



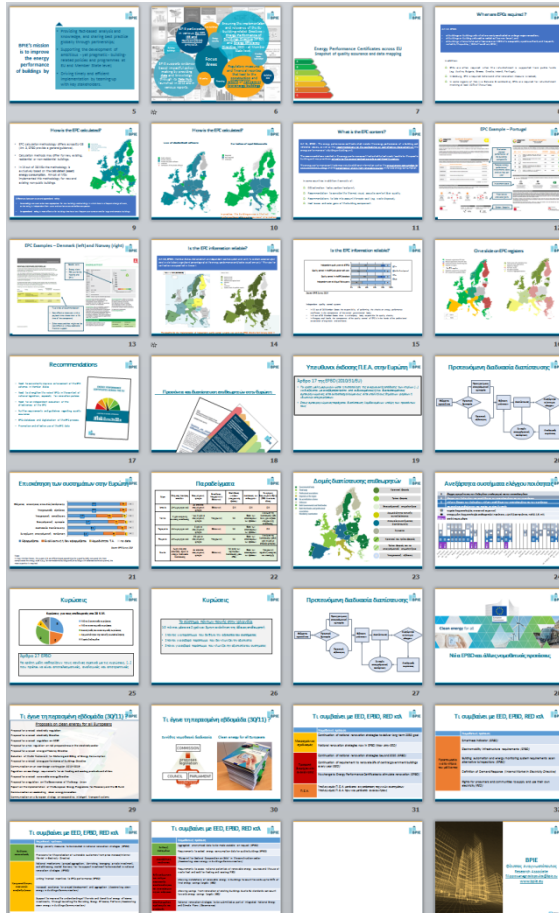
Μια Ευρωπαϊκή οπτική: Π.Ε.Α, επιθεωρητές, και η νέα ΕΡΒΔ

Δεκέμβριος, 2016

Φίλιππος Αναγνωστόπουλος

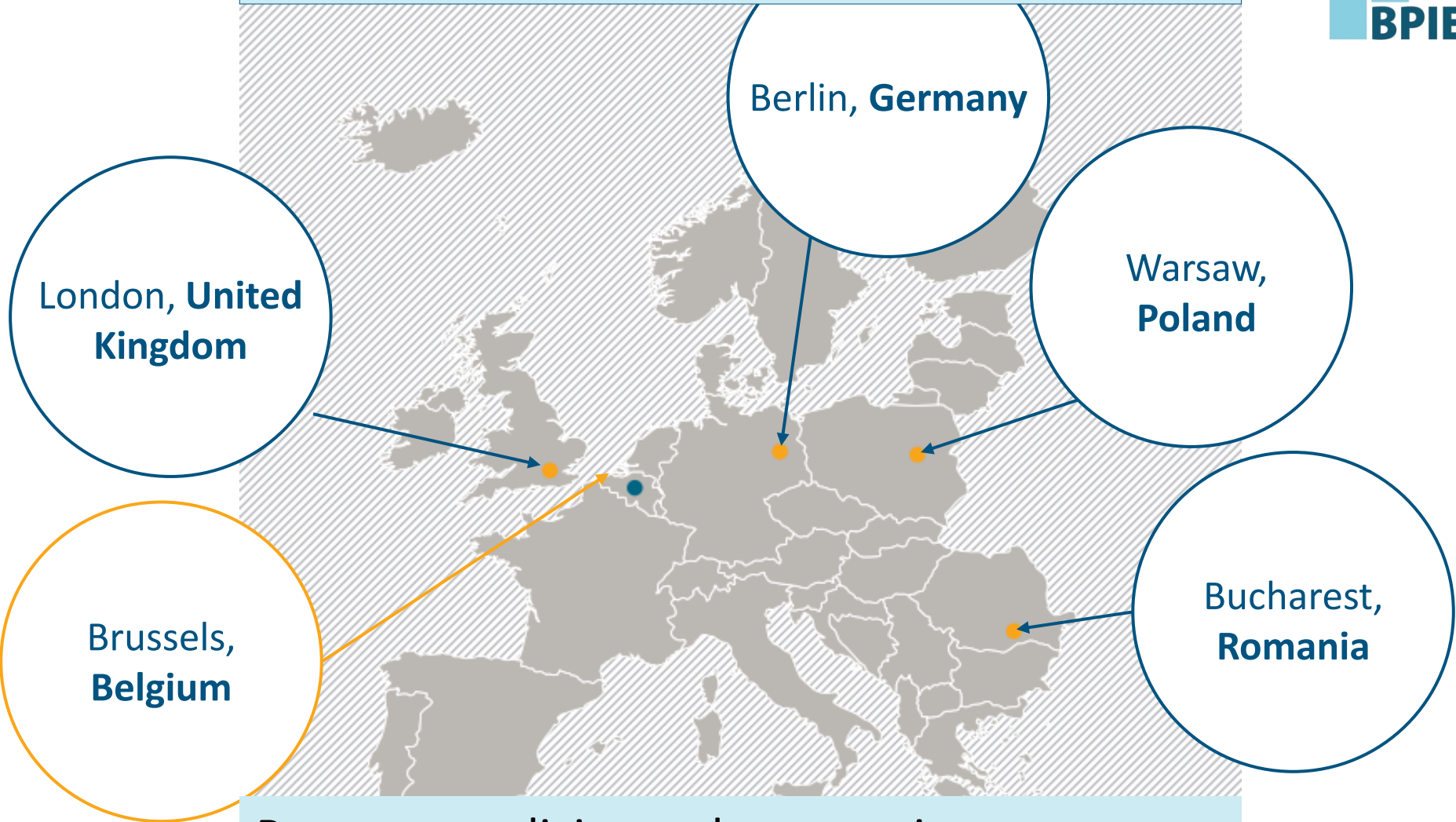
1^η Τεχνική ημερίδα Π.ΣΥ.Π.ΕΝ.ΕΠ

Δομή της παρουσίασης



- Το Buildings Performance Institute Europe
- Πιστοποιητικά Ενεργειακής Απόδοσης στην Ευρώπη
- Προσόντα και διαπίστευση επιθεωρητών
- Νέα EPBD και το νομοθετικό πακέτο “clean energy for all Europeans”. Τι αλλάζει?

Buildings Performance Institute Europe

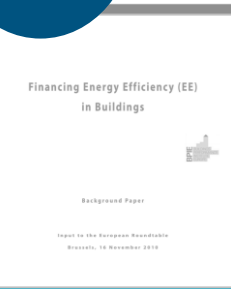
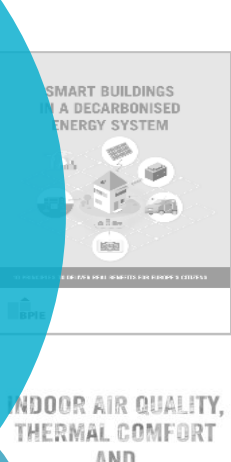
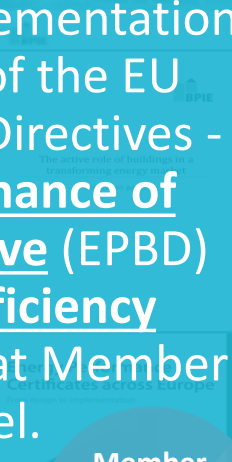
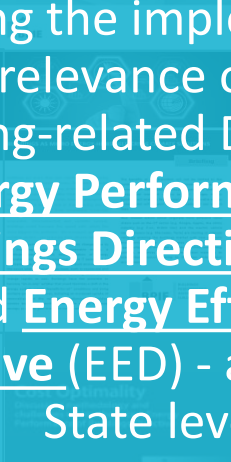
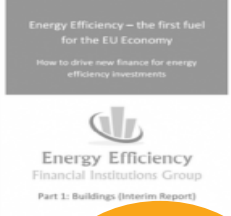
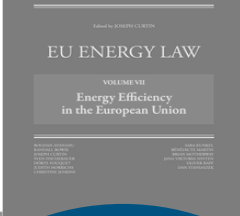


Promotes policies and support instruments to increase the energy performance of buildings

www.bpie.eu

**BPIE's mission
is to improve
the energy
performance
of buildings by**

- Providing fact-based analysis and knowledge, and sharing best practice globally through partnerships;
- Supporting the development of ambitious - yet pragmatic - building-related policies and programmes at EU and Member State level;
- Driving timely and efficient implementation by teaming-up with key stakeholders.



