



# **Energy Efficiency in Buildings**

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## **Legislation & Implementation**

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# Energy Efficiency in Buildings

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## Present Legislation

**EU** - Directive 2002/91/EC

Energy Performance of Buildings Directive

Adopted 16<sup>th</sup> December 2002

**Malta** - LN 238 of 2006 (MRA Act CAP 423)

Minimum Requirements on the Energy

Performance of Buildings Regulations, 2006

(entered into force thro LN 269 of 2006- 7/11/06)

And Document F as per Gov.Gaz. 1002/2006



# New Legislation

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## Proposed Legislation

### *EU – Presently Reviewing Directive*

- more clear definitions
- removing or lowering the 1000m<sup>2</sup> limit threshold
- Strengthening the energy performance certificates
- Strengthening the inspection of boilers & ACs
- Establishing cost-effective energy performance requirements



# New Legislation

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Proposed legislation

***Malta*** – ***To fully transpose the Directive & set up the administrative measures to implement and enforce the regulations***

- Introduction of requirement for a technical, environmental and economic feasibility study for new buildings over 1000m<sup>2</sup>
- Introduction of energy performance certificates and display in Public Buildings
- Introduction of requirement for regular inspection and energy performance certification of boiler and AC installations



# New Legislation

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New legislation (still in draft form) will;

- Repeal LN 238 of 2006, but not the validity of Document F
- Transpose fully Directive 2002/91/EC
- Set enforcement and administrative procedures
- Indicate offenses
- Set penalties and fines



# The New Requirements

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## Overview of the Proposed Legislation

### Important definitions

- “accredited EPC training provider”
  - (a) The Malta Resources Authority; or
  - (b) A training provider, providing an EPC training course validated by and registered with the Malta Resources Authority;



# Important definitions

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- *"Independent EPC assessor"*  
a *Perit* (warranted Architect and Civil Engineer) or a warranted Engineer who is not the owner or tenant of the building being assessed or an employee of the owner or the contractor/s responsible for the construction, finishing and/or installation of mechanical or electrical services of a building for which an EPC is being requested or inspection of boilers, lighting, space heating or space cooling systems is made;



# Important definitions

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- "*EPC*" or "*building energy rating*" or "*system energy rating*" means a building's or a mechanical or electrical system's energy rating recorded on the EPC register on the basis of an EPC assessment, as the case may be.
- "*EPC assessment*" means an assessment of the energy performance of a building or a mechanical or electrical system carried out by an EPC assessor for the purpose of assigning an EPC.



# Important definitions

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- ***"EPC assessor"*** – In the case of the Energy Performance Certificate of Buildings, an EPC assessor shall mean a *Perit* (warranted Architect and Civil Engineer) or a warranted Engineer who has undergone a period of approved training on the assessment of the energy performance of buildings and is duly registered with the Malta Resources Authority (MRA),



# Important definitions

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- **in the case of certificates in connection with the inspection of boilers, lighting, space heating or space cooling systems**  
a warranted Engineer who has undergone a period of approved training on the assessment of the efficiency of boilers, lighting, space heating or space cooling systems and is duly registered with the Malta Resources Authority (MRA);



# Important definitions

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- ***"New Building/s"***

any building/s for which a planning permit application is submitted to the Malta Environment and Planning Authority on or after the 2nd January 2009;



# Important definitions

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■ ***"major renovation or alteration"*** means a renovation or alteration:

**which effects the building by 25% or more of its volume before such an intervention or**

**where renovation of 25% or more of windows, roofs or external walls is made, in which case compliance to these regulations is to be limited solely to the elements that are being renovated, or**

**where renovation of 25% or more of any energy consuming installations for artificial lighting, or heating and cooling of air or water is made, in which case compliance to these regulations is to be limited solely to any such installation that is being renovated or altered;**

**where a change-of-use planning application concerning a dwelling or residential building, is being submitted to the Malta Environment and Planning Authority (MEPA);**



# Important definitions

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- “*public buildings*” means

a building or part of a building that is owned or used by a government department or entity or local authority and provides a service to the public.



