Subsidiary Legislation made under s.18(c).

Environment (Energy Performance of Buildings) Regulations 2012

LN.2012/131

Commencement (rr.1-3, 11, 19, 21-22, 24-27)	**4.10.2012**
(rr. 4, 10, 12-14[1], 18, 20, 23)	**9.1.2013**
(rr. 5-9, 15-17)	**9.1.2013[2]**

Amending enactments	Relevant current provisions	Commencement date
LN. 2016/100	rr. 2(1), 4-5, 8-10, 14-18, 20, 23	27.4.2016
Act. 2018-19	r. 2	26.9.2019
LN. 2020/099	rr. 2(1), 8(5), 9(7)-(16), 11(3), (3A)-(3B), 15-16, 21(2), (2A), Sch. 1, 2	10.3.2020
2021/424	rr. 2(1), 3(4), 6(2)-(5), 9(12)(c), 10(3), (4)(c), (6), 11(2)(b)-(c), Sch. 1	1.1.2021
2025/251	r. 4(1)-(2)	16.10.2025
2026/048	rr. 2(1), 3(2)(f)-(p), 3A, 4(3)-(5), 5(1), (3)-(4), (6)(a)-(b), 6(1)-(2), (5), 7, 8(5)(b)-(e), 8A-8C, 9(1A)-(1D), (7), (9), (9A)-(9B), (10)-(11), (11A), (12)(d), (12A)-(12B), 10A, 11(1), (3), (3A), (3C)-(3F), 11A, 12(2)-(4), (5), (b)-(e), (10A)-(10B), 13(1), (a), (4)-(5), (8A)-(8B), 13A, 15(1A)-(1B), (2)(a)-(d), 16(1A)-(1B), (2)(a)-(d), 17(1)-(2), (2A)-(2B), 18(1)-(2), 20(1)-(3), 21(1A), (2A), (3)(b), Schs. 1-6	19.3.2026

Transposing:
Directive 2010/31/EU
Directive (EU) 2018/844

Implementing:
Directive (EU) 2024/1275

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[1] *13(1) to (4) shall not apply to single buildings which are rented out until 31 December 2015.*
[2] *See r.1(4)(a) & (b)*

ARRANGEMENT OF REGULATIONS

Regulation

SCHEDULE 2
Independent control systems for energy performance certificates and inspection reports

SCHEDULE 3
Template for the Gibraltar building renovation plans

SCHEDULE 4
Calculation of life-cycle GWP of new buildings

SCHEDULE 5
Requirements for renovation passports

SCHEDULE 6
Template for energy performance certificates

In exercise of the powers conferred on it by section 18(c) of the Environment Act 2005 and in order to transpose into the law of Gibraltar Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, the Government has made the following Regulations–

Title and commencement.

1.(1) These Regulations may be cited as the Environment (Energy Performance of Buildings) Regulations 2012.

(2) These Regulations, subject to subregulations (3), (4) and (5), shall come into operation on the day of publication.

(3) Regulations 4, 10, 12, 13, 14, 18, 20 and 23 shall come into operation on 9 January 2013.

(4) Regulations 5, 6, 7, 8, 9, 15, 16 and 17 shall come into operation−

(a) in respect of buildings occupied by public authorities, on 9 January 2013; and

(b) in respect of other buildings, on 9 July 2013.

(5) Regulation 13(1) to (4) shall not apply to single buildings which are rented out until 31 December 2015.

Interpretation.

2.(1) In these Regulations and unless the context otherwise requires–

"air-conditioning system" means a combination of the components required to provide a form of indoor air treatment, by which temperature is controlled or can be lowered;

"assessment boundary" means the boundary where the delivered energy and exported energy are measured or calculated;

"bicycle parking space" means a designated space for parking at least one bicycle;

"bi-directional recharging" means a smart recharging operation where the direction of the electricity flow can be reversed, allowing that electricity flows from the battery to the recharging point it is connected to;

"boiler" means the combined boiler body-burner unit, designed to transmit to fluids the heat released from burning;

"building" means a roofed construction having walls, for which energy is used to condition the indoor climate;

"building automation and control system" means a system comprising all products, software and engineering services that can support energy efficient, economical and safe operation of technical building systems through automatic controls and by facilitating the manual management of those technical building systems;

"building element" means a technical building system or an element of the building envelope;

"building envelope" means the integrated elements of a building which separate its interior from the outdoor environment;

"building unit" means a section, floor or apartment within a building which is designed or altered to be used separately;

"calculation interval' means the discrete time interval used for the calculation of the energy performance;

"car park physically adjacent to a building" means a car park which is intended for the use of residents, visitors or workers of a building and which is located within the property area of the building or is in the direct vicinity of the building;

"cogeneration" means simultaneous generation in one process of thermal energy and electrical or mechanical energy;

"competent authority" means the Department of Environment of the Government;

"cooling generator" means the part of an air-conditioning system that generates useful cooling for uses identified in Schedule 1;

"cost-optimal level" means the energy performance level which leads to the lowest cost during the estimated economic life cycle, where:

(a) the lowest cost is determined taking into account the category and use of the building concerned, energy related investment costs on the basis of official forecasts, maintenance and operating costs (including energy costs taking into account the cost of greenhouse gas allowances), environmental and health externalities of energy use, earnings from energy produced on-site (where applicable), waste management costs (where applicable); and

(b) the estimated economic life cycle is determined by the competent authority and refers to the remaining estimated economic life cycle of a building where energy performance requirements are set for the building as a whole, or to the estimated economic life cycle of a building element where energy performance requirements are set for building elements;

"deep renovation" means a renovation which is in line with the 'energy efficiency first' principle, which focuses on essential building elements, and which transforms a building or building unit-

(a) before 1 January 2030, into a nearly zero-energy building;

(b) from 1 January 2030, into a zero-emission building;

"delivered energy" means energy, expressed per energy carrier, supplied to the technical building systems through the assessment boundary, to satisfy the uses taken into account or to produce the exported energy;

"digital building logbook' means a common repository for all relevant building data, including data related to energy performance such as energy performance certificates, renovation passports and smart readiness indicators, as well as data related to the life-cycle GWP, which facilitates informed decision making and information sharing within the construction sector, and among building owners and occupants, financial institutions and public authorities;

"Directive" means Directive (EU) 2024/1275 of the European Parliament and of the Council of 24 April 2024 on the energy performance of buildings, as the same may be amended from time to time;

"district heating" or "district cooling" means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from a central or decentralised source of production through a network to multiple buildings or sites, for the use of space or process heating or cooling;

"effective rated output" means the maximum calorific output, expressed in kW, specified and guaranteed by the manufacturer as being deliverable during continuous operation while complying with the useful efficiency indicated by the manufacturer;

"energy assessor" shall be understood within the meaning of regulation 18(1);

"energy from renewable sources" means energy from renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic) and geothermal energy, osmotic energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas;

"energy from renewable sources produced nearby" means energy from renewable sources, produced within a local or district-level perimeter of a particular building, which fulfils all of the following conditions-

(a) it can be distributed and used only within that local and district-level perimeter through a dedicated distribution network;

(b) it allows for the calculation of a specific primary energy factor valid only for the energy from renewable sources produced within that local or district-level perimeter; and

(c) it can be used on-site through a dedicated connection to the energy production source, where that dedicated connection requires specific equipment for the safe supply and metering of energy for self-use of the building;

"energy needs" means the energy to be delivered to, or extracted from, a conditioned space to maintain the intended space conditions during a given period of time, disregarding any technical building system inefficiencies;

"energy performance certificate" means a certificate recognised by the competent authority, which indicates the energy performance of a building or building unit, calculated according to a methodology adopted in accordance with regulation 4;

"energy performance contracting" means energy performance contracting as defined in the Environmental Protection (Energy End-Use Efficiency) Act 2009;

"energy performance of a building" means the calculated or measured amount of energy needed to meet the energy demand associated with a typical use of the building, which includes, inter alia, energy used for heating, cooling, ventilation, domestic hot water and lighting;

"energy poverty" means a household's lack of access to essential energy services, where such services provide basic levels and decent standards of living and health, including adequate heating, hot water, cooling, lighting, and energy to power appliances, existing social and other relevant policies, caused by a combination of factors, including at least non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes;

"energy use'" or "energy consumption" means energy input to a technical building system providing an EPB service intended to satisfy an energy need;

"European standard" means a standard adopted by the European Committee for Standardisation, the European Committee for Electrotechnical Standardisation or the European Telecommunications Standards Institute and made available for public use;

"exported energy" means the proportion of the renewable energy, expressed per energy carrier and per primary energy factor, that is exported to the energy grid instead of being used on-site for self-use or for other on-site uses;

"heat generator" means the part of a heating system that generates useful heat for uses identified in Schedule 1 using one or more of the following processes-

(a) the combustion of fuels in, for example, a boiler;

(b) the Joule effect, taking place in the heating elements of an electric resistance heating system; and

(c) capturing heat from ambient air, ventilation exhaust air, or a water or ground heat source using a heat pump;

"heat pump" means a machine, a device or installation that transfers heat from natural surroundings such as air, water or ground to buildings or industrial applications by reversing the natural flow of heat such that it flows from a lower to a higher temperature and for reversible heat pumps, it may also move heat from the building to the natural surroundings;

"heating system" means a combination of the components required to provide a form of indoor air treatment, by which the temperature is increased;

"'indoor environmental quality" means the result of an assessment of the conditions inside a building that influence the health and wellbeing of its occupants, based upon parameters such as those relating to the temperature, humidity, ventilation rate and presence of contaminants;

"life-cycle global warming potential" or "life-cycle GWP" means an indicator which quantifies the global warming potential contributions of a building along its full life cycle;

"major renovation" means the renovation of a building where−

(a) the total cost of the renovation relating to the building envelope or the technical building systems is higher than 25% of the value of the building, excluding the value of the land upon which the building is situated; or

(b) more than 25% of the surface of the building envelope undergoes renovation;

"measured" means measured by a relevant device, such as an energy meter, a power meter, a power metering and monitoring device, or an electricity meter;

"minimum energy performance standards" means rules that require existing buildings to meet an energy performance requirement as part of a wide renovation plan for a building stock or at a trigger point on the market such as sale, rent, donation or change of purpose within the land registry, in a period of time or by a specific date, thereby triggering the renovation of existing buildings;

"Minister" means the Minister for the Environment;

"nearly zero-energy building" means a building that has a very high energy performance, as determined in accordance with Schedule 1 and the nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;

"new building" means a building (as defined in these Regulations)–

(a) the construction of which requires full planning permission under the Town Planning Act 2018; or

(b) (in the case of an existing building) the alteration of which constitutes a material change of use which requires full planning permission under the Town Planning Act 2018;

"non-renewable primary energy factor" means an indicator that is calculated by dividing the primary energy from non-renewable sources for a given energy carrier, including the delivered energy and the calculated energy overheads of delivery to the points of use, by the delivered energy;

"on-site" means in or on a particular building or on the land on which that building is located;

"operational greenhouse gas emissions" means greenhouse gas emissions associated with the energy consumption of the technical building systems during the use and operation of the building;

"other on-site uses' means on-site uses other than EPB services, including appliances, miscellaneous and ancillary loads, or electro-mobility recharging points;

"owner" where he is not in occupation of the building or building unit shall include the occupier;