BPIE participates in various EU FP7, IEE and Horizon2020 projects.

New buildings

Energy security

Ensuring the implementation and relevance of the EU building-related Directives - Energy Performance of Buildings Directive (EPBD) and Energy Efficiency Directive (EED) - at Member State level.

Member States legislation

Focus Areas

BPIE supports evidence-based impactful policy-making by providing data and knowledge through its Data Hub, launched in 2012 and in various reports.

EU policy

Financing

Regulatory measures and financial incentives that lead to the construction and retrofit of net-zero or low-energy buildings.

Buildings data

Energy Performance Certificates across EU

Snapshot of quality assurance and data mapping



When are EPCs required ?



Art 12. EPBD:

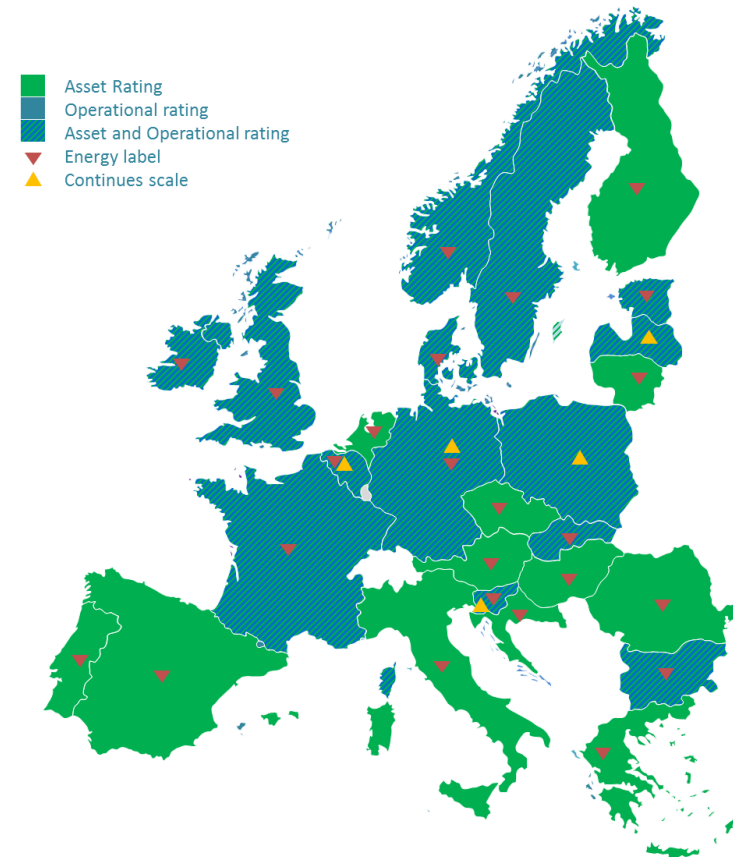
- all **buildings or building units** which are **newly constructed** or undergo **major renovation**;
- all buildings or building **units sold or rented** out to a new tenant; and
- all buildings where a total useful floor area over 1000 m² is occupied by a public authority and frequently visited by the public; [250 m² from 9 July 2015]

In addition:

- 🏠 EPCs are often required when the refurbishment is supported from public funds (e.g. Austria, Bulgaria, Greece, Croatia, Ireland, Portugal);
- 🏠 In Salzburg, EPC is required before and after renovation measure is realised;
- 🏠 In some regions of Italy (i.e. Bolzano & Lombardia), EPCs are required for refurbishment involving at least 25% of the surface;

How is the EPC calculated?

- EPC calculation methodology differs across EU-28 (Art. 3, EPBD provide a general guidance).
- Calculation methods may differ for new, existing, residential or non-residential buildings.
- In 14 out of 28 MSs the methodology is exclusively based on the **calculated (asset) energy consumption**. Almost all MSs implemented this methodology for new and existing non-public buildings.



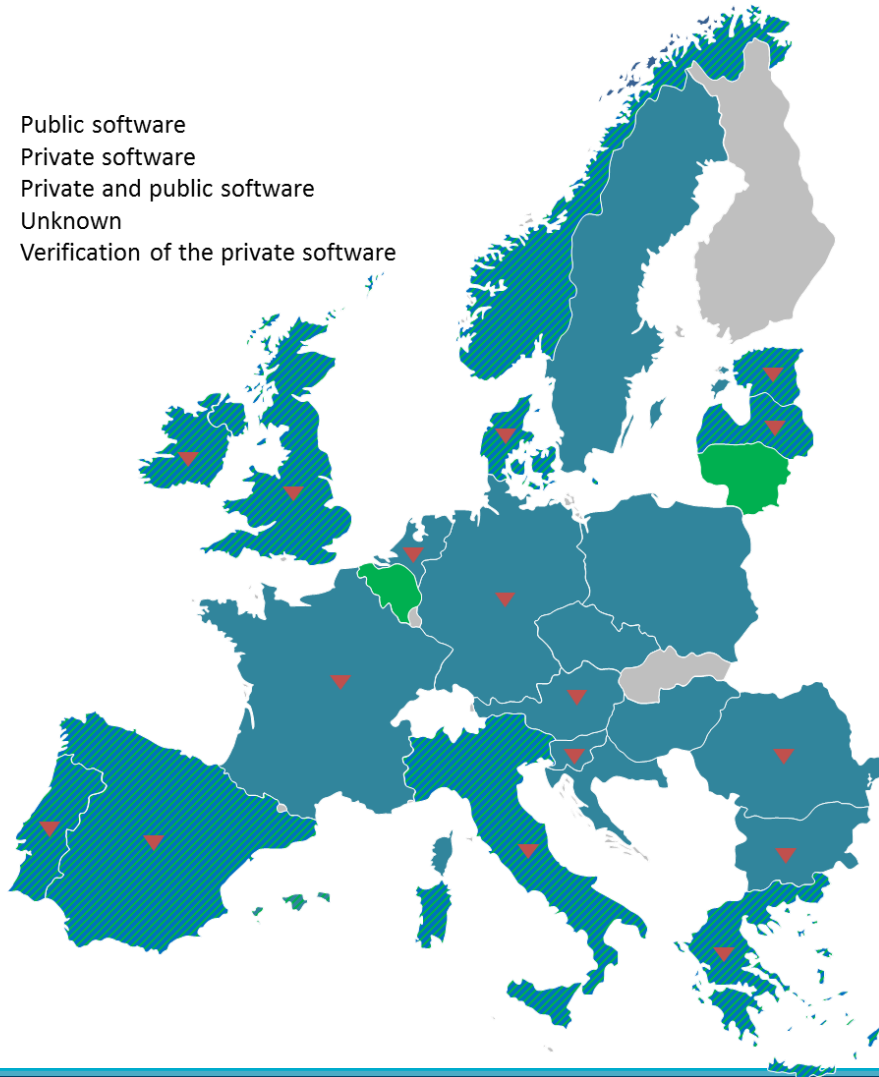
Differences between asset and operational rating:

- **Asset ratings** are seen to be most appropriate for new buildings and buildings in which there is a frequent change of users, as the rating is independent from users and can be assessed before occupation.
- **An operational rating** is more effective for buildings that have less frequent user turnover and for large and complex buildings.

