



## The Energy Performance of Buildings Directive

What are the key implications arising  
from the proposed revision?



# Introduction

The proposed revision to the Energy Performance of Buildings Directive (EPBD) is part of the European Commission's 2nd Fit for 55 package released in December 2021. The aim of the two Fit for 55 packages is to translate the European Green Deal's vision for a climate neutral Europe by 2050 into policy terms, specifically focusing on energy and transport. The proposal for a revised EPBD introduced the new aim to significantly increase renovation rates of existing buildings, and ultimately achieve a zero-emission EU building stock by 2050. The proposed revision also ties into other EU initiatives such as the Renovation Wave and the New European Bauhaus.

The Malta Business Bureau (MBB) and Deloitte Malta recognise the important role that the EU building stock plays in the road towards climate neutrality by 2050. A gradual transition towards zero-emission buildings and higher efficiency standards should be welcomed as an opportunity to finally address a sector which has been lagging in terms of improvement in energy performance, and which can also translate into economic gains such as cost savings, new technology markets, and high-skill job creation. Despite the benefits which such a transition will reap, it also poses several serious challenges which should not be taken lightly.

# Technical aspects of the EPBD proposal in the Maltese context

Notwithstanding respective EU Council and European Parliament Positions, and the ensuing negotiations, the Commission's text for a revised EPBD has put forward several targets and thresholds which existing and future buildings need to meet. This report shall consider the targets set out in the original Commission text as a baseline for the proposal.

In terms of new buildings, the proposal introduces a relatively short cut-off date, with all new buildings constructed after 1 January 2030 needing to be zero-emission. This applies to both commercial and residential buildings. New public buildings need to meet an even shorter cut-off date, standing at 1 January 2027. The definition of a zero-emission building according to the Commission text is a building with a high level of energy performance (set at no more than 60kwh/m<sup>2</sup> for residential and 70 kwh/m<sup>2</sup> for commercial), which meets its energy demand through renewable energy generation on-site, through an energy community, or through a district heating and cooling system. The kwh figures are based on our geographical location category (Mediterranean). Thus, the definition includes aspects relating to both energy efficiency and renewable

energy. The former relates to consuming less energy for the same level of output, consequently making the process more efficient. Meanwhile, renewable energy includes aspects such as solar energy as greener sources of energy production. The proposal is also targeting existing buildings, which naturally make up the bulk of the national building stock. The initial focus shall be on the worst performing buildings, which correspond to the bottom 15% performers, and which are granted an energy rating of 'G' for classification purposes. This rating is reflected on the building's Energy Performance Certificate (EPC). In order to gradually bring all buildings in the EU up to standards in terms of energy performance, commercial buildings classified as class 'G' will need to be renovated to meet a higher energy rating by 2027, and again one rating higher by 2030. Further improvements will be planned down the line. The proposed classification system runs from G to A, with the latter corresponding to zero-emission buildings, which is the ultimate end goal of the revised EPBD.

The renovation measures needed will vary according to the building type in question, and what measures had been

already implemented in the design phase or retrofitted. However, most energy efficiency measures will fall under heating and cooling, lighting systems, ventilation, and heating of water. Thus, interventions on these fronts will need to be implemented to achieve higher energy class ratings and comply with the proposed EPBD standards. In terms of renewable energy, main investments will relate to solar panels and solar water heaters on roofs.

The proposal empowers national governments themselves to set the penalties applicable for building owners in cases of infringement and/or non-compliance with the requirements stemming out of the proposed revised EPBD, arguing that the penalties should be effective, proportionate, and dissuasive. Review of the situation regarding Malta raises several points that render these targets difficult and, in some cases, impracticable to reach. In addition, the costs for retrofitting existing buildings would be high and financial support is needed to put these into effect.



### Current situation for commercial buildings

EPC data was provided by the Building & Construction Authority (BCA). Data was also extracted from Gatt, D., Yousif, C., Barbara, C., Caruana, T. F., & Degiorgio, M. (2019) EPBD cost-optimal analysis for non-residential buildings in Malta. Data from the BCA was divided into EPCs of existing Commercial buildings, and New or planned Commercial buildings, split by type of commercial operation. This includes namely Shops, Offices, Restaurants, Schools, Hotels, Other Accommodation, Hospitals, Nursing Homes, and Sport Centres. EPC data for factories and industrial installations was not available.

