and <u>company</u>
SK	Engineering degree required	3 years of prior professional experience	V	✓	Based on exam results	X	Differentiated by type of certifier
UK — England, Wales and Northern Ireland	No minimum requirements, provided competence-based accreditation procedure	Not required	M or V depending on type of certifier and accreditation	(except in case of accreditation through APEL)	Based on exam results or Accreditation of Prior Experiential Learning (APEL) which is requested for certifiers of the most complex buildings	Mandatory training (mininum 5-10 hours of Continuous Professional Development per year)	Differentiated by type of certifier for residential buildings (Northern Ireland, England and Wales) or non-residential buildings (Northern Ireland, England and Wales)
UK - Scotland	No minimum requirements, provided competence-based accreditation procedure	Not required	V	(except in case of accreditation through APEL)	Based on exam results or APEL	Mandatory periodic training and desk support	Differentiated by <u>certifier</u> or <u>company</u>

^[1] Based on trade licence

^[2] Complementary training required for certifiers accredited before June 2014 in Brussels Capital Region

^[3] Based on self-declaration of certifier
[4] New provisions by the Danish Energy Agency concerning certifiers trained after October 4, 2014

^[5] Multiple voluntary lists available
[6] Penalty point system for certifiers that may lead to loss of the licence

Conclusions

Building certifiers have a central role to play in ensuring the credibility of the EPC scheme. MS should therefore develop an EPC framework which includes all elements necessary to guarantee an effective and reliable certification process. For this, it is essential to guarantee adequate skills of the certifiers. Minimum standards for training, prior professional experience and independent accreditation procedures should be included in all Member States' legislation in order to ensure a minimum level of quality. Therefore, in a future recast of the EPBD, the European Commission should include detailed guidance and further require a more consistent approach from MS when setting up those requirements.

The requirements for EPC certifiers should take into account both the necessity for adequate training and independent accreditation procedures. Training needs to be proportional to the expert's level of education and prior professional experience and should be based on programmes verified by the competent public authority. Verification of the certifiers' skills during the accreditation process should be given further attention and be accompanied by a mandatory examination for self-employed experts, and a standardised procedure for legal entities.

Monitoring and independent control of certifiers is essential. EPC checks need to be executed in an independent manner and include full verification of the EPC input data, results and recommendations, by conducting (when necessary) an on-site visit and re-certification. Verification procedures should furthermore establish the experts' independence from commercial interests with the companies involved in building construction and renovation.

Monitoring and verification systems should lead to the enforcement of proportional penalties when malpractice is detected. The penalty point system of Ireland and Latvia is exemplary and should be considered by all Member States.

Proper monitoring and verification systems including penalties and fines are vital in reaching the desired results of a reliable and credible certification scheme.

To guarantee the certifiers' skills over the years, their licence should be subject to renewal based on proof of training and/or exam results under an appropriate dedicated continuous professional development programme. Compulsory professional continuous development programmes and assistance for EPC certifiers (e.g. help desk and FAQ information) should be offered in an independent manner.

For more information, download the report <u>Energy Performance Certificates (EPC) across the EU: a mapping of national approaches</u> (2014) on BPIE's website.



Figure 7 - Desirable scheme to ensure the competences of EPC certifiers

¹Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the Energy Performance of Buildings

²Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the Energy Performance of Buildings

³National reports on the independent control system under Art 18 and Annex II of the EPBD recast are to date (December 2014) available for 20 MS http://ec.europa.eu/energy/efficiency/buildings/implementation_en.htm

⁴Out of 20 MS who submitted the reports



Buildings Performance Institute Europe (BPIE)

Rue de la Science 23 1040 Brussels Belgium www.bpie.eu