How is the EPC calculated?

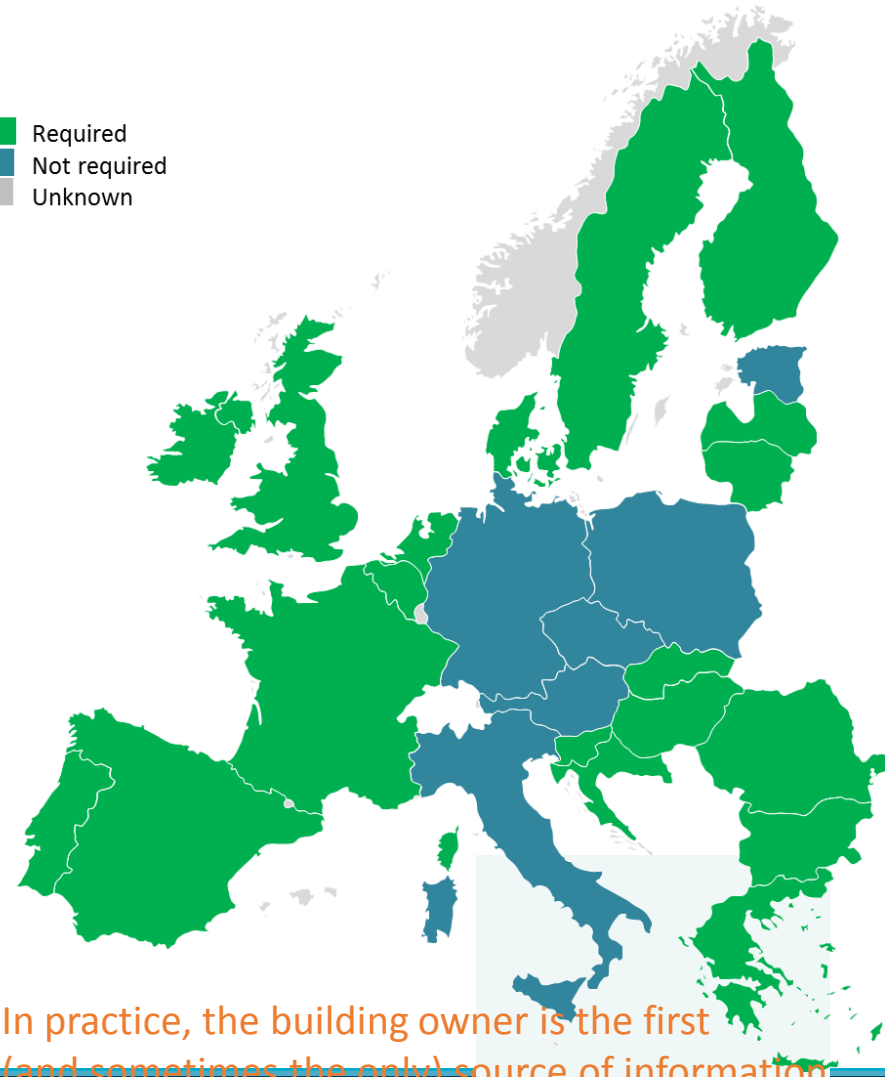
Use of standardised software

- Public software
- Private software
- Private and public software
- Unknown
- Verification of the private software



Collection of input data on-site

- Required
- Not required
- Unknown



In practice, the building owner is the first (and sometimes the only) source of information

What is the EPC content?



Art 11, EPBD : The energy performance certificate **shall** include the **energy performance of a building and reference values**, as well as the recommendations for the cost-optimal or cost-effective improvement of the energy performance of a building or building unit;

The recommendations included in the energy performance certificate **shall** be technically feasible for the specific building and may provide an estimate for the range of payback periods or cost-benefits analysis;

The energy performance certificate **may** include additional information such as the annual energy consumption for non-residential buildings and the percentage of energy from renewable sources in the total energy consumption.

In some countries in addition it consists of:

- 🏠 CO₂ estimation factor, carbon footprint;
- 🏠 Recommendation to consider the thermal, visual, acoustic comfort & air quality;
- 🏠 Recommendations to take into account life-cycle cost (e.g. waste disposal);
- 🏠 Heat losses and solar gains of the building component.

EPC Example – Portugal



Certificação Energética e Ar Interior EDIFÍCIOS

Certificado Energético
Edifício de Habitação
SCE1234567890

D

DESCRIÇÃO SUCINTA DO EDIFÍCIO OU FRAÇÃO

O edifício localiza-se no concelho de Oeiras, distrito de Lisboa, a uma altitude de 20 metros e a uma distância à costa superior a 5 Km. Apresenta uma tipologia T4, possui uma área útil de pavimento de 170 m² e é constituído por 3 pisos. Segundo a informação disponível o edifício foi construído em 2007.

A produção de águas quentes sanitárias é assegurada por um aquecedor a gás natural e por um sistema de coléctores solares térmicos. O aquecimento ambiente é assegurado por um recuperador de calor a biomassa e por um multi-split com 4 unidades interiores. O arrefecimento é assegurado pelo multi-split com 4 unidades interiores. Adicionalmente foi identificado um sistema solar fotovoltaico ligado à rede.

A ventilação processa de forma natural.

COMPORTAMENTO TÉRMICO DOS ELEMENTOS CONSTRUTIVOS DA HABITAÇÃO

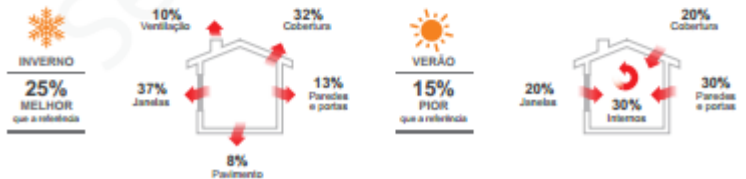
Descreve e classifica o comportamento térmico dos elementos construtivos mais representativos desta habitação. Uma classificação de 5 estrelas, expressa a referência adequada para esses elementos, tendo em conta, entre outros factores, as condições climáticas onde o edifício se localiza.

Tipo	Descrição das Principais Soluções	Classificação
PAREDES	Parade dupla sem isolamento térmico	☆☆☆☆☆
	Parade simples com isolamento térmico pelo exterior	☆☆☆☆☆
COBERTURAS	Cobertura inclinada de madeira sem isolamento térmico	☆☆☆☆☆
PAVIMENTOS	Pavimento interior sem isolamento térmico	☆☆☆☆☆
JANELAS	Janela simples com caixilhões de alumínio sem corte térmico e vidro simples	☆☆☆☆☆

Nota:☆☆☆☆☆ Melhor☆☆☆☆☆ Pior

PERDAS E GANHOS DE CALOR DA HABITAÇÃO

Os elementos construtivos contribuem para o consumo de energia associado à climatização e para o conforto na habitação. A informação seguinte indica o contributo desses elementos em cada estação, bem como os locais onde ocorrem perdas e ganhos de calor.



ENTIDADE GESTORA
ADENE
AGÊNCIA PARA A ENERGIA

ENTIDADE FISCALIZADORA
ADENE
AGÊNCIA PARA A ENERGIA

ENERGIA RENOVÁVEL
Contributo de energia renovável no consumo de energia deste edifício: **15%**

EMISSÕES DE CO₂
Emissões de CO₂ estimadas devido ao consumo de energia: **0,8 toneladas/ano**

Evaluation thermal performance of the buildings components

Forecast energy performance, investments costs and savings per year

Investment costs

Heat losses and solar gains

Carbon footprint

Certificação Energética e Ar Interior EDIFÍCIOS

Certificado Energético
Edifício de Habitação
SCE1234567890

D

PROPOSTAS DE MEDIDAS DE MELHORIA

As medidas propostas foram identificadas pelo Perfil Qualificado e têm como objetivo a melhoria do desempenho energético do edifício. A implementação destas medidas, para além de reduzir a fatura energética anual, poderá contribuir para uma melhoria na classificação energética.