Qty of EPCs reviewed						
	Existing		New		Total	
<b>Shops</b>	1,954.21	73%	722.79	27%	2677	54%
<b>Offices</b>	900.00	75%	300.00	25%	1200	24%
<b>Restaurants</b>	407.43	81%	95.57	19%	503	10%
<b>Schools</b>	304.00	76%	96.00	24%	400	8%
<b>Hotels</b>	49.00	70%	21.00	30%	70	1%
<b>Other</b>	30.03	77%	8.97	23%	39	1%
<b>Hospitals</b>	22.08	92%	1.92	8%	24	0%
<b>Homes</b>	4.98	83%	1.02	17%	6	0%
<b>Sports</b>	70.00	100%	-	0%	70	1%
	<b>4,041.09</b>	<b>81%</b>	<b>947.91</b>	<b>19%</b>	<b>4989</b>	<b>100%</b>

As can be seen in the table above, the majority of EPCs in terms of overall quantity (for both existing and new buildings) are Shops and Offices, standing at 54% and 24% respectively. One also has to consider the floor size in square meters, which varies between categories of buildings. Schools have the largest total area overall with 1,030,400 m<sup>2</sup> followed by Shops with 953,012 m<sup>2</sup> and Offices with 831,600 m<sup>2</sup>.

Size in m <sup>2</sup>				
	Existing	New	Average	Total
<b>Shops</b>	375	307	356	953,012
<b>Offices</b>	698	678	693	831,600
<b>Restaurants</b>	112	93	108	54,324
<b>Schools</b>	2,321	381	2,576	1,030,400
<b>Hotels</b>	3,257	1,616	2,764	193,480
<b>Other</b>	629	2,047	956	37,284
<b>Hospitals</b>	3,865	4,599	3,987	95,688
<b>Homes</b>	8,005	1,544	7,467	44,802
<b>Sports</b>	3,965	3,965	3,965	277,550
	<b>673</b>	<b>649</b>	<b>22,872</b>	<b>3,518,140</b>

When considering the consumed energy in kWh/m<sup>2</sup>/year per category of building, the data obtained shows the following picture:

Consumed kwh/m2/yr			
	Existing	New	Total Average
Shops	208	231	214
Offices	148	129	143
Restaurants	294	330	301
Schools	98	70	70
Hotels	246	258	248
Other	228	176	202
Hospitals	172	171	169
Homes	267	295	248
Sports	146	146	146
	<b>196</b>	<b>194</b>	<b>152</b>

This shows that restaurants have the highest energy consumption per m<sup>2</sup> among all building categories, standing at 301 kWh/m<sup>2</sup>/yr. This is then followed by Hotels and Nursing Homes, both at 248 kWh/m<sup>2</sup>/yr.

However, when working out the total energy consumed per type of commercial operation (according to EPC data), shops collectively are consuming 38% of total commercial energy, while Offices are consuming 22%.

kWh/yr estimated consumption		
	Total	New
Shops	203,686,478	38%
Offices	119,212,200	22%
Restaurants	16,348,898	3%
Schools	71,707,552	13%
Hotels	48,015,366	9%
Other	7,538,302	1%
Hospitals	16,188,286	3%
Homes	11,108,518	2%
Sports	40,522,300	8%
	<b>534,327,901</b>	<b>100%</b>

These figures show that to have the biggest impact in terms of reductions in national energy consumption, more effort and support should be placed on shops and offices. However, these operations are often the most complicated to improve do to leasing arrangements and reluctance to upgrade premises. In this respect, appropriate awareness raising on the obligations and benefits surrounding energy efficiency should be emphasised, alongside support measures which are available.



### Energy Consumed by Type of Use

Energy use according to type was also extracted from BCA and EPC data to provide an opportunity to identify possible intervention points for each type of building operation. Lighting and water heating collectively consume over 50% of energy when considering all EPC data available, making these two uses by far the two most energy consuming areas overall.

Analysing the data more closely, one notes that lighting is the main source of energy consumption in shops, followed by cooling, and then water heating. Challenges in this respect relate to the importance of lighting in terms of selling effects, while more efficient water heating may be difficult due to limited roof space and access issues. Offices show a similar situation, with lighting and cooling presenting the

main sources of energy consumption. Unsurprisingly, water heating is the highest energy consumer in hotels, while restaurants should look at lighting, water heating and cooling.