"primary energy" means energy from renewable and non-renewable sources which has not undergone any conversion or transformation process;

"pre-cabling" means all measures that are necessary to enable the installation of recharging points, including data transmission, cables, cable routes and, where necessary, electricity meters;

"recharging point" means a recharging point as defined in the Environment (Deployment of Alternative Fuels Infrastructure) Regulations 2016;

"renewable primary energy factor" means an indicator that is calculated by dividing the primary energy from renewable sources from an on-site, nearby or distant energy source that is delivered via a given energy carrier, including the delivered energy and the calculated energy overheads of delivery to the points of use, by the delivered energy;

"renovation passport" means a tailored roadmap for the deep renovation of a specific building in a maximum number of steps that will significantly improve its energy performance;

"residential building or building unit" means a room or suite of rooms in a permanent building or a structurally separated part of a building which is designed for all-year habitation by one private household;

"SBEM-GI" means the Simplified Building Energy Model developed by the Building Research Establishment for the UK Department for Communities and Local Government tailored specifically for Gibraltar, as amended from time to time;

"self-use" means the use of energy from renewable sources produced on-site or energy from renewable sources produced nearby by on-site technical systems for EPB services;

"smart recharging" means a capability for both public and private charging points to support grid stability, increase renewable energy consumption, and reduce costs;

"split incentives" means the lack of fair and reasonable distribution of financial obligations and rewards relating to energy efficiency investments among the actors concerned, for example the owners and tenants or the different owners of building units, or owners and tenants or different owners of multi-apartment or multi-purpose buildings;

"staged deep renovation" means a deep renovation carried out in a maximum number of steps, asset out in a renovation passport;

"technical building system" means technical equipment of a building or building unit for space heating, space cooling, ventilation, domestic hot water, built-in lighting, building automation and control, on-site renewable electricity generation and energy storage, or a combination thereof, including those systems using energy from renewable sources;

"total primary energy factor" means the sum of renewable and non-renewable primary energy factors for a given energy carrier;

"useful floor area" means the area of the floor of a building needed as parameter to quantify specific conditions of use that are expressed per unit of floor area and for the application of the simplifications and the zoning and allocation or re-allocation rules;

"vulnerable households" means households in energy poverty or households, including lower middle-income households, that are particularly exposed to high energy costs and that lack the means to renovate the building that they occupy;

"whole-life-cycle greenhouse gas emissions" means greenhouse gas emissions that occur over the whole life cycle of a building, including the production and transport of construction products, construction-site activities, the use of energy in the building and replacement of construction products, as well as demolition, transport and management of waste materials and their reuse, recycling and final disposal;

"zero-emission building" means a building with a very high energy performance, as determined in accordance with Schedule 1, requiring zero or a very low amount of energy, producing zero on-site carbon emissions from fossil fuels and producing zero or a very low amount of operational greenhouse gas emissions, in accordance with regulation 10.

(2) Paragraph (b) in the definition of "cost-optimal level" refers to the remaining estimated economic lifecycle of a building where energy performance requirements are set for the building as a whole, or to the estimated economic lifecycle of a building element where energy performance requirements are set for building elements.

(3) The cost-optimal level shall lie within the range of performance levels where the cost benefit analysis calculated over the estimated economic lifecycle is positive.

(4) In applying the definition "major renovation" to any particular case, the competent authority may choose to apply either paragraph (a) or (b) of that definition, as it deems fit.

Subject matter of these Regulations.

3.(1) These Regulations seek to promote the improvement of the energy performance of buildings, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness.

(2) These Regulations lay down requirements as regards−

(a) the common general framework for a methodology for calculating the integrated energy performance of buildings and building units;

(b) the application of minimum requirements to the energy performance of new buildings and new building units;

(c) the application of minimum requirements to the energy performance of−

(i) existing buildings, building units and building elements that are subject to major renovation;

(ii) building elements that form part of the building envelope and that have a significant impact on the energy performance of the building envelope when they are retrofitted or replaced; and

(iii) technical building systems whenever they are installed, replaced or upgraded;

(d) Gibraltar's plans for increasing the number of nearly zero-energy buildings;

(e) energy certification of buildings or building units;

(f) regular inspection of heating and air-conditioning systems in buildings;

(g) independent control systems for energy performance certificates and inspection reports;

(h) the application of minimum energy performance standards to existing buildings and existing building units, in accordance with regulations 3A and 8A;

(i) The calculation and disclosure of the life-cycle global warming potential of buildings;

(j) solar energy in buildings;

(k) renovation passports;

(l) Gibraltar's building renovation plans;

(m) sustainable mobility infrastructure in and adjacent to buildings;

(n) smart buildings;

(o) regular inspection of ventilation systems in buildings; and

(p) the indoor environmental quality performance of buildings.

(3) The requirements referred to in subregulation (2)–

(a) are minimum requirements; and

(b) shall not prevent the Government from maintaining or introducing more stringent measures.

(4) Where more stringent measures are implemented in accordance with subregulation (3)(b) such measures shall be subject to the condition that the measures adopted under that subregulation must be compatible with retained EU law.

Gibraltar building renovation plans.

3A.(1) The competent authority shall establish a building renovation plan for Gibraltar to ensure the renovation of the stock of residential and non-residential buildings, both public and private, into a highly energy-efficient and decarbonised building stock by 2050, with the objective to transform existing buildings into zero-emission buildings.

(2) The Gibraltar building renovation plan shall include-

(a) an overview of the building stock in Gibraltar for different building types and construction periods, based, as appropriate, on statistical sampling and the database for energy performance certificates pursuant to regulation 13A, an overview of market barriers and market failures and an overview of the capacities in the construction, energy efficiency and renewable energy sectors, and of the share of vulnerable households based, as appropriate, on statistical sampling;

(b) a roadmap with established targets and measurable progress indicators, including the reduction of the number of people affected by energy poverty, with a view to achieving a 2050 climate neutrality goal;

(c) an overview of implemented and planned policies and measures, supporting the implementation of the roadmap pursuant to subregulation 3A(2)(b);

(d) an outline of the investment needs for the implementation of the building renovation plan, the financing sources and measures, and the administrative resources for building renovation;

(e) the thresholds for the operational greenhouse gas emissions and annual primary energy demand of a new or renovated zero-emission building pursuant to regulation 10A;

(f) minimum energy performance standards for non-residential buildings on the basis of maximum energy performance thresholds pursuant to regulation 8A;

(g) a trajectory for the renovation of the residential building stock, including the 2030 and 2035 milestones for average primary energy use in kWh/(m^2.y) pursuant to regulation 8A; and

(h) an evidence-based estimate of expected energy savings and wider benefits, including those related to indoor environmental quality.

(3) The roadmap referred to in subregulation (3A)(2)(b) of shall include-

(a) targets for 2030, 2040 and 2050 as regards the annual energy renovation rate;

(b) the primary and final energy consumption of the building stock and its operational greenhouse gas emission reductions;

(c) specific timelines for non-residential buildings to comply with lower maximum energy performance thresholds pursuant to regulation 8A, by 2040 and 2050, in line with the pathway for transforming the building stock into zero-emission buildings; and

(d) an evidence-based estimate of expected energy savings and wider benefits, including those related to indoor environmental quality.

(4) Where an overview of specific policies and measures as referred to in subregulation 3A(3)(c) or an outline of specific investment needs as referred to in subregulation 3A(3)(d) is already included in the competent authority's energy and climate plans, a clear reference to the relevant parts of the energy and climate plans may be included in the Gibraltar building renovation plan in place of a fully developed overview.

(5) On a date to be published by the Minister in the Gazette and every five years thereafter, the competent authority shall prepare and publish on its website its Gibraltar building renovation plan, using the template set out in Schedule 3.

(6) In preparing the Gibraltar building renovation plan, the competent authority shall carry out a public consultation which shall involve local authorities and other socioeconomic partners, including organisations and bodies working with vulnerable households.

(7) The competent authority shall annex a summary of the results of the public consultation referred to in subregulation 3A(6) to its Gibraltar building renovation plan.

(8) The competent authority shall annex the details of the implementation of its most recent long-term renovation strategy or building renovation plan to its next building renovation plan, indicating whether its targets have been achieved.

Adoption of a methodology for calculating the energy performance of buildings.

4.(1) In accordance with the common general framework set out in Schedule 1, the energy performance of buildings shall be calculated by applying the National Calculation Methodology.

(2) The competent authority shall ensure that the National Calculation Methodology and the software programmes approved as being in accordance with the methodology are published on its website.

(3) The methodology for calculating the energy performance of buildings shall be based not only on the season in which heating or air-conditioning is required, but shall cover the annual energy performance of a building.

(4) The methodology shall take into account existing European standards and shall ensure the representation of actual operating conditions and enable the use of measured energy to verify correctness and for comparability.

(5) The calculation methodology shall recognise and account for the benefits of maximising the use of on-site renewable energy, including for other uses, such as electric vehicle recharging points.

Setting of minimum energy performance requirements.

5.(1) The Minister shall prescribe, by notice in the Gazette, minimum energy performance requirements for buildings or building units with a view to achieving cost-optimal levels and, where relevant, more stringent reference values such as nearly zero-energy building requirements and zero-emission buildings requirements and shall publish such requirements on its website.

(2) The energy performance shall be calculated in accordance with the methodology referred to in regulation 4.

(3) Cost-optimal levels shall be calculated in accordance with the comparative methodology framework referred to in regulation 6, once the framework is in place.

The competent authority may set the requirements for building elements at a level that would facilitate the effective installation of low temperature heating systems in renovated buildings.

(4) The competent authority shall, by issuing guidance, prescribe minimum energy performance requirements for building elements that form part of the building envelope and that have a significant impact on the energy performance of the building envelope when they are replaced or retrofitted, with a view to achieving at least cost-optimal levels and shall publish such requirements on its website.

(5) When prescribing the requirements under subregulations (1) and (4), the competent authority may differentiate between new and existing buildings and between different categories of buildings.

(6) The requirements set under these Regulations–

(a) shall take account of optimal indoor climate conditions, in order to avoid possible negative effects such as inadequate ventilation, as well as local conditions and the designated function and the age of the building; and

(b) shall be reviewed at regular intervals which shall not be longer than 5 years and, if necessary, shall be updated in order to reflect technical progress in the building sector, the results of the cost-optimal calculation set out in regulation 6, and updated energy and climate targets and policies.

(7) The competent authority shall not be required to set minimum energy performance requirements which are not cost-effective over the estimated economic lifecycle.

(8) The Minister may, in his discretion, direct the competent authority not to set or apply the requirements referred to in subregulation (1) for the following categories of buildings–

(a) buildings officially protected as part of a designated environment or because of their special architectural or historical merit, in so far as compliance with certain minimum energy performance requirements would unacceptably alter their character or appearance;

(b) buildings used as places of worship and for religious activities;

(c) temporary buildings with a time of use of 2 years or less, industrial sites, workshops and non-residential agricultural buildings with low energy demand and non-residential agricultural buildings which are in use by a sector covered by a sectoral agreement on energy performance;

(d) residential buildings which are used or intended to be used for either less than 4 months of the year or, alternatively, for a limited annual time of use and with an expected energy consumption of less than 25% of what would be the result of all-year use; and

(e) stand-alone buildings with a total useful floor area of less than $50m^2$.

Calculation of cost-optimal levels of minimum energy performance requirements.