# Important definitions

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- ***"useful floor area"*** means

the area that is needed to carry out the activities of the building in question including waiting and circulation spaces and excluding garages, storage spaces and plant rooms;



# Important definitions

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- ***"owner"***

- (a) a person who in his own right or as an agent for another is entitled to receive the rent of the building or, where the building is not let, would be so entitled if it were let;
- (b) where the building is subject to usufruct, bare owner or usufructuary;
- (c) an emphyteuta;
- (d) any one of the spouses, where the building to which the EPC relates forms part of the community of acquests



# Important definitions

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- ***“prospective buyer or tenant”*** – a person becomes a prospective buyer or tenant in relation to a building when he:
  - (a) enters into a promise of sale agreement (“konvenju”) with another person or his agent for the purpose of deciding whether to buy a building
  - (b) enters into an agreement of rent, whether oral or written, to rent a building;



# The New Requirements

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## **Part 1** Minimum Requirements on the Energy Performance of Buildings

The Minimum Requirements issued in ***Document F***, shall apply to new buildings and existing buildings that undergo major renovation or alteration, whose building permit applications was received by the Malta Environment and Planning Authority on or after the **2nd January, 2007**.



# The New Requirements

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- **new buildings that are being designed** and that have a total useful floor area over 1000m<sup>2</sup>, a study that takes into consideration the technical, environmental and economic feasibility of alternative energy systems such as:
    - Decentralised energy supply systems based on renewable energy;
    - Combined heat and power;
    - District or block heating or cooling (if available);
    - Heat pumps under certain conditions;
- has to be carried out and presented with the building permit application.**



# The New Requirements

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## ■ **Exclusions**

- a building classified as scheduled property (Grade One) by the Malta Environment and Planning Authority
- a building the construction of which is subject to the Control of Fireworks and other Explosives Regulations, 1998;
- a building constructed for the Enemalta Corporation, the Water Services Corporation or any other similar entity, and used as a generation, transmission or distribution station;
- a building, or parts of a building, housing solely industrial processes which require adherence to specific sectoral regulations;



# The New Requirements

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- **Exclusions (cont.)**
- temporary buildings with a planned time of use of two years or less;
- glasshouses used solely for agricultural purposes;
- stand-alone buildings with a total useful floor area of less than 40 square metres;
- a building constructed for use by the Armed Forces of Malta in connection with their military requirements, and
- any existing building with a total useful floor area of less than 1000m<sup>2</sup> and which is to undergo major renovation or alteration.



# The New Requirements

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- **Part 2 - Energy Performance Certificate**

(1) An Owner or his agent has to obtain an Energy Performance Certificate (EPC) in the form prescribed by the First Schedule of these Regulations when a building is constructed, sold or rented out.



# The New Requirements

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- **Validity of EPC**
- To be valid, the EPC has to be obtained from an assessor and registered with the Authority before being issued to the person who commissions it.



# Newly Designed Buildings

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- (3) A person or agent acting on behalf of such person who **commissions the design of a new building or building with a useful floor area over 1000m<sup>2</sup> that is to undergo major renovation or alteration** has to obtain an EPC based on the design rating of the building and in the Form prescribed in the Regulations when applying for a building permit on or after the date indicated hereunder;
  - (a) Dwellings – 2nd January 2009
  - (b) All other buildings – 1st June 2009



# Sale or Rent of buildings

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- (4) On or after the date indicated hereunder, a person or agent acting on behalf of such person who offers for sale or letting a building, shall provide to the prospective buyer or tenant within the period of the promise of sale or at the time of signing of the rent agreement an EPC. This shall be in the Form prescribed in the First Schedule to these Regulations and shall be based on the design rating of the building if the building is not yet constructed and finished or the asset rating, if the building is already constructed and finished;
- (a) Dwellings – 2nd January 2009
- (b) All other buildings – 1st June 2009



# Non Provision of EPC

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- (5) In the event that the person or agent does not provide the prospective buyer or the tenant with an EPC within the period of the promise of sale agreement or 30 days from the signing of the rent agreement, the buyer or the tenant will have the right to engage an assessor to issue the necessary certificate.
- In the case of a promise of sale agreement the buyer shall have the right to increase the binding period of the promise of sale by the time required to have the certificate issued, and in both cases the prospective buyer or tenant shall have the right to deduct the expenses incurred for the issue of the EPC from the amount of the sum agreed for sale or rent.