### kWh/yr estimated consumption

	Heating	Cooling	Other	Lighting	Hot Water	Total	
<b>Shops</b>	17,511,507	55,299,496	11,059,899	81,105,928	38,709,647	203,686,478	38%
<b>Offices</b>	8,920,641	40,548,367	10,542,576	44,603,204	14,597,412	119,212,200	22%
<b>Restaurants</b>	852,060	4,260,299	958,567	6,230,688	4,047,284	16,348,898	3%
<b>Schools</b>	5,853,678	14,634,194	4,390,258	19,756,162	27,073,259	71,707,552	13%
<b>Hotels</b>	2,657,677	8,150,210	3,543,569	7,618,674	26,045,235	48,015,366	9%
<b>Other</b>	457,792	1,037,661	152,597	1,648,050	4,242,202	7,538,302	1%
<b>Hospitals</b>	327,036	5,232,577	6,268,192	1,853,204	2,507,277	16,188,286	3%
<b>Homes</b>	1,789,998	2,369,115	1,789,998	2,684,997	2,474,409	11,108,518	2%
<b>Total</b>	38,370,389	131,531,921	38,705,657	165,500,908	119,696,727	493,805,601	
	<b>8%</b>	<b>26%</b>	<b>8%</b>	<b>34%</b>	<b>24%</b>	<b>100%</b>	

### Manufacturing industry

A shortcoming of the current publicly available EPC dataset is the lack of information concerning the manufacturing industry. According to Malta's NECP issued in 2019, industry alone accounted for approximately 9% of final energy consumption in 2017. This includes all energy consumption, including consumption not related to building performance (e.g. production lines). The plan also suggests that industrial activity is expected to remain constant in the years to come. Thus, it accounts for a significant portion of energy consumption, for which the share relating to building performance is not being

categorised in the EPC dataset available to the writers of this report.

Such data is crucial to achieve a macro-level view on what interventions are needed to improve the energy performance of factories and industrial installations. This in turn would help inform policy direction and the design of appropriate incentives. From a more strategic perspective, reducing the energy consumption of industry would further help businesses shield themselves from potential fluctuations in energy prices which have so far been maintained at constant rates only due to government

intervention. Energy cost have a clear and direct impact on profitability and pricing of manufactured products.

This report thus calls on the BCA to ensure that reliable data pertaining to the manufacturing industry is gathered and disaggregated according to type of consumption, to have a clearer understanding of the current situation. More generally, accuracy of all data contained within the EPC database should also be guaranteed to improve the usefulness of the EPC system.





**Obstacles to reaching the targets set by revised EPBD;**

The obstacles which affect Malta's ability to reach the targets set out in the revised EPBD may be divided into 2 categories; (i) obstacles due to the inherent characteristics of the islands, (ii) and obstacles due to low levels of readiness.

**(i) Inherent characteristics of the Island**

Malta is an archipelago with a small geographic footprint of circa 316 km<sup>2</sup>. Lying at the most southern tip of the EU, it is characterised by a very warm climate typical of the Mediterranean and is strongly influenced by the sea. The Maltese islands have a pleasantly sunny climate with a daily average of around 12 hours sunshine in summer going down to 5 to 6 hours in mid-winter. Temperature highs are in the low 30Co in July and August and around 16Co in Winter. Due to this, the main energy use in buildings is dedicated towards cooling around 6 months of the year. Winters are mild, with the occasional short cold spells brought about by the north and north-easterly winds from central Europe. Annual rainfall is low, averaging 568mm a year. Use of heating is mainly hot water and some ambient heating in winter. There is no gas network in Malta, and gas (propane) use is through distributed cylinders for dwellings or in road tankers for industry.

In addition, Malta demonstrates some of the highest if not the absolute highest population density in its urban districts.

Some figures from NSO Regional Statistics 2021:

- The number of inhabitants living in Malta as at the end of 2019 amounted to 514,564, with 480,134 and 34,430 residing in Malta and Gozo respectively.
- The number of households in 2019 was of 196 593 in Malta of which 93.3% resided in Malta and 6.7% resided in Gozo.
- Malta not only retained its place as the most densely populated EU member state, but the population density continues to increase, reaching 1,649 persons per km<sup>2</sup> in 2021. This represents a 24.5% increase when compared to 2011. Sliema is the most densely populated town with a staggering

15,000 people per km<sup>2</sup> followed by Senglea with 14,418 people per km.

The urban areas in Malta such as Sliema are characterised by buildings that are very densely packed terraced sites (touching each other on both sides with very small back yards) and with multiple stories. In addition, these areas also have hotels and tourist accommodation that add to the density even further. In 2019, just over 2 million tourists were recorded visiting Malta in one year (NSO statistics 2020).

Another characteristic is that multiple dwelling buildings do not have common services, with each apartment having to install their services separately. In addition, the flat roofs are very often stepped with terraces leaving very little space for renewables such as PV or solar panels. This density also creates problems on solar renewables as many times lower roofs are shaded by the taller buildings.