6.(1) The competent authority shall calculate cost-optimal levels of minimum energy performance requirements using the comparative methodology framework established in accordance with Article 6(1) of the Directive and relevant parameters, such as climatic conditions and the practical accessibility of energy infrastructure, and compare the results of this calculation with the minimum energy performance requirements in force.

(2) When calculating the cost-optimal levels of minimum energy performance requirements, the competent authority may take into account the life-cycle GWP.

(3) *Omitted*

(4) *Omitted*

(5) If the result of the comparison performed in accordance with subregulation (1) shows that the minimum energy performance requirements in force are significantly less energy efficient than cost-optimal levels of minimum energy performance requirements by more than 15 %, the competent authority shall adjust the minimum energy performance requirements in place within 24 months of the availability of the results of that comparison.

New buildings.

7.(1) A person who constructs a new building shall ensure that as from the 1st January 2028, new buildings owned by public authorities and, as from the 1st January 2030, all new buildings, are zero emission buildings pursuant to regulation 10A.

(2) Until the application of the requirements under subregulation (1), a person who constructs a new building shall ensure that building is at least a zero-energy building and meets the minimum energy performance requirements set out in regulation 5.

(3) Where public authorities intend to occupy a new building that they do not own, they shall encourage the owner of the building for that building to be a zero-emission building.

(4) A person who constructs a new building shall ensure that the life-cycle GWP is calculated in accordance with Schedule 4 which calculation shall be disclosed in the energy performance certificate of the building-

(a) from 1 January 2028, for all new buildings with a useful floor area larger than 1 000 m2;

(b) from 1 January 2030, for all new buildings.

(5) The competent authority may decide not to apply subregulations (1) to (4) to buildings for which building permit applications or equivalent applications, including for change of use, have already been submitted by the dates pursuant to subregulations (1) to (4).

(6) By the 1st January 2027, the competent authority shall prepare and publish on its website a roadmap detailing the introduction of limit values on the total cumulative life-cycle GWP of all new buildings and set targets for new buildings from 2030, considering a progressive downward trend, as well as maximum limit values, detailed for different climatic zones and building typologies.

(7) The competent authority shall issue guidance, in relation to new buildings, which addresses issues of optimal indoor environmental quality, adaptation to climate change, fire safety, risks related to intense seismic activity, carbon removals associated to carbon storage in or on buildings.

Existing buildings.

8.(1) When buildings undergo major renovation, the owner of the existing building shall ensure that the energy performance of the building or the renovated part thereof is upgraded in order to meet minimum energy performance requirements set in accordance with regulation 5 in so far as this is technically, functionally and economically feasible having regard to what is reasonably practicable in all the circumstances.

(2) The requirements referred to in subregulation (1) shall be applied to the renovated building or building unit as a whole and additionally or alternatively, requirements may be applied to the renovated building elements.

(3) The owner of the existing building shall, in addition, take the necessary measures to ensure that when a building element that forms part of the building envelope and has a significant impact on the energy performance of the building envelope, is retrofitted or replaced, the energy performance of the building element meets minimum energy performance requirements in so far as this is technically, functionally and economically feasible having regard to what is reasonably practicable in all the circumstances.

(4) The competent authority shall determine the minimum energy performance requirements in accordance with regulation 5.

(5) The competent authority shall encourage, in relation to buildings undergoing major renovation, the consideration and taking into account of high-efficiency alternative systems, as referred to in regulation 7(2), in so far as this is technically, functionally and economically feasible, and shall address issues of-

(a) healthy indoor climate conditions;

(b) fire safety;

(c) risks related to intense seismic activity;

(d) the removal of hazardous substances (including asbestos); and

(e) accessibility for persons with disabilities.

(6) The competent authority shall issue guidance on measures which are reasonably expected from owners in relation to this regulation and what is meant by "technically, functionally and economically feasible" in the circumstances, and shall publish such guidance on its website.

Minimum energy performance standards for non-residential buildings and trajectories for progressive renovation of residential building stock.

8A.(1) The competent authority shall establish minimum energy performance standards for non-residential buildings which ensure that those buildings do not exceed the specified maximum energy performance threshold, as referred to in subregulation (8), expressed by a numeric indicator of primary or final energy use in kWh/(m^2.y), by the dates specified in subregulation (8).

(2) The maximum energy performance thresholds shall be established on the basis of the non-residential building stock as at 1 January 2020, based on available information and, where appropriate, on statistical sampling.

(3) For the purposes of subregulation (2), the competent authority shall exclude from the baseline any non-residential buildings that are exempted pursuant to regulation 5(8).

(4) The competent authority shall set a maximum energy performance threshold to the effect that 16 % of non-residential building stock is above that threshold (the '16 % threshold').

(5) The competent authority shall also set a maximum energy performance threshold to the effect that 26 % of non-residential building stock is above that threshold (the '26 % threshold').

(6) For the purposes of subregulations (4) and (5) the competent authority may set the maximum energy performance thresholds with reference to the non-residential building stock as a whole or per building type or category of building.

(7) The competent authority may set the thresholds at a level corresponding to a specific energy performance class, provided that they comply with subregulations (4) and (5).

(8) The minimum energy performance standards shall ensure, at least, that all non-residential buildings are below the 16% threshold from 2030 and the 26% threshold from 2033.

(9) The competent authority will monitor compliance of individual non-residential buildings with the 16% threshold and the 26% threshold on the basis of energy performance certificates or, where appropriate, other available means.

(10) In its roadmap referred to in regulation 3A(5), the competent authority shall establish specific timelines for non-residential buildings to comply with lower maximum energy performance thresholds by 2040 and 2050, in line with the pathway for transforming the building stock into zero-emission buildings.

(11) The competent authority may establish and publish criteria to exempt individual non-residential buildings-

(a) in light of the expected future use of those buildings;

(b) in light of serious hardship; or

(c) in the case of an unfavourable cost-benefit assessment,

from requirements of subregulations (1)-(17).

(12) The criteria referred to in subregulation (11) shall be clear, precise and stringent and shall ensure equal treatment between non-residential buildings.

(13) When establishing those criteria, the competent authority shall enable the *ex ante* assessment of the potential share of non-residential buildings covered and shall avoid a disproportionate number of non-residential buildings from being exempted.

(14) The competent authority shall publish a report on its website on the criteria as part of the Gibraltar building renovation plans.

(15) Where the overall renovation necessary to achieve the energy performance thresholds specified in this section has an unfavourable cost-benefit assessment for a given non-residential building, the competent authority shall require that, for that given non-residential building, at least those individual renovation measures with a favourable cost-benefit assessment are implemented.

(16) To the extent that the national non-residential building stock, or part of it, is seriously damaged by a natural disaster, the competent authority may temporarily adjust the maximum energy performance threshold so that the energy renovation of damaged non-residential buildings replaces the energy renovation of other worst-performing non-residential buildings, whilst ensuring that a similar percentage of the non-residential building stock undergoes energy renovation.

(17) The competent authority shall report the adjustment referred to in subregulation (16) and its projected length in its national building renovation plan.

(18) The competent authority shall establish a trajectory for the progressive renovation of the residential building stock in line with the roadmap and the 2030, 2040 and 2050 targets contained in the Gibraltar building renovation plan.

(19) The competent authority shall ensure that the trajectory for the progressive renovation of the residential building stock shall be expressed as a decrease in the average primary energy use in kWh/(m^2.y) of the entire residential building stock over the period from 2020 to 2050, and shall identify the number of residential buildings and residential building units or floor area to be renovated annually, including the number or floor area of the 43 % worst-performing residential buildings and residential building units.

(20) The competent authority shall ensure that the average primary energy use in kWh/(m^2.y) of the entire residential building stock:

(a) decreases by at least 16 % compared to 2020 by 2030;

(b) decreases by at least 20-22 % compared to 2020 by 2035;

(c) by 2040, and every 5 years thereafter, is equivalent to, or lower than the determined value derived from a progressive decrease in the average primary energy use from 2030 to 2050, in line with the transformation of the residential building stock into a zero-emission building stock.

(21) The competent authority shall ensure that at least 55 % of the decrease in the average primary energy use is achieved through the renovation of the 43 % worst-performing residential buildings.

(22) For the purposes of subregulation (21), the competent authority may count the decrease in the average primary energy use achieved by the renovation of residential buildings affected by natural disasters such as earthquakes and floods towards the share achieved by means of the renovation of the 43 % worst-performing residential buildings.

(23) In order to achieve the required decrease in the average primary energy use of the entire residential building stock, the competent authority may put in place measures such as minimum energy performance standards, technical assistance and financial support measures, where feasible.

(24) For the purposes of subregulation (22), the competent authority shall not disproportionately exempt rental residential buildings or building units.

(25) The competent authority shall report in the Gibraltar building renovation plan the methodology used and data gathered for estimating the values referred to in subregulations (20) to (22).

(26) The trajectory for the progressive renovation of the residential building stock shall refer to data on the national residential building stock, based, as appropriate, on statistical sampling and energy performance certificates.

(27) If the average fossil share of energy use in residential buildings is lower than 15 %, the competent authority may adjust the levels laid down in subregulations (20)(a) and (20)(b), to ensure that the average primary energy use in kWh/(m^2.y) of the entire residential building stock by 2030, and every five years thereafter, is equivalent to, or lower than a determined value derived from a linear decrease in the average primary energy use from 2020 to 2050, in line with the transformation of the residential building stock into a zero-emission building stock.

(28) In addition to primary energy use, the competent authority may establish additional indicators of non-renewable and renewable primary energy use, and of operational greenhouse gas emissions produced in kgCO_2eq/(m^2.y).

(29) In accordance with regulation 11, the competent authority shall support compliance, where reasonably practical to do so, with minimum energy performance standards by-

(a) providing appropriate financial measures, in particular those targeting vulnerable households, people affected by energy poverty or, where applicable, living in social housing;

(b) providing technical assistance, including through one-stop shops with a particular focus on vulnerable households and, where applicable, people living in social housing;

(c) designing integrated financing schemes which provide incentives for deep renovations and staged deep renovations, pursuant to regulation 11;

(d) removing non-economic barriers, including split incentives; and

(e) monitoring social impacts on the most vulnerable households.

Solar energy in buildings.

8B.(1) Subject to subregulation (5), the competent authority shall ensure the deployment of suitable solar energy installations on-

(a) all new public and non-residential buildings with a useful floor area larger than 250 m²;

(b) all existing non-residential buildings with a useful floor area larger than 500 m² undergoing major renovation or action which requires an administrative permit;

(c) all new residential buildings, by 31 December 2029.

(2) The competent authority shall ensure that all new buildings are designed to optimise their solar energy generation potential on the basis of the site's solar irradiance, enabling the installation of solar technologies without costly structural interventions.

(3) The competent authority shall establish criteria for the practical implementation of the obligations set out in subregulation (1), including criteria for determining technical and economic feasibility exemptions.

(4) The competent authority shall put in place a framework providing the necessary administrative, technical and financial measures to support the deployment of solar energy in buildings.

(5) The competent authority may exempt specific categories of buildings from the requirements under subregulation (1) where the deployment of solar energy installations is not technically viable or not economically feasible.

Renovation passports.

8C.(1) The competent authority shall introduce a scheme for renovation passports based on the common framework set out in Schedule 5.

(2) The scheme referred to in subregulation (1) shall be of voluntary use by owners of buildings and building units, unless the competent authority decides to make it mandatory.