Nº de Medida	Aplicação	Descrição da Medida de Melhoria Proposta	Custo Estimado do Investimento	Redução Anual Estimada da Fatura Energética	Classe Energética (Após Medida)
1		Aplicação de isolamento térmico pelo exterior com revestimento aplicado sobre o isolamento em paredes exteriores.	3.500€	até 300€	C
2		Instalação de uma segunda caixilhota interior e melhoria do fator solar dos vidros.	1.800€	até 250€	B
3		Instalação de sistema solar térmico individual.	2.500€	até 300€	A
4		Substituição do equipamento atual e/ou instalação de aquecedor de elevação rendimento para preparação de águas quentes sanitárias.	700€	até 75€	B
5		Correção de patologias por via de substituição de caixilhotes em elevado estado de degradação.	700€	até 100€	C

CONJUNTO DE MEDIDAS DE MELHORIA

1 + 4 + 5 Representa o Impacto a nível económico e do desempenho energético na habitação que este conjunto de medidas de melhoria terá, se for implementado.

4.900€
CUSTO TOTAL ESTIMADO DO INVESTIMENTO

até 400€
REDUÇÃO ANUAL ESTIMADA DA FATURA ENERGÉTICA

A
CLASSE ENERGÉTICA APÓS MEDIDAS

RECOMENDAÇÕES SOBRE SISTEMAS TÉCNICOS

Os sistemas técnicos dos edifícios de habitação, com especial relevância para os equipamentos responsáveis pela produção de águas quentes sanitárias, aquecimento e arrefecimento são determinantes no consumo de energia. Face a essa importância é essencial que sejam promovidas, com regularidade, ações que assegurem o correto funcionamento desses equipamentos, especialmente em sistemas com caldeiras que produzam água quente sanitária e/ou aquecimento, bem como sistemas de ar condicionado. Neste sentido, é recomendável que sejam realizadas ações de manutenção e inspeção regular a esses sistemas, por técnicos qualificados. Estas ações contribuem para manter os sistemas regulares de acordo com as suas especificações, garantir a segurança e o funcionamento otimizado do ponto de vista energético e ambiental.

Nas situações de aquisição de novos equipamentos ou de substituição dos atuais, deverá obter, através de um técnico qualificado, informação sobre o dimensionamento e características adequadas em função das necessidades. A escolha correta de um equipamento permitirá otimizar os custos energéticos e de manutenção durante a vida útil do mesmo.

Estas recomendações foram produzidas pela ADENE - Agência para a energia. Caso necessite de obter mais informações sobre como melhorar o desempenho dos seus equipamentos, contacte esta agência ou um técnico qualificado.

EPC Examples – Denmark (left) and Norway (right)



RENTABLE BESPARELSESFORSLAG

Herunder vises forslag til energibesparelser der skønnes at være rentable at gennemføre. At være rentabel betyder her, at besparelsen kan tilbagebetale investeringen inden de komponenter, der indgår i besparelsesforslaget, skal udskiftes igen.

F.eks. hvis forslaget er udskiftning af en cirkulationspumpe, forventes pumpen at leve i 10 år, og besparelsesforslaget anses at være rentabel hvis besparelsen kan tilbagebetale investeringen over 10 år. Hvis besparelsesforslaget er efterisolering af en hulmur ved indblæsning af granulat, er levetiden 40 år, og besparelsesforslaget er rentabelt hvis investeringen kan tilbagebetales over 40 år.

For hvert besparelsesforslag vises investeringen, besparelsen i energi og besparelsen i kr. ved nedsættelsen af energiregningen.

Hvis besparelsesforslaget medfører, at forbruget af en given energiform stiger, så vil stigningen være anført med et minus foran. Det vil f.eks. typisk tilfældet ved udskiftning et olietfy med en varmepumpe, hvor forbruget af olie erstattes med et elforbrug til varmepumpen.

Investering er med moms. Besparelser er med moms og energiligner.

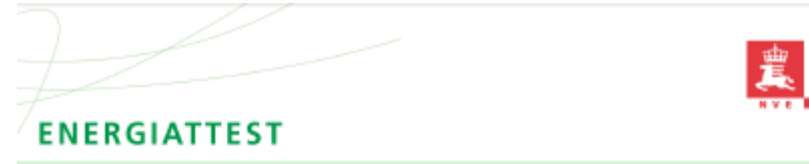
Emne	Forslag	Investering	Årlig besparelse i energienheder	Årlig besparelse
Varmeanlæg				
Varmefordelings pumper	Montering af ny cirkulationspumpe på varmeanlæg, som Alpha2 på 22 W	4.500 kr.	278 kWh Elektricitet	700 kr.
El				
Solceller	Montage af nye solceller, Monokrystaliske silicium, 4 kW	79.300 kr.	2.346 kWh Elektricitet	5.300 kr.

Double axis:

- Energy class
- RES use for the heating and DHW

Two kinds of recommendation:

- Cost effective measures (with a payback time shorter than a life time of the component)
- Other measured that might not be cost-effective without additional financial support



Adresse	MIDDELTHUNGS GATE 29
Postnr.	0398
Sted	OSLO
Leilighetnr.	
Gr.	215
Bnr.	235
Seksjonnr.	
Festnr.	
Bygn. nr.	80034683
Bylgnr.	
Marknr.	A2011-118968
Dato	29.08.2011

Energimerke

Oppvarmingskarakter (andel el og fossilt)

Høy andel (red) Lav andel (green)

Energikarakter

Årlig energiforbruk

Oppvarmingskarakter

Årlig energiforbruk

Eier	ENTRA EIENDOM AS
Innmøtt av	Erichsen & Horgen AS v/ Helle Wehik Jæger Sørensen

Energimerket angir bygningens energistandard. Energimerket består av en energikarakter og en oppvarmingskarakter, se figuren. Energimerket symboliseres med et hus, hvor fargen viser oppvarmingskarakter, og bokstaven viser energikarakter.

Energikarakteren angir hvor energieffektiv bygningen er, inkludert oppvarmingsanlegget. Energikarakteren er beregnet ut fra den typiske energibruken for bygningstypen. Beregningene er gjort ut fra normal bruk ved et gjennomsnittlig klima. Det er bygningens energimessige standard og ikke bruken som bestemmer energikarakteren. A betyr at bygningen er energieffektiv, mens G betyr at bygningen er lite energieffektiv. En bygning bygget etter byggeforskriftene vedtatt i 2007 vil normalt få C.

Oppvarmingskarakteren forteller hvor stor andel av oppvarmingsbehovet (romoppvarming og varmtvann) som dekkes av elektrisitet, olje eller gass. Grønn farge betyr lav andel el, olje og gass, mens rød farge betyr høy andel el, olje og gass. Oppvarmingskarakteren skal stimulere til økt bruk av varmepumper, solenergi, biobrensel og fjernvarme.