Land cover type	Area (km <sup>2</sup> )	%
Agricultural areas	161.5	51.2
Urban areas	70.4	22.3
Forested areas	2.1	0.7
Coastal wetlands	0.3	0.1
Natural vegetation	57.8	18.3
Industrial and commercial units, mineral extraction, airports, port areas, dump sites, green urban areas and sports and recreational facilities	23.31	7.4

The Land cover statistics from the Planning Authority (PA) in 2020 show how little area is available for renewable energy projects, with under 7.4% available. This means that the limitations on land for communal PV projects are very restricted and this effects the potential for lowering EPC ratings. Furthermore, there are currently no district cooling or heating systems, and neither are there any projected. The reason is that the dense urban congestion does not favour this type of projects without huge amounts

of disruption on roads and/or displacement of people or businesses.

**(ii) Obstacles due to low levels of readiness**

The Maltese Islands also exhibit several endemic problems with regards to technology uptake in the building and construction sector. Malta's construction industry is mainly composed of small, independent, family-run operations, and dominated by a handful of large companies

that often act as both developers and construction companies. A very large number of new constructions are built for resale with a focus on profits and with slight adherence to minimum standards such as Document F, which, due to lax inspection and verification regime cannot even be guaranteed.

### Building standards

In 2007, the Chamber of Architects had highlighted quality of construction as a key aspect that was crying out for immediate attention. It had stated that “Quality of construction needs to be improved. New regulations are necessary and welcome but should be backed by adequate research and funding to ensure they truly provide value for money to society.”

Thirteen years later, the overhaul of the industry has not yet started. This lack of readiness in this sector is a huge stumbling block because not only do the normal standards and regulations need updating, but now, they need to bring near zero emission design and construction into the picture. The delayed response from the local sector will hinder, and at best delay, any target dates that are being recommended by the revised EPBD.

### Energy Performance Certificate

The EPC changes are in themselves welcome and would enhance the usefulness of the document. The main difficulty, especially for residential EPCs, is that the rating in kWh/m<sup>2</sup> of primary energy is difficult for non-technical

personnel to understand. Most often, this is different from the actual energy consumption due to variations in use. This happens because the EPC uses standard situations and assumptions that may not actually be the case. For example, it is assumed that all buildings will be cooled in summer. However, people may have different tolerance levels, or other considerations, and may actually opt not to cool. This means that their consumption will be lower than that the EPC is estimating. There may also be situations where the owner is using much more as they have wasteful habits, such as switching on air conditioning but leaving windows open. These two examples are only a few that make up real life situations where the information contained in the EPC and actual use can be substantially different. In order to bridge this gap, the EPC will need to take into account the real-life operating conditions of the building, which itself might also vary over time.

It is also noted that since the rating is per m<sup>2</sup>, if one has a very old and poorly built building, but is large in size, this can get ratings better than a very small new building with multiple energy saving

investments. This is especially true if renewables cannot be installed due to lack of space available. This situation is misleading and may skew the statistics.

Another factor is the number of people occupying the residential building. This can vary and will affect the energy use. The EPC needs to have more emphasis on the number of actual occupants as this affects the actual energy consumption substantially. The number of occupants in a building has a direct effect on the energy use for various reasons. People generate heat and therefore the building will require more cooling. The more people are in a building, the more heat generated and therefore higher the energy use for cooling. People also contribute to the humidity in the air, requiring more ventilation. Similarly, more people use more water, including hot water, which has a direct impact on the energy footprint of a building. Finally, the actual number of occupants may also differ from standard practice for various reasons, even if keeping within acceptable norms and standards. Therefore, this should be taken into account for the EPC.



# Financing the transition

A major stumbling block to accelerating energy efficiency investment and improving the energy performance of the Maltese building stock will undoubtedly be the limited financing options available to businesses. In its own Questions and Answers document published on 15 December 2021, the Commission argued that “energy renovation pays for itself over time”. While this may be true in the long term, in the short-term renovations may require significant financial investment which businesses, and especially SMEs, may not afford to undertake on their own. Furthermore, the return on investment on energy efficiency may be more uncertain than in aspects such as renewable energy, as energy efficiency also requires behavioral changes from users themselves, aside from the initial technological investment. This may make it more difficult for businesses to tap into traditional modes of financing such as through banks, which may not be willing to take on the investment risk.