(3) The competent authority shall take measures to ensure that renovation passports are affordable and shall consider whether to provide financial support to vulnerable households wishing to renovate their buildings.

(4) The competent authority may allow for the renovation passport to be drawn up and issued jointly with the energy performance certificate.

(5) The renovation passport shall be issued in a digital format suitable for printing, by a qualified or certified expert, following an on-site visit.

(6) When the renovation passport is issued, a discussion with the expert shall be suggested to the building owner to allow the expert to explain the best steps by which to transform the building into a zero-emission building well before 2050.

(7) The competent authority shall ensure that the renovation passport can be uploaded to the national database for the energy performance of buildings set up pursuant to regulation 13A.

Technical building systems, electromobility and smart readiness indicator.

9.(1) The competent authority shall apply the technical building system requirements set out in the Domestic and Non-Domestic Building Services Compliance Guides in respect of the overall performance, the proper installation, and the appropriate dimensioning, adjustment and control of the technical building systems which are installed in existing buildings.

(1A) When setting up the requirements, the competent authority shall take account of design conditions and typical or average operating conditions.

(1B) The competent authority may set requirements related to the greenhouse gas emissions of, or to the type of fuel used by heat generators or to the minimum part of renewable energy used for heating at building's level, provided that such requirements do not constitute an unjustified market barrier.

(1C) The competent authority shall ensure that the requirements they set for technical building systems reach at least the latest cost-optimal levels.

(2) The competent authority may also apply the system requirements referred to in subregulation (1) to new buildings.

(3) System requirements shall be−

(a) set for new, replacement and upgrading of technical building systems; and

(b) applied in so far as they are technically, economically and functionally feasible.

(3A) The competent authority shall issue guidance on measures which are reasonably expected from owners in relation to subregulation (3)(b) and what is meant by "technically, functionally and economically feasible" in the circumstances, and shall publish such guidance on its website.

(4) The system requirements shall cover at least the following −

(a) heating systems;

(b) hot water systems;

(c) air-conditioning systems;

(d) large ventilation systems,

or a combination of such systems.

(5) The competent authority–

(a) shall encourage the introduction of intelligent metering systems whenever a building is constructed or undergoes major renovation; and

(b) may furthermore encourage, where appropriate, the installation of active control systems such as automation, control and monitoring systems that aim to save energy.

(6) In subregulation (1), "Domestic and Non-Domestic Building Services Compliance Guides" means the United Kingdom Domestic Building Services Compliance Guide and Non-Domestic Building Services Compliance Guide, as amended from time to time, which shall apply in Gibraltar with such modifications (for example, in nomenclature) as the circumstances in Gibraltar may require.

(7) A person who constructs a new building shall take the necessary measures to ensure that the building is equipped with self-regulating devices for the separate regulation of the temperature in each room or, where justified, in a designated heated or cooled zone of the building unit and, where appropriate, with hydronic balancing. The installation of such self-regulating devices and hydronic balancing in existing buildings shall be required when heat generators or cooling generators are replaced in so far as this is technically, functionally and economically feasible having regard to what is reasonably practical in all the circumstances.;

(8) The owner of an existing building shall take the necessary measures to install self-regulating devices for the separate regulation of the temperature in each room or, where justified, in a designated heated zone of the building unit when heat generators are replaced, in so far as this is technically, functionally and economically feasible having regard to what is reasonably practical in all the circumstances.;

(9) Where new non-residential buildings and non-residential buildings undergoing major refurbishment which have more than five parking spaces and-

(a) the car park is located inside the building, and, for major renovations, renovation measures include the car park or the electrical infrastructure of the building; or

(b) the car park is physically adjacent to the building, and, for major renovations, renovation measures include the car park or the electrical infrastructure of the car park,

the competent authority shall require the owner of the building to install at least one recharging point for every five car parking spaces; pre-cabling for at least 50 % of car parking spaces and ducting, namely conduits for electric cables, for the remaining car parking spaces, to enable the installation at a later stage of recharging points for electric vehicles, electrically power-assisted cycles and other L-category vehicle types; and the provision of bicycle parking spaces representing at least 15 % of average or 10 % of total user capacity of non-residential buildings, taking into account the space required also for bicycles with larger dimensions than standard bicycles.

(9A) The competent authority shall ensure that the pre-cabling and ducting referred to in regulation 9(9) are dimensioned so as to enable the simultaneous and efficient use of the required number of recharging points and support, where appropriate, the installation of a load or recharging management system, to the extent that this is technically, functionally and economically feasible having regard to what is reasonably practical in all the circumstances.

(9B) The competent authority may adjust requirements for the number of bicycle parking spaces in accordance with regulation 9(9) for specific categories of non-residential buildings that are not typically accessed by bicycles.

(10) Where non-residential buildings which have more than 20 car parking spaces the competent authority shall require the owner of the building to install-

(a) at least one recharging point for every 10 car parking spaces, or of
ducting, namely conduits for electric cables, for at least 50 % of the car parking spaces to enable the installation at a later stage of recharging points for electric vehicles; and

(b) bicycle parking spaces representing at least 15 % of average or 10 % of total user capacity of the building and with space required also for bicycles with larger dimensions than standard bicycles.

(11) Where new residential buildings and residential buildings undergoing major refurbishment which have more than three parking spaces and-

(a) the car park is located inside the building, and, for major renovations, renovation measures include the car park or the electric infrastructure of the building; or

(b) the car park is physically adjacent to the building, and, for major renovations, renovation measures include the car park or the electrical infrastructure of the car park,

the competent authority shall require the owner of the building to install pre-cabling for at least 50 % of car parking spaces and ducting, namely conduits for electric cables, for the remaining car parking spaces to enable the installation, at a later stage, of recharging points for electric vehicles, electrically power-assisted cycles and other L-category vehicle types and provision of bicycle parking spaces representing at least 15 % of average or 10 % of total user capacity of non-residential buildings, taking into account the space required also for bicycles with larger dimensions than standard bicycles.

(11A) The competent authority may, subject to an assessment and taking into account local characteristics, including demographical, geographical and climate conditions, adjust requirements for the number of bicycle parking spaces.

(12) The competent authority may decide not to apply the requirements of subregulations 9(9), 9(10) and 9(11) where-

(a) the buildings referred to in subregulations 9(9) and 9(11) are owned by small and medium sized companies as defined in Title I of the Annex to Commission Recommendation 2003/361/EC;

(b) building permit applications or equivalent applications have been submitted by 10 March 2021;

(c) the Gibraltar Electricity Authority determines that the ducting infrastructure required would endanger the stability of the local grid;

(d) the cost of the recharging and ducting installation exceeds 10% of the total cost of the major renovation of the building;

(e) a public building is already covered by comparable requirements under the Environment (Deployment of Alternative Fuels Infrastructure) Regulations 2016.

(12A) The competent authority shall require the owner of a building to ensure that the recharging points referred to in this regulation are capable of smart recharging and, where appropriate, bi-directional recharging and that they are operated on the basis of non-proprietary

and non-discriminatory communication protocols and standards, in an interoperable manner, and in compliance with any European standards."

(12B) The competent authority shall ensure the availability of technical assistance for building owners and tenants wishing to install recharging points and bicycle parking spaces.

(13) The competent authority, without prejudice to Gibraltar's applicable property and tenancy legislation, shall issue guidelines on measures which will simplify the deployment of recharging points in existing residential and non residential buildings and which shall cover at least the following-

(a) possible regulatory barriers;

(b) permitting and approval procedures.

(14) The competent authority shall require that the overall energy performance of an altered part or the complete altered system when a technical building system is installed, replaced or upgraded is assessed.

(15) The results of the assessment described in subregulation 9(14) shall be documented and made available to the owner of the building in respect of which the assessment has been carried out.

(16) The competent authority shall use the results of the assessment in order to-

(a) verify compliance with the minimum requirements set out in subregulation 9(1);

(b) decide whether to issue a new energy performance certificate, without prejudice to Regulation 12.

Nearly zero-energy buildings.

10.(1) The competent authority shall ensure that−

(a) after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings; and

(b) by 31 December 2020, all new buildings are nearly zero-energy buildings.

(2) The competent authority shall draw up plans for increasing the number of nearly zero-energy buildings and such plans may include targets differentiated according to the category of building.

(3) The competent authority shall furthermore, following the leading example of the public sector and after consulting the Minister, develop polices and take measures such as the setting of targets in order to stimulate the transformation of buildings that are refurbished into nearly zero-energy buildings.

(4) The plans referred to in subregulation (2) shall include, inter alia, the following elements−

(a) the competent authority's detailed application in practice of the definition of nearly zero-energy buildings, reflecting the local conditions, and including a numerical indicator of primary energy use expressed in kWh/m^2 per year;

(b) intermediate targets for improving the energy performance of new buildings, by 2015, with a view to preparing the implementation of subregulations (1) and (2);

(c) information on the policies and financial or other measures adopted in the context of subregulations (1) to (3) for the promotion of nearly zero-energy buildings, including details of Gibraltar's requirements and measures concerning the use of energy from renewable sources in new buildings and existing buildings undergoing major renovation in the context of regulations 7 and 8 of these Regulations and Article 15(4) of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

(5) Primary energy factors used for the determination of the primary energy use under subregulation (4)(a) may−

(a) be based on Gibraltar's yearly average values; and

(b) take into account relevant European standards.

(6) The competent authority may decide not to apply the requirements set out in paragraphs (a) and (b) of subregulation (1) in specific and justifiable cases where the cost-benefit analysis over the economic lifecycle of the building in question is negative.

(7) The competent authority shall ensure that the plans referred to in subregulation (2) and the policies referred to in subregulation (3)(a) are published on its website and made available to the public for inspection at its offices.

Zero-emission buildings.

10A(1) A zero-emission building shall not cause any on-site carbon emissions from fossil fuels.

(2) A zero-emission building shall, where economically and technically feasible, offer the capacity to react to external signals and adapt its energy use, generation or storage.

(3) The competent authority shall take the necessary measures to ensure that the energy demand of a zero-emission building complies with a maximum threshold.

(4) The maximum threshold for the energy demand of a zero-emission building shall be at least 10% lower than the threshold for total primary energy use established for nearly zero-energy buildings.

(5) The competent authority may adjust the maximum threshold for the energy demand of a zero-emission building for renovated buildings, while complying with the respective provisions on cost optimality.

(6) The competent authority shall take the necessary measures to ensure that the operational greenhouse gas emissions of a zero-emission building comply with a maximum threshold established in Gibraltar's building renovation plan.

(7) The competent authority shall ensure that the total annual primary energy use of a new or renovated zero-emission building is covered by-

(a) energy from renewable sources generated on-site or nearby;

(b) energy from renewable sources provided from a renewable energy community;

(c) energy from an efficient district heating and cooling system; or

(d) energy from carbon-free sources.

(8) Where it is not technically or economically feasible to fulfil the requirements laid down in subregulation (7), the total annual primary energy use may also be covered by other energy from the grid complying with criteria established by the competent authority.

(9) The competent authority shall continue to ensure that all new buildings meet the requirements for nearly zero-energy buildings until the zero-emission building requirements become applicable.

Financial incentives and market barriers.

11.(1) In view of the importance of providing appropriate financing and other instruments to catalyse the energy performance of buildings and the transition to nearly zero-energy buildings and zero emission buildings, the competent authority shall take appropriate steps to consider the most relevant such instruments in the light of Gibraltar's circumstances.