Om bakgrunnen for beregningene, se www.energimerking.no

Målt energibruk: Ikke oppgitt	3 385 760 kWh elektrisitet	0 kWh fjernvarme
Målt energibruk er gjennomsnittet av hvor mye energi bygningen har brukt de siste tre årene. Det er oppgitt at det i gjennomsnitt er brukt:	0 liter olje/parafin	0 Sm ³ gass
	0 kg bio (pellets/halm/vis) /	0 kWh annen energikilde

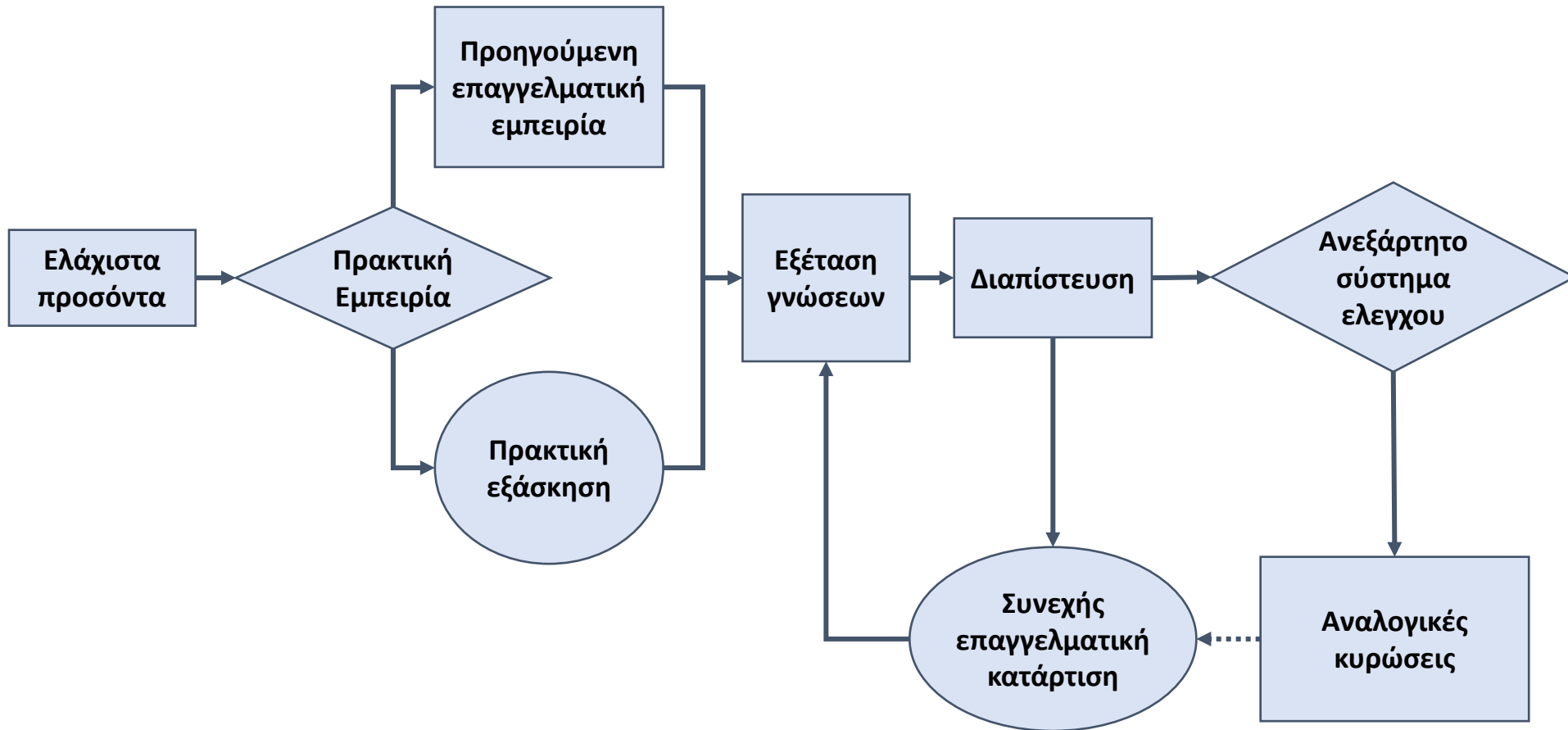
Προσόντα και διαπίστευση επιθεωρητών στην Ευρώπη



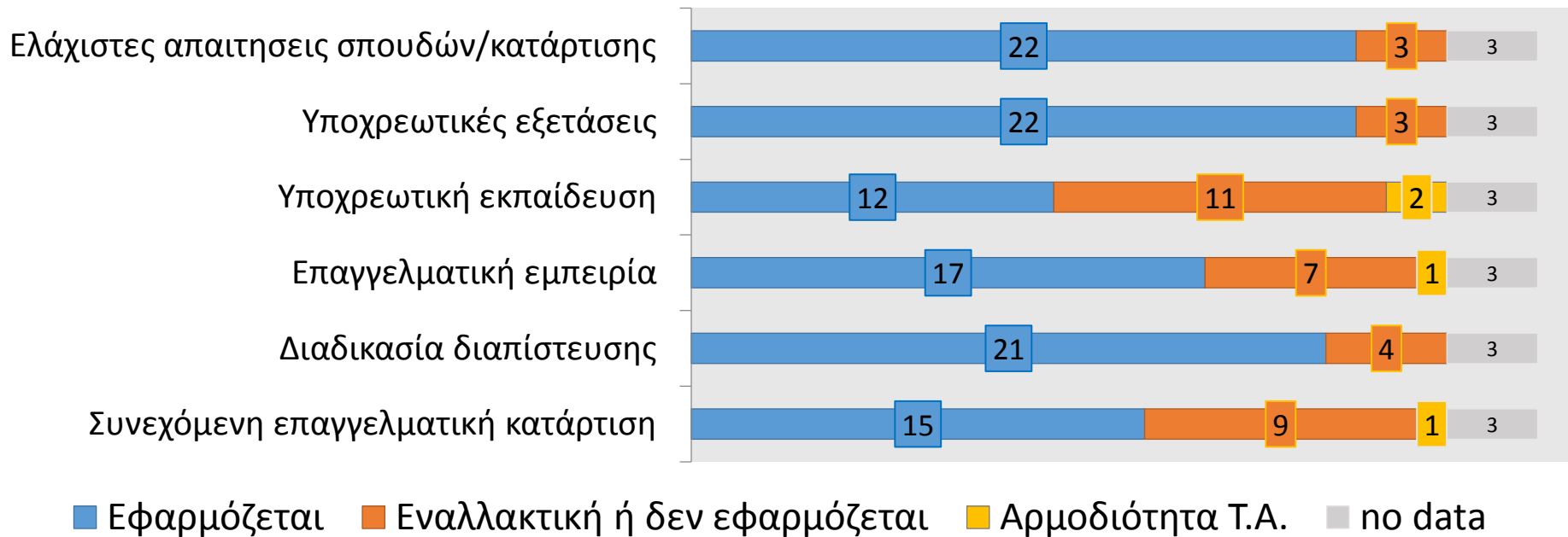
Άρθρο 17 της EPBD (2010/31/EU)

- Τα κράτη μέλη μεριμνούν ώστε η πιστοποίηση της ενεργειακής απόδοσης των κτιρίων [...] να διεξάγεται με **ανεξάρτητο** τρόπο από **ειδικευμένους** ή/και **διαπιστευμένους** εμπειρογνώμονες, είτε αυτοαπασχολούμενους είτε υπαλλήλους δημόσιων φορέων ή ιδιωτικών επιχειρήσεων.
- Στους εμπειρογνώμονες παρέχεται διαπίστευση λαμβανομένων υπόψη των προσόντων τους

Προτεινόμενη διαδικασία διασφάλισης ποιότητας



Επισκόπηση των συστημάτων στην Ευρώπη



Source: BPIE Survey 2014

Note:

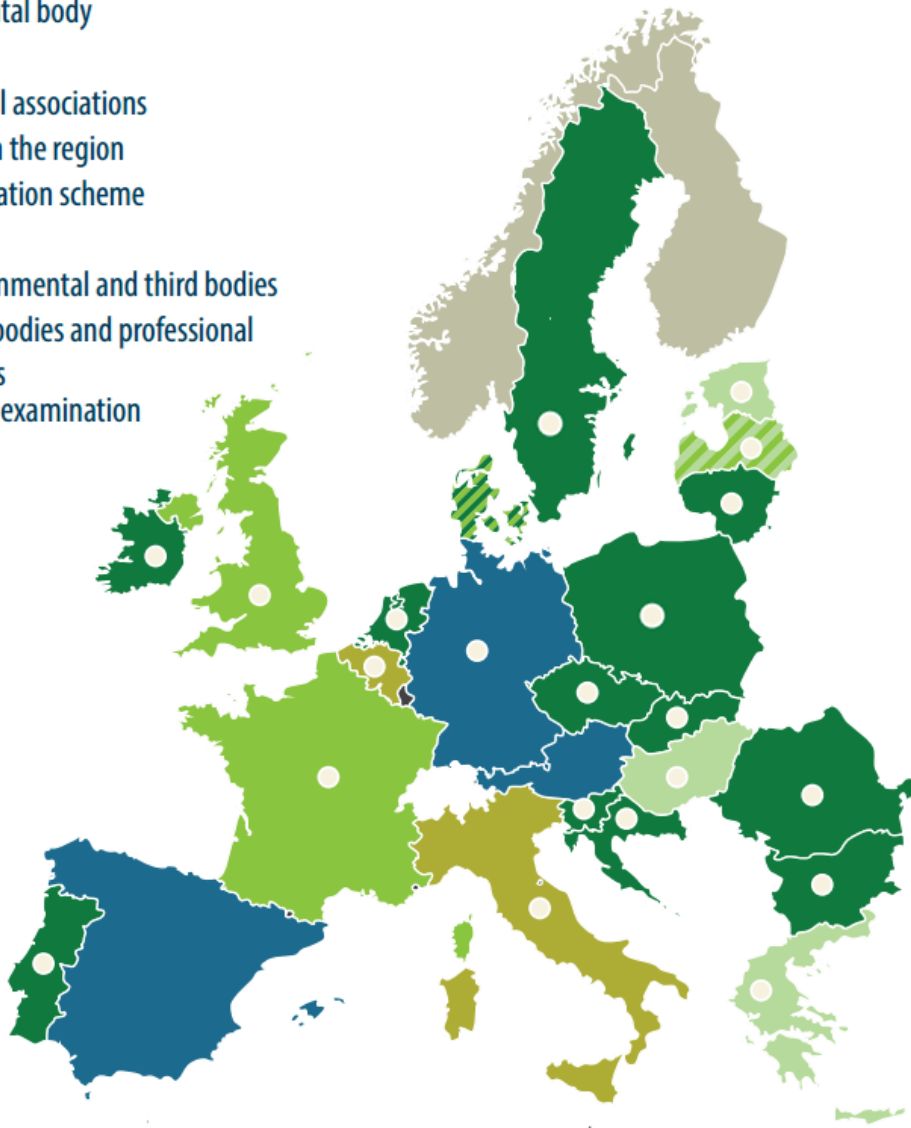
In most Member States, the expert skills are differentiated according to the type of building evaluated; the more complicated the energy audit is (e.g. for non-residential buildings and /or buildings with advanced technical systems), the more expertise is required.

Παραδείγματα

Χώρα	Ελάχιστες Απαιτήσεις σπουδών	Επαγγελματική εμπειρία	Εκπαίδευση: Υποχρεωτική ή Εθελοντική	Επαλήθευση γνώσεων (υποχρεωτικές εξετάσεις)	Διαπίστευση των επιθεωρητών	Συνεχόμενη Επαγγελματική Εξέλιξη (ΣΕΕ) -Ανανέωση άδειας
Ισπανία	Δίπλωμα μηχανικού	Δεν απαιτείται επαγγελματική εμπειρία	Εθελοντική	ΟΧΙ	ΟΧΙ	ΟΧΙ
Γαλλία	2 χρόνια σχετικής ανώτατης εκπαίδευσης	1 έως 3 χρόνια επαγγελματική εμπειρία	Υποχρεωτική	ΝΑΙ	Βάσει των αποτελεσμάτων των εξετάσεων	Ανανέωση της διαπίστευσης κάθε πέντε χρόνια βάσει υποχρεωτικής εκπαίδευσης
Πορτογαλία	Δίπλωμα μηχανικού	5 χρόνια επαγγελματική εμπειρία	Εθελοντική	ΝΑΙ	Βάσει των αποτελεσμάτων των εξετάσεων	ΟΧΙ
Ρουμανία	Δίπλωμα μηχανικού	3-5 χρόνια επαγγελματική εμπειρία	Υποχρεωτική	ΝΑΙ	Βάσει των αποτελεσμάτων των εξετάσεων	Ανανέωση της διαπίστευσης κάθε 5 χρόνια (μαζί με απόδειξη εμπειρίας)
Σκωτία	Χωρίς ελάχιστες απαιτήσεις, αρκεί να υπάρχει διαδικασία διαπίστευσης	Δεν απαιτείται επαγγελματική εμπειρία	Εθελοντική	ΝΑΙ (εκτός των περιπτώσεων διαπίστευσης μέσω APEL)	Βάσει των αποτελεσμάτων των εξετάσεων	Υποχρεωτική περιοδική κατάρτιση και υποστήριξη

Δομές διαπίστευσης επιθεωρητών

- Governmental body
- Third body
- Professional associations
- Depends on the region
- No accreditation scheme
- Unknown
- Both Governmental and third bodies
- Both third bodies and professional associations
- Mandatory examination



- Κρατικοί φορείς
- Τρίτοι φορείς
- Επαγγελματικό επιμελητήριο
- Αρμοδιότητα τοπικής αυτοδιοίκησης
- Απουσία συστήματος διαπίστευσης
- Άγνωστο
- Κρατικοί και τρίτοι φορείς
- Τρίτοι φορείς και το επαγγελματικό επιμελητήριο
- Υποχρεωτική εξέταση

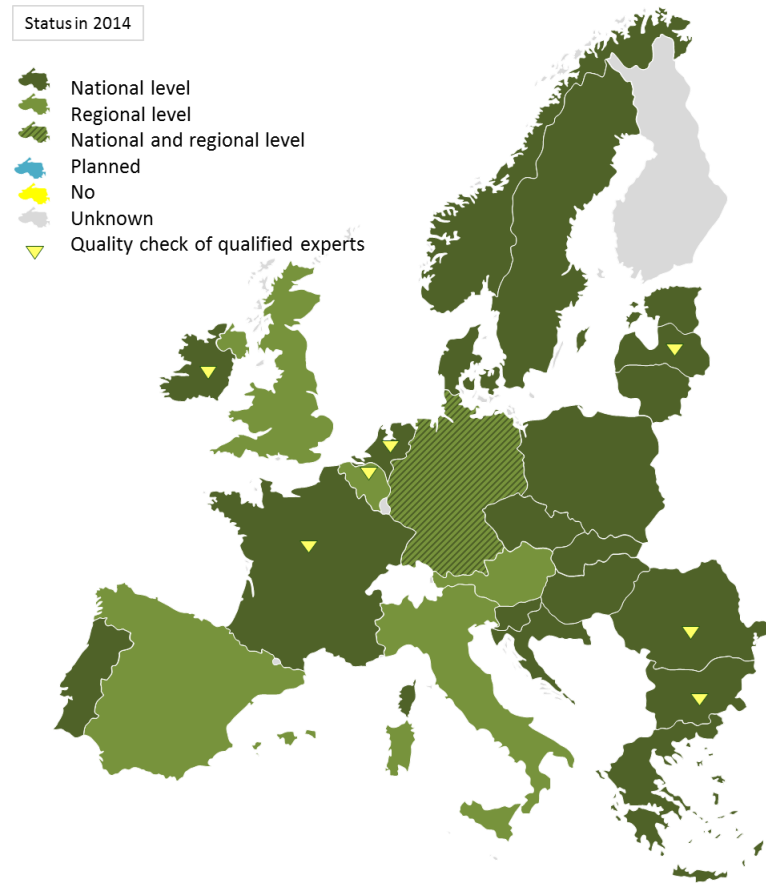
Is the EPC information reliable?