The Commission has cited several financing instruments to help facilitate the green transition, including for buildings. In addition, the proposed revisions to the EPBD stipulate, in article 15, that a variety of financial support measures are to be adopted by member states in order to address market barriers and stimulate the necessary investments in energy renovations. It is noted however, that the Social Climate Fund, in particular, is being limited to the most vulnerable members of society, such as certain households and micro-enterprises. Such support is crucial; but we know that SMEs will similarly face significant cost challenges which should not be overlooked and which they cannot meet on their own, especially in the context of a post-pandemic recovery and the economic effects of the Russia-Ukraine conflict. Existing national schemes (e.g. through state aid) should continue to be promoted by governments and business associations. That said, these schemes must always consider the business case to ensure that

they are designed in the most business-friendly format possible, both in relation to the type of funding offered and the bureaucracy involved to apply for them. Traditionally, energy efficiency state aid schemes have provided an insufficient incentive for businesses to invest due to the funding support being limited to the difference in cost between an energy efficient solution and a less efficient option. We argue that funding should instead cover the entire capital expense should we truly aim to accelerate the drive towards energy efficiency. We are glad to note that this concern has been recognised in the discussions tied to the negotiations on the revised EU state aid rules (General Block Exemption Regulation – GBER), which are yet to be finalised. We also recognise that the proposed EPBD revision may require an updating of Malta’s LTRS 2050 to reflect the increased ambition presented by this proposal.

At the time of writing this report, there were two national schemes providing dedicated funding in an effort to support sustainable business practices and improve sustainability of economic activity, namely (i) the Smart and Sustainable Investment Grant (SSIG); (ii) the Micro Invest Scheme (MIS). Furthermore, additional financial support measures, stemming from the utilisation of EU funding, were being offered locally through the Renovation of Private Sector Buildings Grant Scheme (RPSB) as well as in the form of subsidised commercial loans sponsored by the Republic of Malta in collaboration with the EU via the implementation of the Energy Efficiency and Renewable Energy (EERE) Malta Financial Instrument (FI).

## The smart and sustainable investment grant<sup>1</sup>

The SSIG, which is being made available by Malta Enterprise (ME), is set to provide business funding to support the undertaking of investments that lead to more sustainable and digitalized processes so as to enhance the enterprises’ competitiveness through the

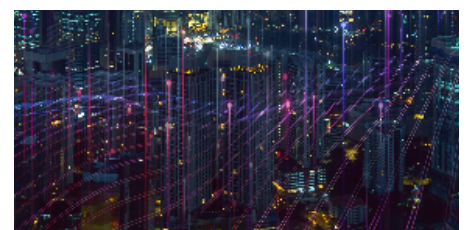
optimization of the use of resources in their activities.

The SSIG is, in principle, open to corporate undertakings or self-employed persons engaging in an economic activity that operates from a commercial property and not being excluded under the de minimis State Aid Regulations.

Eligible projects to be considered for support under the SSIG should pertain to investments of at least €10,000 relating to, inter alia, (i) waste minimization, (ii) use of sustainable materials, (iii) reduction of energy use in the production process, (iv) reduction of water use per unit of production, and (v) adoption of digital solutions to enhance environmental performance.

Supported investments are to be implemented within twelve (12) months following funding approval, with the beneficiary agreeing to sustain the investment for at least three (3) years.

The aid intensity under the SSIG is 50% of the eligible expenditure, up to a maximum grant of €100,000 per project. Moreover, a tax credit of up to €40,000 per project may be awarded as an additional 10% or 20% of eligible costs, if the project meets certain predefined criteria (e.g. an independent energy audit conducted by a qualified energy auditor or engineer is submitted in support of the project). Furthermore, such aid intensity is subject to the de minimis threshold of €200,000 (or €100,000 in the case of single undertakings providing road freight transport for hire or reward) over a rolling period of three (3) consecutive fiscal years.



<sup>1</sup> Applications may be submitted until 30th November 2023.

### The micro invest scheme<sup>2</sup>

The MIS, which is operated by ME, encourages undertakings (including start-ups, family businesses and self-employed) to invest in their business, so as to innovate, expand and develop their operations.

The MIS is open to undertakings engaged in an economic activity in Malta, regardless of their legal form or the way they are being financed. Such undertakings should not, however, have under their employment more than fifty (50) full time employees at the time of application nor have turnover or annual balance sheet total exceeding €10 million in the fiscal year preceding the year in which the application for investment aid under the MIS is submitted. Furthermore, undertakings engaged in activities specifically excluded under the de minimis State Aid Regulations and/or undertakings having applied for investment aid measures within the same year, are excluded from receiving funding under the MIS.