(2) The competent authority shall, with the Minister's approval−

(a) draw up a list of existing and, if appropriate, proposed measures and instruments including those of a financial nature, other than those required by these Regulations, which promote the objectives of these Regulations;

(b) update the list by 30 June 2014, and every three years thereafter.

(3) The competent authority shall link its financial measures for energy performance improvements and reduced greenhouse gas emissions in the renovation of buildings to the targeted or achieved energy savings and improvements, as determined by one or more of the following criteria-

(a) the energy performance of the equipment or material used for the renovation and the related greenhouse gas emission reduction, in which case the equipment or material used for the renovation is to be installed by an installer with the relevant level of certification or qualification;

(b) standard values for calculation of energy savings and greenhouse gas emission reduction in buildings;

(c) the improvement achieved due to such renovation by comparing energy performance certificates issued before and after renovation;

(d) the results of an energy audit; or

(e) the results of another relevant, transparent and proportionate method that shows the improvement in energy performance, for example by comparing the energy consumption before and after renovation with metering systems.

(3A) The competent authority shall not provide any financial incentives for the installation of stand-alone boilers powered by fossil fuels.

(3B) Subject always to Gibraltar's data protection laws as may apply from time to time, the competent authority shall make available, on request, aggregated and anonymised data for statistical and research purposes.

(3C) The competent authority shall incentivise deep renovation and staged deep renovation with higher financial, fiscal, administrative and technical support.

(3D) The competent authority shall incentivise sizeable programmes that address a high number of buildings, in particular the worst-performing buildings, and that result in an overall reduction of at least 30% of primary energy use.

(3E) Financial incentives shall target, as a priority, vulnerable households, people affected by energy poverty and people living in social housing.

(3F) When providing financial incentives to owners of buildings or building units for the renovation of rented buildings or building units, the competent authority shall aim at financial incentives benefiting both the owners and the tenants.

(4) The provisions of these Regulations shall not prevent the competent authority from providing incentives for new buildings, renovations or building elements which go beyond the cost-optimal levels.

One-stop shops for the energy performance of buildings.

11A.(1) The competent authority shall, in cooperation with relevant stakeholders, ensure the establishment and the operation of at least one one-stop shop for the energy performance of buildings, targeting all actors involved in building renovations, including homeowners, administrative, financial and economic actors.

(2) The one-stop shop established pursuant to subregulation (1) shall-

(a) provide streamlined information on technical and financial possibilities and solutions to households, small and medium-sized enterprises and public authorities;

(b) provide holistic support to all households, with a particular focus on households affected by energy poverty and on worst-performing buildings;

(c) provide independent advice on the energy performance of buildings;

(d) offer dedicated services for vulnerable households, people affected by energy poverty and people in low-income households.

(3) The one-stop shop may accompany integrated district renovation programmes.

Energy performance certificates.

12.(1) The Government shall establish a system of certification of the energy performance of buildings.

(2) The competent authority shall ensure that, any energy performance certificates issued after the 1st June 2026 shall comply with the template in Schedule 6 and shall include-

(a) the energy performance of a building expressed by a numeric indicator of primary energy use in kWh/(m².y), and reference values such as minimum energy performance requirements, minimum energy performance standards, nearly zero-energy building requirements and zero-emission building requirements, in order to make it possible for owners or tenants of the building or building unit to compare and assess its energy performance;

(b) the energy performance class of the building, on a closed scale using only letters from A to G, where the letter A shall correspond to zero-emission buildings, and the letter G shall correspond to the very worst-performing buildings in Gibraltar's building stock at the time of the introduction of the scale;

(c) the calculated annual final energy use in kWh/(m².y);

(d) renewable energy produced on-site in percentage of energy use;

(e) operational greenhouse gas emissions in $kgCO_2/(m^2.y)$, and the value of the life-cycle GWP, if available; and

(f) recommendations for the cost optimal or cost effective improvement of the energy performance and the reduction of operational greenhouse gases emissions and the improvement of indoor environmental quality of a building or building unit, unless there is no reasonable potential for such improvement compared to the energy performance requirements in force.

(3) The energy performance certificate shall also display the following elements-

(a) the calculated annual primary and final energy consumption in kWh or MWh;

(b) renewable energy production in kWh or MWh, main energy carrier and type of renewable energy source;

(c) the calculated energy needs in kWh/(m².y);

(d) a yes/no indication whether the building has a capacity to react to external signals and adjust the energy consumption;

(e) a yes/no indication whether the heat distribution system inside the building is capable to work at low or more efficient temperature levels, where applicable; and

(f) the contact information of the relevant one-stop shop for renovation advice.

(4) The recommendations included in the energy performance certificate pursuant to subregulation (2)(f) shall cover–

(a) measures carried out in connection with a major renovation of the building envelope or technical building systems; and

(b) measures for individual building elements independent of a major renovation of the building envelope or technical building systems.

(5) The recommendations included in the energy performance certificate pursuant to subregulation (2)(f) shall–

(a) be technically feasible for the specific building and may provide an estimate for the range of payback periods or cost-benefits over its economic lifecycle; and

(b) provide an indication as to where the owner or tenant can receive more detailed information, including as regards the cost-effectiveness of the recommendations made in the energy performance certificate;

(c) provide an estimate for the energy savings and the reduction of operational greenhouse gas emissions and the improvement of indoor environmental quality;

(d) include an assessment of whether the heating systems, ventilation systems, air-conditioning systems and domestic hot-water systems can be adapted to operate at more efficient temperature settings, such as low temperature emitters for water-based heating systems; and

(e) include an assessment of the remaining lifespan of the heating system or air-conditioning system and, where relevant, shall indicate possible alternatives for the replacement of the heating system or air-conditioning system, in line with the 2030 and 2050 climate targets.

(6) The evaluation of cost effectiveness shall–

(a) be based on a set of standard conditions, such as the assessment of energy savings and underlying energy prices and a preliminary cost forecast; and

(b) contain information on the steps to be taken to implement the recommendations.

(7) The competent authority may provide any other information on related topics, such as energy audits or incentives of a financial or other nature and financing possibilities to the owner or tenant.

(8) The competent authority shall encourage public authorities to take into account the leading role which they should play in the field of energy performance of buildings, inter alia, by implementing the recommendations included in the energy performance certificate issued for buildings owned by them within its validity period.

(9) Certification for building units may be based−

(a) on a common certification of the whole building; or

(b) on the assessment of another representative building unit with the same energy-relevant characteristics in the same building.

(10) Certification for single-family houses may be based on the assessment of another representative building of similar design and size with a similar actual energy performance quality if such correspondence can be guaranteed by the expert issuing the energy performance certificate.

(10A) The competent authority shall ensure that, where a building was issued an energy performance certificate below level C, building owners are invited to a one-stop shop to receive renovation advice on whichever of the following is the earlier-

(a) immediately after the energy performance certificate of the building expires; or

(b) five years after the issuance of the energy performance certificate.

(10B) The competent authority shall make simplified procedures for updating an energy performance certificate available where only individual elements are upgraded, by means of single or standalone measures.

(11) The validity of the energy performance certificate shall not exceed 10 years.

Issue of energy performance certificates.

13.(1) The competent authority shall ensure that a digital energy performance certificate is issued for−

(a) buildings or building units which are constructed have undergone a major renovation, sold or rented out to a new tenant or for which a rental contract has been renewed; and

(b) buildings where a total useful floor area over 500m^2 is occupied by a public authority and frequently visited by the public.

(2) On 9 July 2015, the threshold of 500m^2 referred to in subregulation (1)(b) shall be lowered to 250m^2.

(3) The requirement to issue an energy performance certificate under this regulation does not apply where a certificate, issued in accordance with either the Building (Energy Performance) Regulations 2010 or these Regulations, for the building or building unit concerned is available and valid.

(4) A person who constructs, carries out a major renovation, sells or rents out any building or any units of a building must show and hand over an energy performance certificate, or a copy thereof, to the buyer or prospective tenant, as the case may be.

(5) Where a building is sold or rented out in advance of construction or major renovation, the seller may provide an assessment of its future energy performance to the prospective new tenant or buyer as a derogation from subregulations (1) to (4) and in such case the energy performance certificate shall be issued at the latest once the building has been constructed.

(6) When−

(a) buildings having an energy performance certificate;

(b) building units in a building having an energy performance certificate; and

(c) building units having an energy performance certificate,

are offered for sale or for rent, the person offering the building or the unit of the building shall state the energy performance indicator of the energy performance certificate of the building or the building unit, as applicable, in the advertisements in commercial media.

(7) The provisions of this regulation, except subregulation (5), shall not apply to the categories of buildings referred to in regulation 5(8).

(8) Nothing in this regulation shall be construed as altering any subsisting property rights in relation to joint ownership or common property, whether they arise through statute or otherwise.

(8A) The competent authority shall carry out sample checks or other controls to ensure compliance with the requirements of this section.

(8B) The competent authority shall ensure that all energy performance certificates issued are uploaded to the database for the energy performance of buildings referred to in regulation 13A. The upload shall contain the full energy performance certificate, including all necessary data required for the calculation of the energy performance of the building.

Databases for energy performance of buildings.

13A.(1) The competent authority shall set up a database for energy performance certificates and the energy performance of buildings which allows data to be gathered on the energy performance of individual buildings and on the overall energy performance of Gibraltar's building stock.

(2) The database shall allow data to be gathered from all relevant sources related to energy performance certificates, inspections, renovation passports, smart readiness indicators and the calculated or measured energy consumption of the buildings covered.

(3) Data may also be gathered and stored on both operational and embodied emissions and life-cycle GWP.

(4) The aggregated and anonymised data of building stock shall be made publicly available, in compliance with applicable data protection laws.

(5) The data stored shall be machine-readable and accessible via an appropriate digital interface.

(6) The competent authority shall ensure easy and free-of-charge access to the full energy performance certificate for building owners, tenants and managers and to financial institutions as regards the buildings in their investment and lending portfolios.

(7) The competent authority shall make publicly available information on the share of buildings in Gibraltar's building stock covered by energy performance certificates and aggregated or anonymised data on the energy performance. The public information shall be updated at least twice per year.

Display of energy performance certificates.

14.(1) Where a total useful floor area over 500m^2 of a building for which an energy performance certificate has been issued in accordance with regulation 13(1) is occupied by public authorities and frequently visited by the public, the owner of the building shall display the energy performance certificate in a prominent place clearly visible to the public.

(2) On 9 July 2015, the threshold of 500m^2 referred to in subregulation (1) shall be lowered to 250m^2.

(3) Where a total useful floor area over 500m^2 of a building for which an energy performance certificate has been issued in accordance with regulation 13(1) is frequently visited by the public, the owner of the building shall display the energy performance certificate in a prominent place clearly visible to the public.

(4) The provisions of this regulation do not include an obligation to display the recommendations included in the energy performance certificate.

(5) The competent authority shall inspect buildings which fall under the scope of this regulation every six months.

Inspection of heating systems.

15.(1) The competent authority shall establish a regular programme of inspection of the accessible parts of heating systems or of systems for combined space heating and ventilation, with an effective rated output of over 70kW and shall publish details of the programme on its website.

(1A) The effective rating of the system shall be based on the sum of the rated output of the heat generators generators.