Art 18, EPBD : Member States shall establish an independent control system and verify “a random selection of at least a statistically significant percentage of all the energy performance certificates issued annually.” The rules for verification are specified in Annex II.

Status in 2011 (CA EPBD 2011)



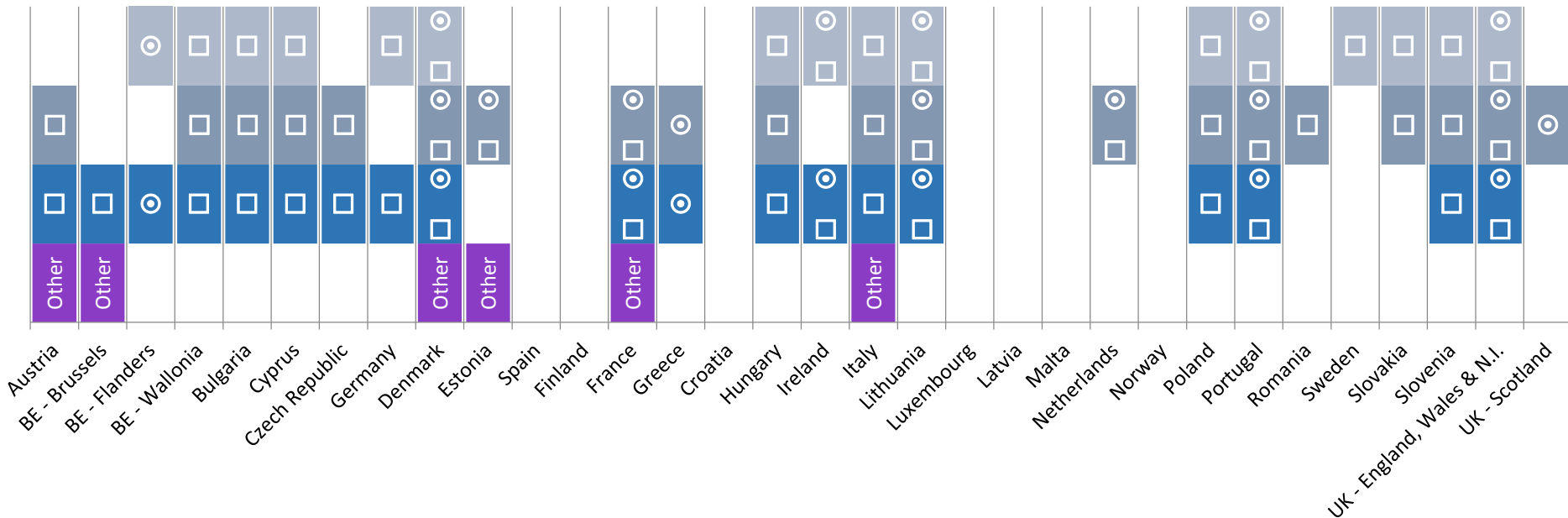
Status in 2014



The deadline for the implementation of independent quality control systems was set in the EPBD directive for 9 January 2013 !!

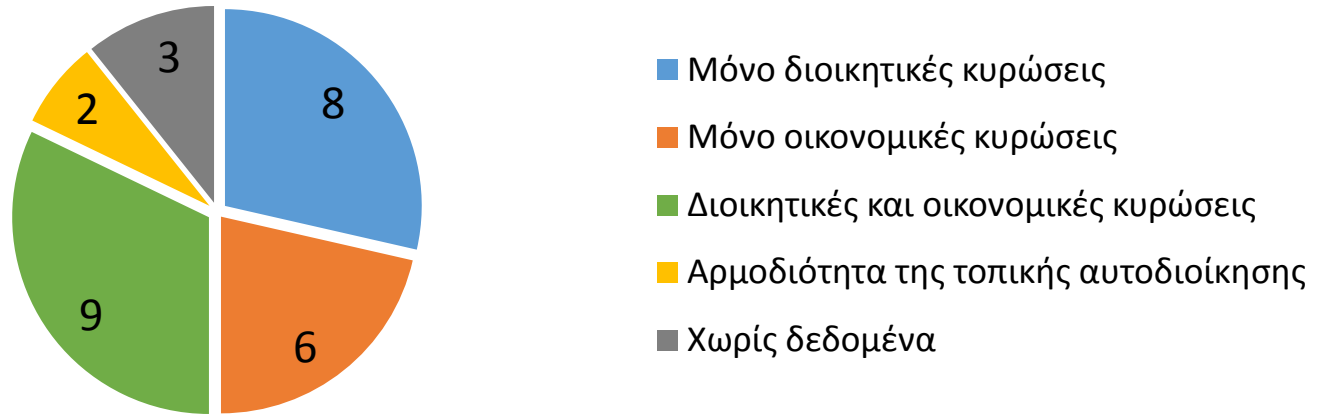
Ανεξάρτητα συστήματα ελέγχου ποιότητας

A	έλεγχος εγκυρότητας των δεδομένων υπολογισμού και των αποτελεσμάτων
B	έλεγχος των δεδομένων και επαλήθευση των αποτελεσμάτων και των συστάσεων
C	πλήρης έλεγχος των δεδομένων, πλήρης επαλήθευση των αποτελεσμάτων και των συστάσεων
	και επιτόπια επιθεώρηση του κτιρίου, αν είναι δυνατόν
□	τυχαία δειγματοληψία, στατιστικά σημαντική
⊙	στοχευμένη δειγματοληψία επιθεωρητών (παράπονα, υψηλή δραστηριότητα, πολλά A,B, κτλ)
Other	ισοδύναμα μέτρα



Κυρώσεις

Κυρώσεις για τους επιθεωρητές στα 28 Κ.Μ.



Άρθρο 27 EPBD

Τα κράτη μέλη καθορίζουν τους κανόνες σχετικά με τις κυρώσεις, [...] που πρέπει να είναι αποτελεσματικές, αναλογικές και αποτρεπτικές