Eligible costs for which funding under the MIS may be requested include, inter alia, (i) refurbishing, refurbishing and upgrading (including extension and modifications) of business premises; (ii) investment costs relating, inter alia, to systems intended to produce alternative energy or improve energy efficiency; and (iii) certification costs including costs relating to business advisory services provided by unrelated parties (e.g. ISO 50001 Energy Management).

The funding to be provided under the MIS is in the form of a tax credit, which may reach 45% of eligible expenditure in favor of each undertaking. An additional bonus of 20% will be applicable to undertakings operating from Gozo (reaching a total of 65% tax credits). However, the maximum eligible tax credit per single undertaking is capped at either €50,000 or €70,000 (subject to certain requirements) over any period of three (3) consecutive fiscal years.

### The Renovation of Private Sector Buildings Grant Scheme<sup>3</sup>

The RPSB scheme, operating with funds having been allocated to it from the European Commission's Recovery and Resilience Plan for Malta and administered locally through a series of competitive calls, is set to improve energy efficiency, reduce energy demand, lower carbon emissions and limit energy waste through the retrofitting of private sector buildings.

The RPSB scheme is open to corporate undertakings irrespective of their size (i.e. to micro, small, medium and large undertakings) and their legal form engaging in an economic activity, though subject to certain exclusions.

Eligible expenditures under the RPSB scheme relate to actions taken that reduce the primary energy demand of the building by reducing the energy used for heating, cooling, ventilation, hot water and lighting through (i) actions involving systems for the above energy use; and (ii) interventions on the building envelope that reduce the energy demand required by the above stated. The entire investment costs necessary to achieve a higher level of energy efficiency in buildings constitute the eligible costs, provided that the aid induces energy efficiency improvements leading to a reduction in primary energy demand of at least 30% compared to the situation prior to the investment, evidenced by means of an EPC.

The funding that an undertaking may receive is of a maximum €350 per m<sup>2</sup>, capped at €1 million per undertaking. In principle, the aid intensity should not exceed 30% of the eligible costs, though such percentage may increase (or decrease in certain instances) subject to several aid intensity parameters.

### Other schemes

We understand that the Investment Aid for Energy Efficiency Projects scheme also provides investment aid up to €15 million per project to undertakings investing in technological solutions that increase energy efficiency and contribute directly

towards a reduction in their energy requirements. However, it should be noted that such aid will not be granted where investments and/or improvements are undertaken to comply with Union standards already adopted, even if they are not yet in force. In this regard, investment aid to comply with the EPBD precepts should not be applicable under the said scheme.

### Energy Efficiency and Renewable Energy Malta Financial Instrument<sup>4</sup>

The EERE FI's main objective is granting individuals and enterprises better access to finance through capital relief and loss protection by providing capped guarantees for investments related to the building envelope (e.g., thermal performance measures) and investments related to the building system (e.g., building and energy management systems).

The instrument is being implemented by the European Investment Fund (EIF) and co-financed by the Republic of Malta and the EU under the European Regional Development Fund (ERDF). Locally, the implementation is being carried out by two banks, namely the Bank of Valletta PLC (BOV) and the APS Bank, and is tied to the provision of medium- to low scale commercial loans with an interest rate subsidy of up to 2.5% for the full life span of the loan and necessitating reduced security requirements on behalf of debtors.

Notwithstanding the above, it is generally perceived that the schemes and incentives currently in place are unlikely to be sufficient to meet the magnitude of financing requirements expected for a successful green transition and that are required under the revised EPBD. This is especially true when considering the available funding options currently in place for private individuals and small households. Apart from the loan facilities offered through the implementation of the EERE FI, individuals and households are generally not afforded access to any other source of funding – and as above, the funds available under the EERE FI are not expected to be sufficient to

cover a considerable volume of material energy performance projects such as the retrofitting of residential buildings. It should further be noted that to the extent that the funding approval procedure does not entail the immediate remittance of the funds approved to the beneficiary, this may result in adverse cash flow implications for the respective business.

Malta's LTRS 2050 is estimated to release an approximate investment of €4.5 billion to transform the Maltese building stock over the next 30 years, with €1.6 billion of this investment to come from businesses through both voluntary investments and compliance with regulatory obligations. Meanwhile, the discussions surrounding the revised EPBD have further raised the ambition and targets which buildings must meet, potentially requiring an even larger investment effort. It is for this reason we argue that alternative support measures should be developed to fill the gaps where necessary. These would not replace existing measures, but rather complement them and provide additional options appropriate to business needs.