(1B) Systems shall be inspected every five years with systems with generators of an effective rated output of more that 290kW shall be inspected every three years.

(2) The inspection under subregulation (1) shall include an assessment of–

(a) the efficiency and sizing of the heat generator or generators and of their main components compared with the heating requirements of the building;

(b) the capabilities, where relevant, of the heating system or of the system for combined space heating and ventilation to optimise its performance under typical or average operating conditions;

(c) the feasibility of the system to operate under different and more efficient temperature settings; and

(d) where relevant, include a basic assessment of the feasibility to reduce on-site use of fossil fuels, for example by integrating renewable energy, changing energy source or replacing or adjusting the existing systems.

(3) The assessment of the heat generator sizing does not have to be repeated as long as no changes were made to the heating systems or the systems for combined space heating and ventilation of the building in the period since the last inspection.

(4) Technical building systems referred to in this regulation that are covered by-

(a) an agreed energy performance criterion;

(b) a contractual arrangement specifying an agreed level of energy efficiency improvement or performance; or

(c) performance monitoring measures on the system side,

shall be exempt from the requirements of subregulation (1), provided that the overall impact of such an approach is equivalent to that resulting from subregulation (1).

(5) The competent authority shall ensure that, where technically, functionally and economically feasible, the owners of non residential buildings with an effective rated output for heating systems or for systems for combined space heating and ventilation of over 290kW equip the building with building automation and control systems by 2025.

(6) The building automation and control systems referred to in subregulation (5), shall be capable of-

(a) continuously monitoring, logging, analysing and allowing for adjusting energy use;

(b) benchmarking the building's energy efficiency;

(c) detecting losses in the efficiency of technical building systems;

(d) providing energy efficiency improvement information;

(e) allowing communication with connected technical building systems and other appliances inside the building; and

(f) being interoperable with technical building systems across different types of proprietary technologies, devices and manufacturers.

(7) The competent authority shall ensure that residential buildings are equipped with-

(a) the functionality of continuous electronic monitoring that measures the efficiency of the systems found therein and informs the owners or managers when it has fallen significantly and when system servicing is necessary; and

(b) effective control functionalities to ensure optimum generation, distribution, storage and use of energy.

(8) Buildings that comply with subregulations (5) and (7) shall be exempt from the requirements of subregulation (1).

Inspection of air-conditioning systems.

16.(1) The competent authority shall establish a regular programme of inspection of the accessible parts of air conditioning systems or systems for combined air-conditioning and ventilation, with an effective rated output of over 70kW and shall publish details of the programme on its website.

(1A) The effective rating of the system shall be based on the sum of the rated output of the heat generators.

(1B) Systems shall be inspected every five years with systems with generators of an effective rated output of more that 290kW shall be inspected every three years.

(2) The inspection under subregulation (1) shall include an assessment of–

(a) the efficiency and sizing of the air-conditioning system compared with the cooling requirements of the building;

(b) the capabilities, where relevant, of the air-conditioning system or generators and of their main components or of the system for combined air-conditioning and ventilation to optimise its performance under typical or average operating conditions;

(c) the feasibility of the system to operate under different and more efficient temperature settings; and

(d) where relevant, include a basic assessment of the feasibility to reduce on-site use of fossil fuels, for example by integrating renewable energy, changing energy source or replacing or adjusting the existing systems.

(3) The assessment of the air-conditioning sizing does not have to be repeated as long as no changes were made to the air-conditioning systems or the system for combined air-conditioning and ventilation of the building in the period since the last inspection.

(4) Technical building systems referred to in this regulation that are covered by-

(a) an agreed energy performance criterion;

(b) a contractual arrangement specifying an agreed level of energy efficiency improvement or performance; or

(c) performance monitoring measures on the system side,

shall be exempt from the requirements of subregulation (1), provided that the overall impact of such an approach is equivalent to that resulting from subregulation (1).

(5) The competent authority shall ensure that, where technically, functionally and economically feasible, the owners of non residential buildings with an effective rated output for air-conditioning systems or for systems for combined air-conditioning and ventilation of over 290kW equip the building with building automation and control systems by 2025.

(6) The building automation and control systems referred to in subregulation (5), shall be capable of-

(a) continuously monitoring, logging, analysing and allowing for adjusting energy use;

(b) benchmarking the building's energy efficiency;

(c) detecting losses in the efficiency of technical building systems;

(d) providing energy efficiency improvement information;

(e) allowing communication with connected technical building systems and other appliances inside the building; and

(f) being interoperable with technical building systems across different types of proprietary technologies, devices and manufacturers.

(7) The competent authority shall ensure that residential buildings are equipped with-

(a) the functionality of continuous electronic monitoring that measures the efficiency of the systems found therein and informs the owners or managers when it has fallen significantly and when system servicing is necessary; and

(b) effective control functionalities to ensure optimum generation, distribution, storage and use of energy.

(8) Buildings that comply with subregulations (5) and (7) shall be exempt from the requirements of subregulation (1).

Reports on the inspection of heating and air-conditioning systems.

17.(1) An inspection report shall be issued after each inspection of a heating, ventilation or air-conditioning system and the inspection report shall contain the result of the inspection performed in accordance with regulation 15 or 16 and include recommendations for the cost-effective improvement of the energy performance of the inspected system.

(2) The recommendations referred to in subregulation (1) may be based on a comparison of the energy performance of the system inspected with that of the best available feasible system, using energy saving technologies and a system of similar type for which all relevant components achieve the level of energy performance required by the applicable legislation.

(2A) The recommendations in subregulation (1) shall contain, where relevant, the results from the basic assessment of the feasibility to reduce on-site use of fossil fuels.

(2B) The inspection report shall be uploaded to the database for the energy performance of buildings pursuant to regulation 13A.

(3) The inspection report issued under this regulation shall be handed over to the owner or tenant of the building.

(4) The owner of a building must make available to the competent authority any inspection report issued under subregulation (1).

Energy assessors.

18.(1) The competent authority shall ensure that the energy performance certification of buildings the establishment of renovation passports, any smart readiness assessment and the inspection of heating systems, ventilation systems and air-conditioning systems are carried out

in an independent manner by qualified or accredited experts who shall be known as energy assessors.

(2) An energy assessor whether operating in a self-employed capacity or employed by a public authority or a private enterprise shall be qualified or accredited in accordance with regulation 19.

(3) The assessors shall be accredited taking into account their competence.

(4) The competent authority shall make publically available a list of qualified or accredited energy assessors and shall publish the list on its website.

Accreditation schemes.

19.(1) An energy assessor shall be a member of an accreditation scheme approved by the Minister.

(2) The terms of approval of any accreditation scheme may be limited in relation to−

(a) the categories of building for which members may produce certificates; and

(b) the types of air-conditioning systems members may inspect.

(3) Before approving an accreditation scheme the Minister must be satisfied that the scheme contains adequate provision for−

(a) preparation and issuing of energy performance certificates;

(b) preparation and issuing of recommendation reports;

(c) preparation and issuing of display energy certificates;

(d) preparation and issuing of inspection reports; and

(e) carrying out of any inspections undertaken for the purposes of preparing any of the documents referred to in paragraphs (a) to (d).

(4) Every energy assessor shall carry out energy assessments with reasonable care and skill.

(5) The duty imposed by subregulation (4) shall be enforceable by the following persons−

(a) preparation and issuing of energy performance certificates;

(b) preparation and issuing of recommendation reports;

(c) preparation and issuing of display energy certificates;

(d) preparation and issuing of inspection reports; and

(e) carrying out of any inspections undertaken for the purposes of preparing any of the documents referred to in paragraphs (a) to (d).

(6) The competent authority shall regularly update the list of–

(a) qualified energy assessors;

(b) accredited energy assessors; and

(c) accredited companies which offer the services of such assessors.

(7) The competent authority shall make available to the public−

(a) information on training and accreditations of energy assessors; and

(b) the lists prepared under subregulation (6).

(8) In this regulation and regulation 18, a reference to "energy assessment" includes a reference to the−

(a) preparation and issuing of energy performance certificates;

(b) preparation and issuing of recommendation reports;

(c) preparation and issuing of display energy certificates;

(d) preparation and issuing of inspection reports; and

(e) carrying out of any inspections undertaken for the purposes of preparing any of the documents referred to in paragraphs (a) to (d).

Independent control system.

20.(1) The competent authority shall ensure that independent control systems for energy performance certificates and reports on the inspection of heating and air-conditioning systems

are established in accordance with Schedule 2 and shall publish the details of such systems on its website.

(2) The competent authority may establish separate systems for the control of energy performance certificates and for the control of reports on the inspection of heating and air-conditioning systems.

(3) The energy performance certificates, renovation passports, smart readiness indicators and the inspection reports referred to in subregulation (1) shall be made available to the competent authority on request.

Information.

21.(1) The competent authority shall take the necessary measures to inform the owners or tenants of buildings or building units of the different methods and practices that serve to enhance energy performance.

(1A) The competent authority shall take the necessary measures to provide tailor made information to vulnerable households.

(2) The competent authority shall in particular provide information to the owners or tenants of buildings on energy performance certificates and inspection reports, their purpose and objectives, on cost-effective ways to improve the energy performance of the building and, where appropriate, on financial instruments available to improve the energy performance of the building, and on replacing fossil fuel boilers with more sustainable alternatives.

(2A) The competent authority shall provide the information in subregulation (2) through renovation advice, one-stop shops or other accessible and transparent advisory tools as it may determine.

(3) The competent authority shall ensure that guidance and training are made available for those responsible for implementing these Regulations and such guidance and training shall−

(a) address the importance of improving energy performance; and

(b) enable consideration of the optimal combination of improvements in energy efficiency, reduction of greenhouse gas emissions, use of energy from renewable sources and use of district heating and cooling when planning, designing, building and renovating industrial or residential areas.

Consultation.

22. In order to facilitate the effective implementation of these Regulations, the competent authority shall consult the stakeholders involved, such consultation being of particular importance for the application of regulations 10 and 21.

Offences and penalties.

23.(1) A person who contravenes subregulation (1), (2) or (3) of regulation 7, subregulation (1), (2) or (3) of regulation 8, subregulation (4), (5) or (6) of regulation 13 or subregulation (1) or (3) of regulation 14 commits an offence.

(1A) A person who –

(a) applies a methodology other than that set out in regulation 4 for the purpose of calculating the energy performance of buildings;

(b) without reasonable excuse, refuses to conduct an inspection pursuant to regulations 15 or 16; or

(c) refuses to make an inspection report available to the competent authority in accordance with regulation 17(4),

commits an offence.

(2) A person who commits an offence under subregulation (1) or (1A) is liable on summary conviction-

(a) if the defendant is a natural person, to a fine not exceeding level 5 on the standard scale; and

(b) if the defendant is a corporate body, to a maximum fine of 12.5% of the rateable value of the building subject to a minimum fine fixed at level 5 on the standard scale.

Liability of bodies corporate.

24.(1) The competent authority shall ensure that independent control systems for energy performance certificates, renovation passports, smart readiness indicators and reports on the inspection of heating systems, ventilation systems and air-conditioning systems are established in accordance with Schedule 2 and shall publish the details of such systems on its website.

(2) The competent authority may establish separate systems for the control of energy performance certificates, renovation passports, smart readiness indicators and reports on the inspection of heating systems, ventilation systems and air-conditioning systems.