# Validity Period of EPC

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- (1) An EPC is considered to be valid for a period not exceeding 10 years from the date of its first issue, provided that no major renovation or alteration occur in the building.



# Contents of EPC

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- The EPC shall include a figurative scale indicating the energy performance, reference values and shall be accompanied by a recommendation report
- The recommendation report shall indicate cost-effective measures for improving the energy performance of the building



# Loss of Validity of EPC

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- If after the construction of the building and/or the installation of mechanical and electrical services in new buildings or existing buildings that undergo major renovation or alteration, it results that such construction and/or installation of services is different from the design on which a design rating EPC has been obtained, a new EPC based on the asset rating of the building shall have to be secured by the owner **before the date that the building is occupied, sold or rented out**



# Display of EPC

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- **Public Buildings**

As from the 2nd January 2009, all public entities that are occupying a building with a total useful floor area over 1,000m<sup>2</sup> **and are providing public services to a large number of persons** are to ensure that an EPC based on the asset rating of the building is commissioned and displayed at all times in a prominent place clearly visible to the public. **The EPC has to be on display not later than the 1st June 2009.**



# Display of EPC

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- Every three years from the date of display of the first EPC an EPC based on the operational rating of the building is to be commissioned and displayed alongside the original EPC to enable users and visitors of that building to make a comparison on how the building is performing.



## Part 3 - Inspection and EPC of lighting, water heating, space heating and space cooling installations in Buildings

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- **Inspection of boilers**
- As from the **2nd January 2009**, owners of installations in buildings having boilers fired by non-renewable liquid or solid fuel of an effective rated output of **20kW to 100kW** shall ensure that such boilers are inspected and a certificate on their energy performance is issued by an assessor.
- In the case of **existing boiler installations**, the certificate should be in the owner's possession **not later than 12 months from the date indicated above**



# Inspection of boilers older than 15 years

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- In the case of installations with an effective rated output of **more than 20 kW** having a boiler or boilers **that are older than 15 years** from the date of coming into force of these regulations, a **one-off inspection and certification** of the whole heating installation has to be made **within 12 months of the date indicated previously**



# New Installations 20kW-100kW

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- In the case of new heating installations having boilers fired by non-renewable liquid or solid fuel of an **effective rated output of 20kW to 100kW and gas fired boilers**, inspections, certifications and reports on their energy performance **shall be in the possession of the owner within 28 days from the date of commissioning** and such inspection and certification is **to be repeated every four years thereafter.**



# Installations over 100kW

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- Certifications and reports on the energy performance of installations with boilers of an effective rated output **of more than 100kW** shall be in the possession of the owner **within 28 days from the date of commissioning** and such inspection and report shall be **repeated at least every two years thereafter**



# Content of EPC

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- Inspections and certifications shall include an assessment of the boiler efficiency and sizing in the context of the heating requirements of the building  
and  
shall contain appropriate advice on possible improvements or modifications to the system, replacement of the system and alternative solutions

# Inspection and Energy Performance Certification of space cooling systems



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- As from the **2nd January 2009**, owners of air-conditioning units, or a number of split air-conditioning units installed in any one property or building, or centralised system, as the case may be, with an effective rated output of **more than 12kW** whether in dwellings, residential buildings, or other non residential buildings are to ensure that such units or systems are inspected by an assessor at regular intervals



# Existing buildings with large existing installations

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- In the case of **existing buildings having existing installations with an effective rated output of 250kW or more** a one-off inspection and certification of the whole system is to be made and a certificate is to be in the possession of the owner or tenant of the building, as the case may be, **within 12 months** from the date indicated before
- Such certification is to be followed at regular intervals **not exceeding five years**