### Proposals for additional financing alternatives

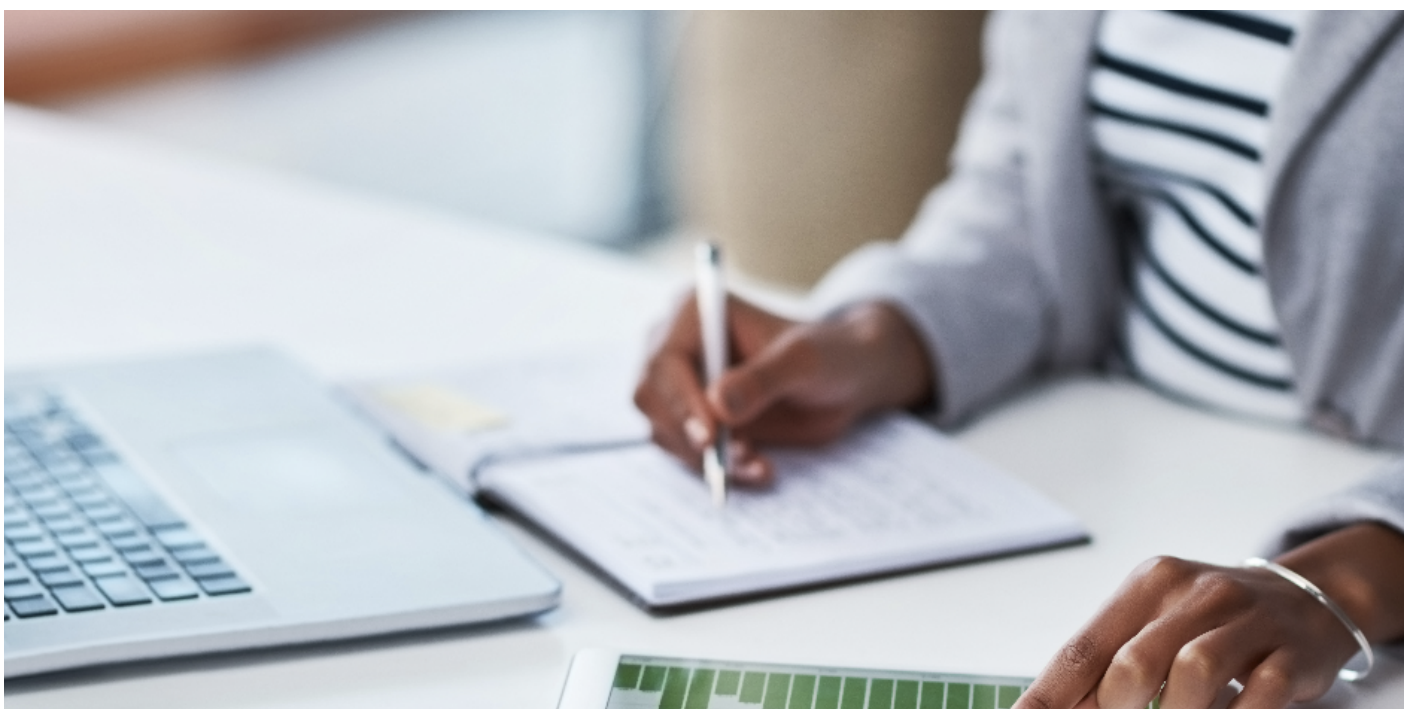
In order to address the concerns raised above, the following financing alternatives are being put forward for consideration:

01. Two similar but alternative structures, aimed principally at providing access to financing for commercial building owners. These structures contemplate the establishment of a specialist lender, based on the understanding that traditional local lenders (i.e. commercial banks) (i) do not possess the skill and knowledge; (ii) are likely to require certain forms of security over the respective immovable property (which is likely to already have some form of security encumbering it); and as a result would, in most cases, not have the risk appetite to provide sufficient financing in such a specialised energy context, especially where the borrowers are commercial entities who are likely to require large sums;
02. One scheme aimed principally at providing additional funding for

commercial/industrial building owners through facilitating the efficient utilisation of certain tax credits; and

03. One financing structure aimed principally at providing access to financing for residential building owners. This is based on the understanding that local commercial banks should be more willing to accept to provide financing to residential building owners where the risk of default is likely to be lower and the amounts lent would tend to be smaller. understanding that local commercial banks should be more willing to accept to provide financing to residential building owners where the risk of default is likely to be lower and the amounts lent would tend to be smaller.

In scenarios 1 and 3, significant involvement of Malta Development Bank (MDB) is proposed in order to support the providers of the contemplated credit facilities.



<sup>2</sup> Applications may be submitted until 13th December 2023, the latest.

<sup>3</sup> The RPSB scheme is to remain operational until 31st December 2023, subject to availability of funding.