Κυρώσεις

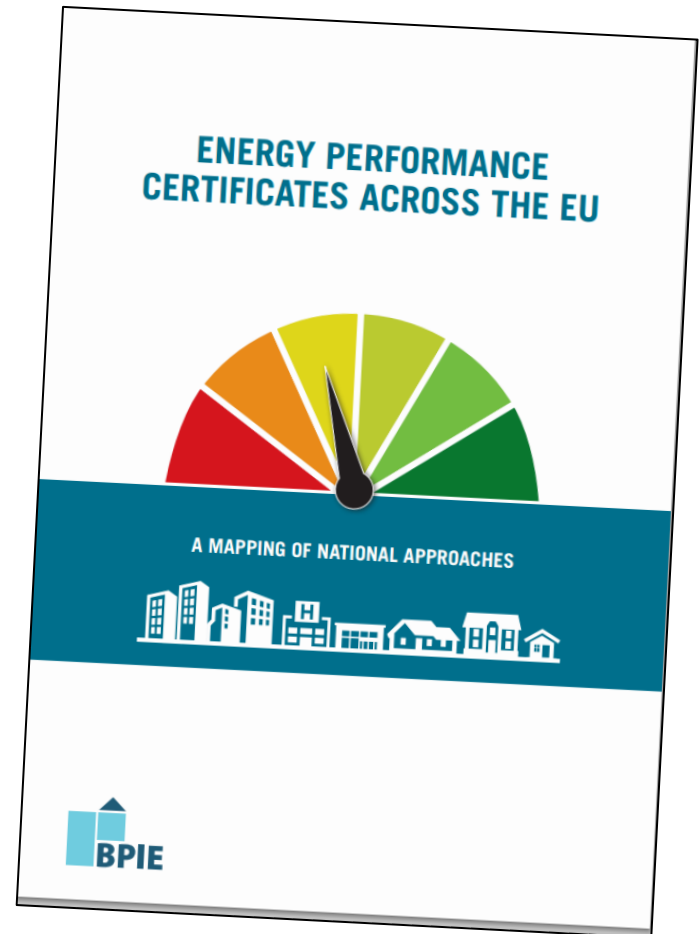
Το σύστημα πόντων ποινής στην Ιρλανδία

10 πόντοι μέσα σε 2 χρόνια: 3μηνη ανάκληση της άδειας επιθεωρητή

- 1 πόντος για παράπτωμα που δε θήγει την **αξιοπιστία του συστήματος**
- 2 πόντοι για σοβαρό παράπτωμα που δεν κλωνίζει την αξιοπιστία
- 3 πόντοι για σοβαρό παράπτωμα που κλωνίζει την αξιοπιστία του συστήματος

Recommendations

- Need to consistently improve enforcement of the EPC schemes in Member States
- Need to strengthen the role of EPCs in the context of national legislation, especially for renovation policies
- Need for an independent evaluation of the effectiveness of the EPC
- Further requirements and guidelines regarding quality assurance
- EPCs databases and digitalisation of the EPC process.
- Promotion and effective use of the EPC data





Clean energy for all



Νέα EPBD και άλλες νομοθετικές προτάσεις

Τι έγινε τη περασμένη εβδομάδα (30/11) ?



Proposals on clean energy for all Europeans

Proposal for a revised **electricity regulation**

Proposal for a revised **electricity Directive**

Proposal for a revised **regulation on ACER**

Proposal for a new regulation on **risk preparedness in the electricity sector**

Proposal for a revised **energy efficiency Directive**

Evaluation of the EU Framework for **Metering and Billing of Energy Consumption**

Proposal for a revised **energy performance of buildings Directive**

Communication on an **eco-design** working plan 2016-2019

Regulation on eco-design requirements for **air heating and cooling products** and chillers

Proposal for a revised **renewable energy Directive**

Proposal for a regulation on the **Governance** of the Energy Union

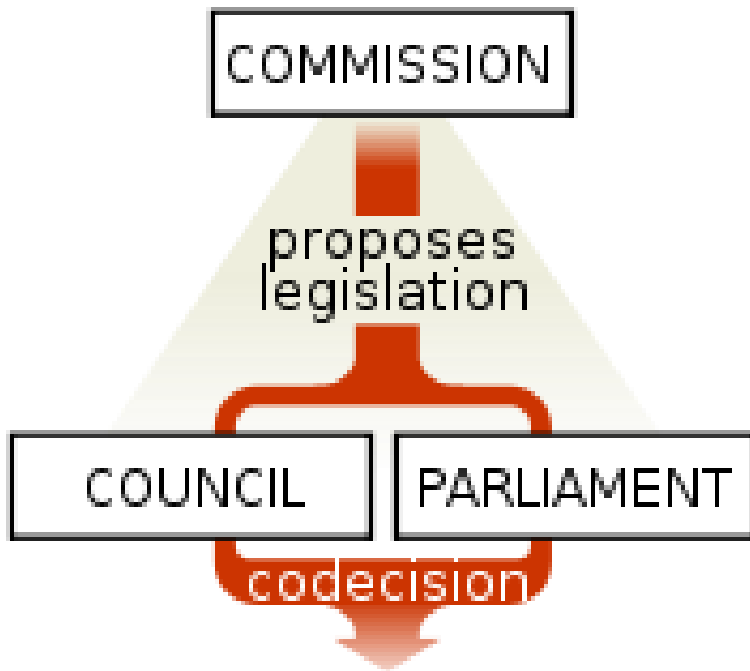
Report on the implementation of the **European Energy Programme for Recovery** and the **EE Fund**

Communication on accelerating **clean energy innovation**

Communication on a European strategy on cooperative, intelligent **transport** systems

Τι έγινε τη περασμένη εβδομάδα (30/11) ?

Συνήθης νομοθετική διαδικασία



Clean energy for all Europeans



Τι συμβαίνει με EED, EPBD, RED κτλ



	Νομοθετική πρόταση
Μακροχρόνιος σχεδιασμός	Continuation of national renovation strategies to deliver long term 2050 goal
	National renovation strategies now in EPBD (<i>ήταν στην EED</i>)
Προτροπή βιομηχανικής ανακαίνησης	Continuation of national renovation strategies beyond 2020 (<i>EPBD</i>)
	Continuation of requirement to renovate 3% of central government buildings every year (<i>EED</i>)
	No change to Energy Performance Certificates to stimulate renovation (<i>EPBD</i>)
Π.Ε.Α.	Υπολογισμός Π.Ε.Α. μετά απο εγκατάσταση τεχνικών συστημάτων Υπολογισμός Π.Ε.Α. πριν και μετά από ανακαινήσεις

Τι συμβαίνει με EED, EPBD, RED κτλ



	Νομοθετική πρόταση
Προετοιμασία για τα κτήρια του μέλλοντος	Smartness indicator (<i>EPBD</i>)
	Electromobility infrastructure requirements (<i>EPBD</i>)
	Building automation and energy monitoring system requirements as an alternative to inspections (<i>EPBD</i>)
	Definition of Demand Response (<i>Internal Market in Electricity Directive</i>)
	Rights for prosumers and communities to supply and use their own electricity (<i>RED</i>)

Τι συμβαίνει με EED, EPBD, RED κτλ



	Νομοθετική πρόταση
Ευάλωτοι καταναλωτές	Energy poverty measures to be included in national renovation strategies (<i>EPBD</i>)
	Provisions for the protection of vulnerable customers from price increase (<i>Internal Market in Electricity Directive</i>)
Χρηματοδότηση ενεργειακών αναβαθμίσεων	National mechanisms (project aggregation, de-risking, leveraging private investment, and addressing market barriers) for to support investment to be included in national renovation strategies (<i>EPBD</i>)
	Linking financial incentives to EPCs performance (<i>EPBD</i>)
	Increased assistance for project development and aggregation (<i>Accelerating clean energy in buildings Communication</i>)
	Support to improve the understanding of the risks and benefits of energy efficiency investments, through launching the De-risking Energy Efficiency Platform (<i>Accelerating clean energy in buildings Communication</i>)

Τι συμβαίνει με EED, EPBD, RED κτλ



	Νομοθετική πρόταση
Συλλογή δεδομένων	Aggregated anonymised data to be made available on request (<i>EPBD</i>)
	Requirements to collect energy consumption data for public buildings (<i>EPBD</i>)
Διασφάλιση ποιότητας	“Blueprint for Sectoral Cooperation on Skills” in the construction sector (<i>Accelerating clean energy in buildings Communication</i>)
Ευθυγράμμιση των στόχων ενεργειακής αποδοτικότητας και ανανεώσιμων πηγών ενέργειας	Requirements to assess national potentials of renewable energy sources and the use of waste heat and cold for heating and cooling (<i>RED</i>)
	Allowing installations of renewable energy in buildings to count towards up to 25% of final energy savings targets (<i>EED</i>)
	Allowing savings from renovation of existing buildings due to EU standards can count towards energy savings targets (<i>EED</i>)
Ολοκληρωμένος σχεδιασμός και αναφορές	National renovation strategies to be submitted as part of Integrated National Energy and Climate Plans (<i>Governance</i>)

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