# Existing buildings with small existing installations

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- In the case of existing buildings having existing installations with an **effective rated output of 12kW** an inspection and certification have to be made and a certificate is to be in the possession of the owner or tenant of the building, as the case may be, within **24 months** from the date indicated previously and
- have to be followed by an inspection and certification at regular intervals **not exceeding five years.**



# All New Buildings or New Installations

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- In the case of **all new or existing buildings** having **new installations** with an effective rated output of **more than 12kW** the inspection, certification and an advisory report is to be in the owner's possession **within 28 days from the date of commissioning** and has to be followed by an inspection and certification at **regular intervals not exceeding five years**



# Content of Report

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- The advisory report must include an assessment of the air-conditioning units' or system's efficiency and the sizing of the unit/s or system compared to the cooling requirements of the building, and contain appropriate advice on possible improvements to the unit/s or system, replacement of the system and alternative solutions



# Implementation & Control

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- The Authority may demand **at any time**, from the owner of a building the production of an EPC in respect of the building  
and  
if the building owner **refuses or fails to produce without reasonable excuse** the EPC **then and there**, he or she **will be committing an offence, unless within 28 days** after the day on which production was demanded the requested EPC is not provided to the authority



# Obstructions to authorised officers

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- Where a person produces an EPC to an authorised officer **but refuses or fails to permit** the said officer to read and examine the EPC or the associated report, that person or other persons involved in such a case, will be committing an offence, and the authorised officer may demand of the person or persons their name and identification card number and official address



## Part 4 -Administration of the EPC System

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- **The EPC shall be carried out using procedures, including calculation methods and software, approved by the Authority.**
- **In carrying out the EPC assessment of a building or installation an assessor shall comply with any direction given by the Authority in relation to the manner in which the assessment is to be carried out.**
- **An assessor may refuse to carry an EPC assessment of a building or installation if in his or her opinion any part of the building or installation is in such a condition that it would not be safe or practicable to carry out that assessment.**
- **An EPC and related report/s shall not be issued by the assessor to the building owner or his agent, as the case may be, unless and until it is accepted in the register maintained by the Authority.**



# Cancellation of an EPC

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- The Authority may revoke an EPC and EPC data file or report where it has **reasonable grounds** for believing that the EPC or data file or report was not completed or issued in accordance with the Regulations, and shall enter such revocation in the EPC record of that building and the Authority's records
- Where an EPC or EPC data file or report is revoked, the Authority is to inform the assessor, **giving him or her the reason for the revocation**, and shall also inform the person who commissioned the EPC
- The Authority may demand in writing, the giving up of an EPC that is revoked, to the Authority **within 14 days of the making of such demand**



# Right of Owners for Compensation of Cost of EPC

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- **Where an EPC or data file, or report is revoked**
  - (a) an application for the reimbursement of the fee or part of the fee may be made by the person who paid a fee or contributed in the fee for the relevant EPC assessment to the assessor who carried out the assessment, and
  - (b) the assessor **shall be obliged** to make the reimbursement in whole or in part, as the case may be, **within 28 days** of the receipt of the application, if he or she is satisfied that the fee or a contribution to the fee was paid by the person making the application



## **Alteration, defacement etc of an EPC and related report**

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- After an EPC has been registered with the Authority, no person other than the Authority shall, either by writing, drawing or in any other manner alter, deface, mutilate or add anything to the EPC or related report/s or a printed copy of an EPC or the related report/s or entry made therein



## Limitations on production of EPCs

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- **No person shall produce:**

- (a) a printed copy of any EPC or report for any building which copy has been altered, defaced, mutilated or added, or upon which the figures have become illegible or the colour has become altered by fading or otherwise; or
- (b) an EPC or report save in relation to the particular building for which it was issued; or
- (c) an EPC or report which has become void or the validity of which has expired; or
- (d) any colourable or other imitation of an EPC or report



# Retrieval of EPC

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- The Authority **may require** the owner of a building to surrender to it for correction an EPC or report where the Authority has reason to believe that the **EPC or report contains particulars which are not correct** and, upon being so required, the owner of the building **shall surrender** the relevant documents to the Authority **forthwith**