(3) A corporate body shall be liable for an offence under these Regulations committed by a person referred to in subregulation (1) where lack of supervision or control by that person has made possible the commission of the offence for the benefit of the corporate body by a person under its authority.

(4) Where a corporate body is guilty of an offence under these Regulations and that offence 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 referred to in subregulation (1), or any person who was purporting to act in any such capacity, that person, as well as the corporate body, shall be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

(5) Where the affairs of a corporate body are managed by its members, subregulation (4) shall apply in relation to the acts and defaults of a member in connection with his functions of management as if he were a director of the corporate body.

(6) A fine imposed on an unincorporated association on its conviction for an offence shall be paid out of the funds of the association.

Repeal.

25. The Building (Energy Performance) Regulations 2010 are repealed.

Savings and transitional provisions.

26. Any energy performance certificate issued, reports made or actions taken under the Regulations repealed by regulation 24 prior to the coming into operation of these Regulations shall be deemed to have been issued, made or taken under these Regulations.

Monitoring and commencement.

27.(1) The competent authority shall monitor whether deferral of the commencement of regulation 13(1) to (4) results in fewer certificates being issued than would have been the case under application of the Regulations repealed by regulation 24.

(2) Where, pursuant to subregulation (1) the competent authority has reason to believe that fewer certificates may be issued in the circumstances set out therein, the competent authority shall inform the Minister.

(3) Where the Minister is informed by the competent authority pursuant to subregulation (2) the Minister shall take such steps as are necessary to rectify the matter.

SCHEDULE 1

Regulation 4

Common general framework for the calculation of energy performance of buildings.

1. The energy performance of a building shall be determined on the basis of calculated or actual energy use and shall reflect typical energy use for space heating, space cooling, domestic hot water, ventilation, built-in lighting and other technical building systems.

The energy performance of a building shall be expressed by a numeric indicator of primary energy use in kWh/(m².y) for the purpose of both energy performance certification and compliance with minimum energy performance requirements. The methodology applied for the determination of the energy performance of a building shall be transparent and open to innovation.

The competent authority shall describe its calculation methodology following applicable retained EU law and Gibraltar legislation of the overarching standards.

(1A) Where measured energy use is the basis for calculating the energy performance of buildings, the calculation methodology shall be capable of identifying the influence of the behaviour of occupants and the local climate, which shall not be reflected in the result of the calculation. Measured energy use for the purpose of calculating the energy performance of buildings shall require readings of at least monthly intervals and must differentiate between energy carriers.

(1B) The competent authority may use measured energy consumption under typical operating conditions to verify the correctness of the calculated energy use and enable comparison between calculated and actual performance.

2. The energy needs for space heating, space cooling, domestic hot water, ventilation, lighting and other technical building systems shall be calculated in order to optimise health, indoor air quality and comfort levels, as may be defined by the competent authority.

The calculation of primary energy shall be based on primary energy factors or weighting factors per energy carrier, which may be based on national, regional or local annual, weighted averages or on more specific information made available.

Primary energy factors or weighting factors shall be defined by the competent authority. In the application of those factors to the calculation of energy performance, the competent authority shall ensure that the optimal energy performance of the building envelope is pursued.

In the calculation of the primary energy factors for the purpose of calculating the energy performance of buildings, the competent authority may take into account renewable energy sources supplied through the energy carrier and renewable energy sources that may be generated and used on-site, provided that it applies on a non-discriminatory basis."

2A. For the purpose of expressing the energy performance of a building, the competent authority may define additional numeric indicators of total, non-renewable and renewable primary energy use, and of greenhouse gas emission produced in $kgCO_2eq/(m^2.y)$.

3. The methodology shall be laid down taking into consideration at least the following aspects−

(a) the following actual thermal characteristics of the building including its internal partitions−

(i) thermal capacity;

(ii) insulation;

(iii) passive heating;

(iv) cooling elements; and

(v) thermal bridges;

(b) heating installation and hot water supply, including their insulation characteristics;

(c) air-conditioning installations;

(d) natural and mechanical ventilation which may include air-tightness;

(e) built-in lighting installation (mainly in the non-residential sector);

(f) the design, positioning and orientation of the building, including outdoor climate;

(g) passive solar systems and solar protection;

(h) indoor climatic conditions, including the designed indoor climate;

(i) internal loads;

(j) capacity of installed on-site renewable energy generation and energy storage;

(k) building automation and control systems and their capabilities to monitor, control and optimise energy performance.

4. The positive influence of the following aspects shall be taken into account.

(a) local solar exposure conditions, active solar systems and other heating and electricity systems based on energy from renewable sources;

(b) electricity produced by cogeneration;

(c) district or block heating and cooling systems;

(d) natural lighting;

(e) electrical storage systems;

(f) thermal storage systems;

5. For the purpose of the calculation, buildings should be adequately classified into the following categories−

(a) single-family houses of different types;

(b) apartment blocks;

(c) offices;

(d) educational buildings;

(e) hospitals;

(f) hotels and restaurants;

(g) sports facilities;

(h) wholesale and retail trade services buildings;

(i) other types of energy-consuming buildings.

SCHEDULE 2

Regulation 20

Independent control systems for energy performance certificates and inspection reports.

1. The competent authority shall make a random selection of all the energy performance certificates, renovation passports and smart readiness indicators issued annually and subject those certificates to verification. The sample shall be of a sufficient size to ensure significant compliance results.

The verification shall be based on the options indicated below or on equivalent measures−

(a) validity check of the input data of the building used to issue the energy performance certificate and the results stated in the certificate;

(b) check of the input data and verification of the results of the energy performance certificate, including the recommendations made;

(c) full check of the input data of the building used to issue the energy performance certificate, full verification of the results stated in the certificate, including the recommendations made, and on-site visit of the building, if possible, to check correspondence between specifications given in the energy performance certificate and the building certified.

1A. The validity of the input data shall be verified by on-site visits, which may be carried out by virtual means, where appropriate in at least 10% of the energy performance certificates that are part of the random sampling used to assess the overall quality of the scheme.

2. The competent authority shall make a random selection of at least a statistically significant percentage of all the inspection reports issued annually and subject those reports to verification.

2A. The independent control system shall verify the availability of energy performance certificates to prospective buyers and tenants in order to ensure that it is possible to consider the energy performance of the building in their decision to buy or rent.

2B. The independent control system shall verify the visibility of the energy performance indicator and class in advertising media.

2C. The independent control system shall account for different building typologies, particularly for building typologies that are most prevalent in the real estate market.

3. Where information is added to a database it shall be possible for the competent authority to identify the originator of the addition, for monitoring and verification purposes.

SCHEDULE 3

Regulation 3A

Template for the Gibraltar building renovation plans

Regulation 3A(2)	Mandatory indicators	Optional indicators
(a)Overview of the national building stock	Number of buildings and total floor area (m^2): —per building type (including public buildings and social housing) —per energy performance class —nearly zero-energy buildings —worst-performing buildings (including a definition) —the 43 % worst-performing residential buildings —estimation of the share of buildings exempted pursuant to regulation 8A	Number of buildings and total floor area (m^2): — per building age — per building size — per climatic zone —demolition (number and total floor area (m^2))
	Number of energy performance certificates: —per building type (including public buildings) —per energy performance class	Number of energy performance certificates: — per construction period
	Annual renovation rates: number and total floor area (m^2) — per building type —to nearly zero-energy and/or to zero-emission building levels —per renovation depth (weighted average renovation) — public buildings	
	Primary and final annual energy consumption (ktoe): — per building type — per end use Energy savings (ktoe): — residential buildings — non-residential buildings — public buildings	Reduction in energy costs (EUR) per household (average) Primary energy use of a building corresponding to the top 15 % (substantial contribution threshold) and the top 30 % (do no significant harm threshold) of the national building stock.

	Average primary energy use in kWh/(m^2.y) for residential buildings Share of renewable energy in the building sector (MW installed or GWh generated): — for different uses	Share of heating system in the building sector per boiler/heating system type Share of renewable energy in the building sector (MW installed or GWh generated): — on-site — off-site
	Annual operational greenhouse gas emissions ($kgCO_2eq/(m^2.y)$): — per building type Annual operational greenhouse gas emission reduction ($kgCO_2eq/(m^2.y)$): — per building type	Life-cycle GWP ($kgCO_2eq/m^2$) in new buildings: — per building type
	Market barriers and failures (description): — split incentives —capacity of construction and energy sector Evaluation of the capacities in the construction, energy efficiency and renewable energy sectors	Market barriers and failures (description): — administrative — financial — technical — awareness — other Number of: — energy service companies — construction companies — architects and engineers — skilled workers — one-stop shops —SMEs in the construction/renovation sector —renewable energy communities and citizen-led renovation initiatives Projections of the construction workforce: —retiring architects/engineers/skilled workers —architects/engineers/skilled workers entering the market — young people in the sector — women in the sector

		Overview and forecast of the evolution of prices of construction materials and national market developments
	Energy poverty (definition): —% of people affected by energy poverty —proportion of disposable household income spent on energy —population living in inadequate dwelling conditions (e.g. leaking roof) or with inadequate thermal comfort conditions	
	Primary energy factors: — per energy carrier —non-renewable primary energy factor —renewable primary energy factor — total primary energy factor	
	Definition of nearly-zero energy building for new and existing buildings	Overview of the legal and administrative framework
	Cost-optimal minimum energy performance requirements for new and existing buildings	
(b)Roadmap for 2030, 2040, 2050	Targets for annual renovation rates: number and total floor area (m^2): — per building type — worst-performing buildings —the 43 % worst-performing residential buildings Information pursuant to regulation 8A: —criteria to exempt individual non-residential buildings —estimated share of exempted non-residential buildings —estimation of equivalent energy performance improvements due to exempted non-residential buildings	Targets for expected share (%) of renovated buildings: — per building type — per renovation depth