# Records, data and documentation

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- All data, documentation and records issued by an assessor and deposited with the Authority in connection with the carrying out of an EPC **shall become the property of the Authority** which has the power to demand from the assessor any such data, documentation or records as it considers appropriate.
- The lawful EPC record in relation to a building **shall be that maintained on the EPC register kept by the Authority.**
- **The most recent** EPC record entered in relation to a building on the EPC register by the Authority **shall be deemed to supersede** any previous EPC record for that building



## Registration of assessors

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- In registering an assessor, the Authority shall designate the type of EPC certification and also the category of buildings in respect of which the assessor is authorised to carry out EPC assessments and certifications



# Registration Requirements

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- The Authority shall not consider a person for registration as an assessor unless:
  - (a) the person makes an application for registration to the Authority in the form specified by the Authority for such purpose;
  - (b) the application for registration is accompanied by any fee specified by the Authority; and
  - (c) the person meets any other requirements specified by the Authority



# Registration Requirements

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- In considering an application for registration as an assessor, the Authority must:  
be satisfied that the applicant **has a valid warrant to practice as a Perit or an Engineer, as the case may be, and has successfully completed a validated training course** provided by the Authority or an accredited EPC training provider for buildings constructed in Malta and in the relevant designated type of certification and category of buildings which he applies for



# Suspension or Termination of Registration

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- (a) failure by the assessor to attend a course of periodic training if required by the Authority or to satisfactorily complete such a training course, or
- (b) failure by an assessor to comply with a direction under the regulations, or
- (c) failure by an assessor to carry out a building energy performance assessment for EPC purposes in a fit and proper manner, or failure to maintain or provide satisfactory data, documentation or records of any such assessment, or



## Suspension or Termination of Registration

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- (d) the committing, or aiding or abetting the committing, by the assessor, of an offence under the Regulations, or
- (e) the forming of an opinion by the Authority that the assessor has ceased to be capable of performing his or her functions under the Regulations properly and efficiently



## Notification & Appeal

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- A suspension or termination of registration shall be notified to the person concerned in writing and shall state the reasons for the suspension or termination and inform the person of the appeal procedure
- A person whose registration has been suspended or terminated under may, **within 14 days** of the said suspension or termination, appeal against the suspension or termination to the Court of appeal



## **Order to Return or Destroy EPCs & Information**

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- A person whose registration as an assessor has lapsed or been suspended or terminated may be directed by the Authority to return back to the Authority or to destroy any data or documentation provided by building owners or their agents, and any copies thereof, in relation to EPC assessments carried out by him or her in his or her capacity as an assessor



# Offenses

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- A person who, not being such, purports to be an EPC assessor for a designated category of buildings, or EPC inspections of installations, or an authorised officer will be committing an offence
- A person who purporting to give information to an EPC assessor, an Authority or an authorised officer for the performance of his or her functions under the Regulations:
  - (a) makes a statement that he or she knows to be false or misleading in a material particular or fails to disclose a material particular will be committing an offence
  - (b) An assessor who issues an EPC or makes a statement or report that he or she knows to be false or misleading in a material particular will be committing an offence



# Directions by the Authority

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- The Authority may from time to time issue directions to assessors in relation to;
  - (a) the manner in which the EPC assessments are to be carried out;
  - (b) the manner in which an EPC, and accompanying advisory reports are to be issued;
  - (c) the qualifications and training requirements for EPC assessors;
  - (d) the records, data bases and documentation to be maintained by assessors;
  - (e) codes of practice to be respected by assessors, and
  - (f) such other matters as are reasonably necessary for the proper administration of the EPC system



## EPC Registration Fee

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- The registered assessor shall pay to the Authority a fee determined by the Authority in respect of each EPC assessment carried out on a building and submitted as an EPC data file by the said assessor to the Authority for the purpose of registering and issuing an EPC and related advisory report
- The revenue from such fees shall be solely used, by the Authority, to defray costs incurred by the Authority in establishing, operating, and maintaining the EPC system including publicizing the said system



## Registers held by the Authority

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- The Authority shall establish, operate and maintain
- a register of assessors,
- an EPC register comprising Energy Performance Certificates, advisory reports, EPC data files and related data or documents and
- any other register that the Authority considers necessary for the proper administration of the EPC system



## Form of Registers

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- Any register established under these regulations may be held in non legible form provided it is capable of being reproduced in legible form
- Each register shall be a public record, and shall be kept under the management of the Authority



# Access Rights to Registers

## **The following access rights shall apply;**

- (a) Extracts from the register of the EPC assessors, comprising the name, his or her employer (if any) and place of business, contact details, and the designated type (buildings or installations) of energy assessment certification system to which his or her EPC registration applies, shall be open to public inspection on the internet or, during office hours, at the offices of the Authority
  
- (b) Subject to compliance with the provisions of the Data Protection Act, the Authority may allow publication or access, on a restricted or an open basis, to any extract from any register maintained by the Authority under these Regulations where the Authority is satisfied that such publication or access is in the public interest



## Access Rights to Registers

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- (c) Other than provided for in (a) and (b), a data file or other extract from a register relating to an EPC for a particular building shall normally only be made available to;**
- (i) the EPC assessor that carried out the relevant EPC assessment, or his or her then employer; or
  - (ii) an EPC assessor undertaking any subsequent EPC assessment of the relevant building, or his or her employer; or
  - (iii) the relevant building owner, or the agent of that building owner, via an EPC assessor



## Evidential Value

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- In any proceedings a certificate signed by an authorised officer of the Authority containing only information stated in that certificate to be taken from a register maintained by the Authority shall be sufficient evidence of the facts stated therein until the contrary is shown
- In any proceedings a document purporting to be a certificate under the paragraph above, shall be deemed to be such a certificate and to have been signed by an authorised officer of the Authority, until the contrary is shown
- A certificate that purports to bear a facsimile signature of the authorised officer of the Authority concerned or a copy of such signature applied by means of a stamp or produced by a computer shall be deemed (for the purpose of this article) to have been signed by an authorised officer, until the contrary is shown.



# Appointment and powers of authorised officers

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- The Authority may appoint persons to be authorised officers for the purposes of enforcing these Regulations.
- An authorised officer shall be furnished with a warrant of his or her appointment, and when exercising a power conferred on him or her under this Regulation shall, if requested by any person affected, produce the warrant of his or her appointment.



# Power of authorised officers to enter & inspect buildings

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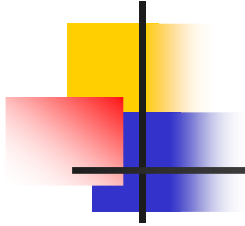
- An authorised officer may enter, inspect and examine a building or any part of a building or installation for the purpose of forming an opinion as to whether or not an EPC data file or certificate issued for the building, or part of the building, or installation is warranted
- An authorised officer may do all such things and make all such requirements in relation to the building and installations, as are reasonably necessary for the purpose of carrying out an inspection



# Prosecution

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- Proceedings for an offence under these Regulations may be brought and prosecuted by the Authority or the building authority as appropriate before the Courts of Law
- Where an offence under these Regulations is committed by a body corporate, or by an unincorporated body of persons, or by a person purporting to act on behalf of a body corporate or on behalf of an unincorporated body of persons, and it is proved to have been committed with the consent or connivance of or to be attributable to any neglect on the part of any person who when the offence was committed, was, or purported to act as, a director, manager, secretary or other officer or member of such body, such other person as well as the body, or the person purporting to act on behalf of the body, commits an offence and is liable to be proceeded against and punished if found guilty

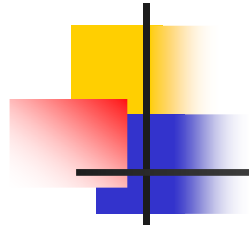


# Penalties

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500 – 5000 Euros



# Energy Efficiency in Buildings

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*Thank You*

*Carm Mifsud Borg*