	Targets for expected primary and final annual energy consumption (ktoe): — per building type — per end use Expected energy savings: — per building type Targets for the increase in the share of renewable energy Numerical targets for the deployment of solar energy in buildings	Share of energy from renewable sources in the building sector (MW installed or GWh generated)
	Targets for expected operational greenhouse gas emissions ($kgCO_2eq/(m^2.y)$): — per building type Targets for expected operational greenhouse gas emission reduction (%): — per building type	Split between emissions covered stationary installations, emissions trading system for buildings, road transport and additional sectors, and other stock; Targets for expected whole-life-cycle greenhouse gas emission ($kgCO_2eq/(m^2.y)$) in new buildings: — per building type
	Expected wider benefits: —% reduction of people affected by energy poverty	— Creation of new jobs —Increase in GDP (share and billion euros)
	The Gibraltar's contribution to energy efficiency targets in accordance with the Environmental Protection (Energy Efficiency) Act 2009 attributable to its building stock's renovation (share and figure in ktoe)	
	The Gibraltar's contribution to renewable energy targets attributable to its building stock's renovation (share, MW installed or GWh generated)	
(c)Overview of implemented and planned policies and measures	Policies and measures with regard to the following elements: (a)the identification of cost-effective approaches to renovation for different building types and climatic zones,	Policies and measures with regard to the following elements: (a)the increase in the climate resilience of buildings; (b)the promotion of the energy services market;

	considering potential relevant trigger points in the life cycle of the building; (b)national minimum energy performance standards pursuant to regulation 8A and other policies and actions to target the worst-performing segments of the national building stock. (c)the promotion of deep renovation of buildings, including staged deep renovation; (d)empowering and protecting vulnerable customers and the alleviation of energy poverty, including policies and measures pursuant to the Environmental Protection (Energy Efficiency) Act 2009, and housing affordability; (e)the creation of one-stop shops or similar mechanisms pursuant to A for the provision of technical, administrative and financial advice and assistance; (f)the decarbonisation of heating and cooling, including through district heating and cooling networks, and the phasing out of fossil fuels in heating and cooling with a view to a complete phasing out of fossil fuel boilers by 2040; (g)prevention and high-quality treatment of construction and demolition waste, in particular as regards the waste hierarchy, and the objectives of the circular economy; (h)the promotion of renewable energy sources in buildings in	(c) the increase in fire safety; (d)the increase in resilience against disaster risks, including risks related to intense seismic activity; (e)the removal of hazardous substances including asbestos; (f)accessibility for persons with disabilities; (g)the role of renewable energy communities and citizen energy communities in district and neighbourhood approaches; (h)addressing mismatches in human capacities; and (i)addressing the improvement of indoor environmental quality. For all policies and measures: —administrative resources and capacities — area(s) covered — worst-performing —minimum energy performance standards —energy poverty, social housing — public buildings —residential (single-family, multi-family) — non-residential — industry — renewable energy sources —phasing out of fossil fuels in heating and cooling —whole-lifecycle greenhouse gas emissions — circular economy and waste — one-stop shops — renovation passports — smart technologies —sustainable mobility in buildings —district and neighbourhood approaches — skills, training

	line with the indicative target for the share of energy from renewable sources in the building sector; (i) the deployment of solar energy installations on buildings; (j) the reduction of whole-life-cycle greenhouse gas emissions for the construction, renovation, operation and end of life of buildings, and the uptake of carbon removals; (k) the promotion of district and neighbourhood approaches and integrated renovation programmes at district level, which may address issues such as energy, mobility, green infrastructure, waste and water treatment and other aspects of urban planning and may take into account local and regional resources, circularity and sufficiency; (l) the improvement of buildings owned by public bodies, including policies and measures pursuant to the Environmental Protection (Energy Efficiency) Act 2009; (m) the promotion of smart technologies and infrastructure for sustainable mobility in buildings; (n) addressing market barriers and market failures; (o) addressing skills gaps and promoting education, targeted training, upskilling and reskilling in the construction sector and energy efficiency and renewable energy sectors	—awareness campaigns and advisory tools

	(whether public or private), with a view to ensuring that there is a sufficient workforce with the appropriate level of skills corresponding to the needs in the building sector, with a special focus on the underrepresented groups; (p)awareness-raising campaigns and other advisory tools; and (q)promotion of modular and industrialised solutions for construction and building renovation. For all policies and measures: — name of policy or measure —short description (precise scope, objective and conditions of operation) — quantified objective —type of policy or measure (such as legislative; economic; fiscal; training, awareness) —planned budget and funding sources —entities responsible for implementing the policy — expected impact — status of implementation — date of entry into force — implementation period	
(d)Outline of the investment needs, the budgetary sources and the administrative resources	—total investment needs for 2030, 2040, 2050 — public investments — private investments — budgetary resources	
(e)Thresholds of new and renovated zero-emission buildings,	—operational greenhouse gas emissions thresholds of new zero-emission buildings; —operational greenhouse gas emissions thresholds of	

referred to in regulation 10A	renovated zero-emission buildings; —annual primary energy use thresholds of new zero-emission buildings; —annual primary energy use thresholds of renovated zero-emission buildings	
(f)Minimum energy performance standards for non-residential buildings	—maximum energy performance thresholds, pursuant to regulation 8A	
(g)National trajectory for the progressive renovation of the residential building stock	—the national trajectory for the progressive renovation of the residential building stock, including the 2030 and 2035 milestones for average primary energy use in kWh/(m^2.y), pursuant to regulation 8A	

SCHEDULE 4

Regulation 7

Calculation of life-cycle GWP of new buildings

For the calculation of the life-cycle GWP of new buildings, the total life-cycle GWP is communicated as a numeric indicator for each life-cycle stage expressed as $kgCO_2eq/(m^2)$ (of useful floor area) calculated over a reference study period of 50 years. The data selection, scenario definition and calculations shall be carried out in accordance with EN 15978 (EN 15978:2011 Sustainability of construction works. Assessment of environmental performance of buildings. Calculation method) and taking into account any subsequent standard relating to the sustainability of construction works and the calculation method for the assessment of environmental performance of buildings. The scope of building elements and technical equipment is as defined in the Level(s) common EU framework for indicator 1.2. Where a national calculation tool or method exists, or is required for making disclosures or for obtaining building permits, that tool or method may be used to provide the required disclosure. Other calculation tools or methods may be used if they fulfil the minimum criteria established by the Level(s) common EU framework.

SCHEDULE 5

Regulation 8C

Requirements for renovation passports

1. The renovation passport shall include:

(a) information on the current energy performance of the building;

(b) a graphical representation or graphical representations of the roadmap and its steps for a staged deep renovation;

(c) information on relevant national requirements such as minimum energy performance requirements for buildings, minimum energy performance standards and rules in Gibraltar on the phasing out of fossil-fuel used in buildings for heating and cooling, including application dates;

(d) a succinct explanation on the optimal sequencing of steps;

(e) information about each step, including-

(i) the name and description of the renovation measures for the step, including relevant options for the technologies, techniques and materials to be used;

(ii) the estimated energy savings in primary and final energy consumption, in kWh and in percentage improvement compared to the energy consumption prior to the step;

(iii) the estimated reduction of operational greenhouse gas emissions;

(iv) the estimated savings on the energy bill, clearly indicating the assumptions on energy costs used for the calculation;

(v) the estimated energy performance class of the energy performance certificate to be achieved following completion of the step;

(f) information about a potential connection to an efficient district heating and cooling system;

(g) the share of individual or collective generation and self-consumption of renewable energy estimated to be achieved after the renovation;

(h) general information on available options for improving construction products' circularity and for reducing their whole-life-cycle greenhouse gas emissions, as well as wider benefits related to health and comfort, indoor environmental quality and the improved adaptive capacity of the building to climate change;

(i) information on available funding and links to the relevant web pages indicating the sources of such funding;

(j) information on technical advice and advisory services, including contact details and links to the web pages of one-stop shops.

2. The renovation passport may include-

(a) an indicative timing of the steps;

(b) for each step-

(i) a detailed description of the technologies, techniques and materials to be used, their advantages, disadvantages and costs;

(ii) how the energy performance of the building would compare to minimum energy performance requirements for buildings undergoing major renovation, nearly zero-energy building and zero-emission building requirements after completion of the step and how the energy performance of the building elements replaced would compare to minimum energy performance requirements for single building elements, where these exist;

(iii) the estimated costs for carrying out the step;

(iv) the estimated payback period for the step, with and without any available financial support;

(v) the estimated time needed to carry out the step;

(vi) where available, the reference values on the life-cycle greenhouse gas emissions for the materials and equipment and links to the relevant web pages where they can be found;

(vii) the estimated lifetime of measures and the estimated maintenance costs;

(c) independent modules on:

(i) the typical trades necessary or recommended for carrying out energy renovations (architects, advisors, contractors, suppliers and installer, etc.) or links to the relevant web pages;

(ii) a list of relevant architects, advisors, contractors, suppliers or installers in the area, that may include only those fulfilling certain conditions such as matching higher qualification or certification labels or conditions, or links to the relevant web pages;

(iii) the technical conditions needed for an optimal roll-out of low temperature heating;

(iv) how the renovation steps and additional measures could improve the smart readiness of a building;

(v) technical and safety requirements for materials and works;

(vi) the underlying assumptions behind the calculations provided or links to the relevant web page where they can be found;

(d) information on how to access a digital version of the renovation passport;

(e) any major renovations made to the building or building unit, as referred to in Article 8(1), and any retrofitting or replacement of a building element that forms part of the building envelope and which has a significant impact on the energy performance of the building envelope, as referred to in Article 8(2), where such information is made available to the expert carrying out the renovation passport;

(f) information related to seismic safety, where such information relevant to the building is made available to the expert;

(g) upon request of and on the basis of information made available by the current building owner, an attachment containing additional information, such as the adaptability of spaces to evolving needs and any planned renovations.

3. Regarding the status of the building prior to the renovation steps, the renovation passport shall consider, to the extent possible, information contained in the energy performance certificate.

4. Each metric used for estimating the impact of steps shall be based on a set of standard conditions.

SCHEDULE 6

Regulation 12

Template for energy performance certificates

1. On its front page, the energy performance certificate shall display at least the following elements-

(a) the energy performance class;

(b) the calculated annual primary energy use in kWh/(m^2.y);

(c) the calculated annual final energy use in kWh/(m^2.y);

(d) renewable energy produced on-site in % of energy use;

(e) operational greenhouse gas emissions ($kgCO_2$/(m^2.y)), and the value of the life-cycle GWP, if available.

2. The energy performance certificate shall also display the following elements-

(a) the calculated annual primary and final energy consumption in kWh or MWh;

(b) renewable energy production in kWh or MWh; main energy carrier and type of renewable energy source;

(c) the calculated energy needs in kWh/(m^2.y);

(d) a yes/no indication whether the building has a capacity to react to external signals and adjust the energy consumption;

(e) a yes/no indication whether the heat distribution system inside the building is capable to work at low or more efficient temperature levels, where applicable;

(f) the contact information of the relevant one-stop shop for renovation advice.

3. In addition, the energy performance certificate may include the following indicators-

(a) energy use, peak load, size of generator or system, main energy carrier and main type of element for each of the uses: heating, cooling, domestic hot water, ventilation and in-built lighting;

(b) the greenhouse gas emission class (if applicable);

(c) information on carbon removals associated to the temporary storage of carbon in or on buildings;

(d) a yes/no indication whether a renovation passport is available for the building;

(e) the average U-value for the opaque elements of the building envelope;

(f) the average U-value for the transparent elements of the building envelope;

(g) type of most common transparent element (e.g. double-glazed window);

(h) results of the analysis on overheating risk (if available);

(i) the presence of fixed sensors that monitor the indoor environmental quality;

(j) the presence of fixed controls that respond to the levels of indoor environmental quality;

(k) number and type of recharging points for electric vehicles;

(l) presence, type and size of energy storage systems;

(m) expected remaining lifespan of the heating or air-conditioning systems and appliances, where applicable;

(n) feasibility of adapting the heating system to operate at more efficient temperature settings;

(o) feasibility of adapting the domestic hot-water system to operate at more efficient temperature settings;

(p) feasibility of adapting the air-conditioning system to operate at more efficient temperature settings;

(q) measured energy consumption;

(r) whether there is a connection to a district heating and cooling network, and, if available, information about a potential connection to an efficient district heating and cooling system;

(s) local primary energy factors and related carbon emission factors of the connected heating and cooling network;

(t) operational fine particulate matter ($PM_{2,5}$) emissions.

4. The energy performance certificate may include the following links with other initiatives if these apply in Gibraltar-

(a) a yes/no indication whether a smart readiness assessment has been carried out for the building;

(b) where available, the value of the smart readiness assessment;

(c) a yes/no indication whether a Digital Building Logbook is available for the building.