<sup>4</sup> The EERE Malta Financial Instrument will remain applicable until 31st December 2023.

## Financing structure for commercial buildings

### Financing scheme 1a: Specialist Energy Lender (Fund with listed shares)<sup>5</sup>

The first alternative contemplates the set-up of a Maltese collective investment scheme (CIS) (the 'Energy Fund') in the form of a SICAV having shares listed on the Malta Stock Exchange (MSE). The proposed Energy Fund would house an internal specialised energy unit and be set up with the sole aim of acting as a dedicated and specialist lender to commercial building owners for retrofitting of their buildings to meet the EPBD targets.

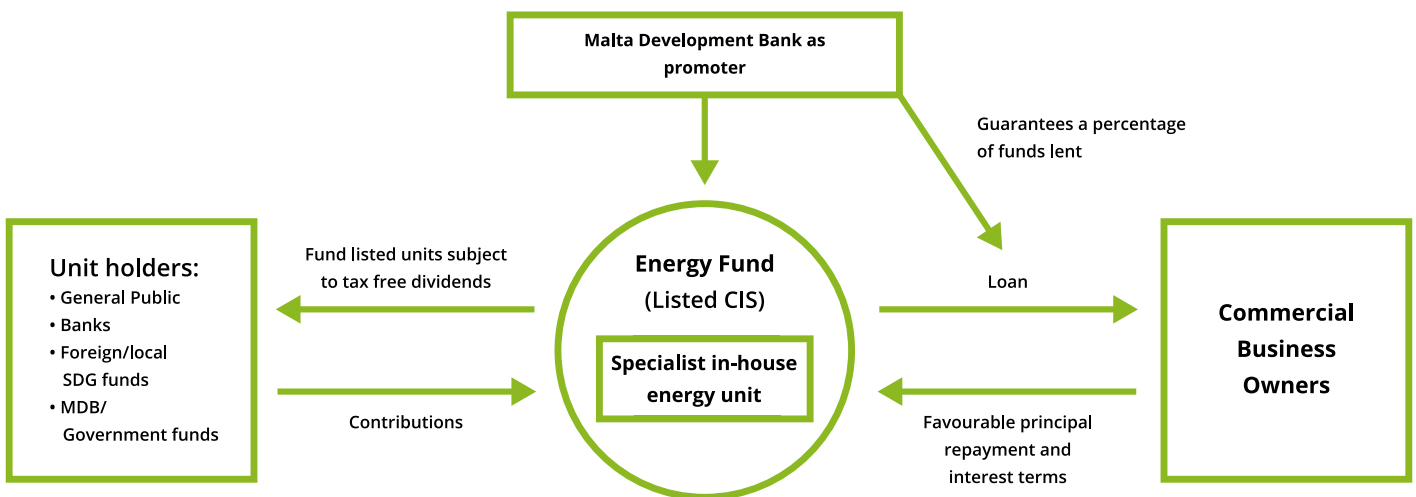
The Energy Fund will offer financing to commercial building owners at lower than market interest rates and at favorable

principal repayment terms in order to facilitate (and for the sole purpose of ensuring) their compliance with the EPBD precepts. For the purposes of enabling uniform access to financing and irrespective of any prior security claims being incumbent upon commercial buildings, the Energy Fund would not seek any form of collateral over the commercial buildings themselves but would require the provision of personal letters of guarantee by building owners so as to secure the financing being offered by it.

Any capital gains realised from the redemption of units should fall to be exempt from Malta income tax. Legislative intervention is proposed to allow investors to also benefit from a tax exemption on dividends received from the Energy Fund.

The MDB as the proposed promoter of the Energy Fund would guarantee a percentage of the funds lent so as to mitigate the Energy Fund's exposure to credit default risk. Eligibility criteria for such loans will be put in place and will have strict terms to ensure the funds are used for retrofitting/energy performance in terms of the EPBD.

However, it should be noted that, for this Financing scheme, there are several regulatory considerations to be assessed, including, the potential requirement to procure a collective investment scheme and a financial institution license from the Malta Financial Services Authority (MFSA) and the requirement to comply with the MSE's Capital Markets Rules and to publish a Prospectus.



<sup>5</sup>A variant of this financing scheme to be considered would contemplate a foreign Fund manager specialising in sustainable investment (e.g. investments relevant to sustainable development goals (SDGs)) and acting as the promoter of the Energy Fund, while the MDB would continue to guarantee a percentage of the funds lent and hence mitigating the Energy Fund's exposure to credit default risk.

**Financing Scheme 1b: Specialist energy lender (Company with listed debt instrument/s)**

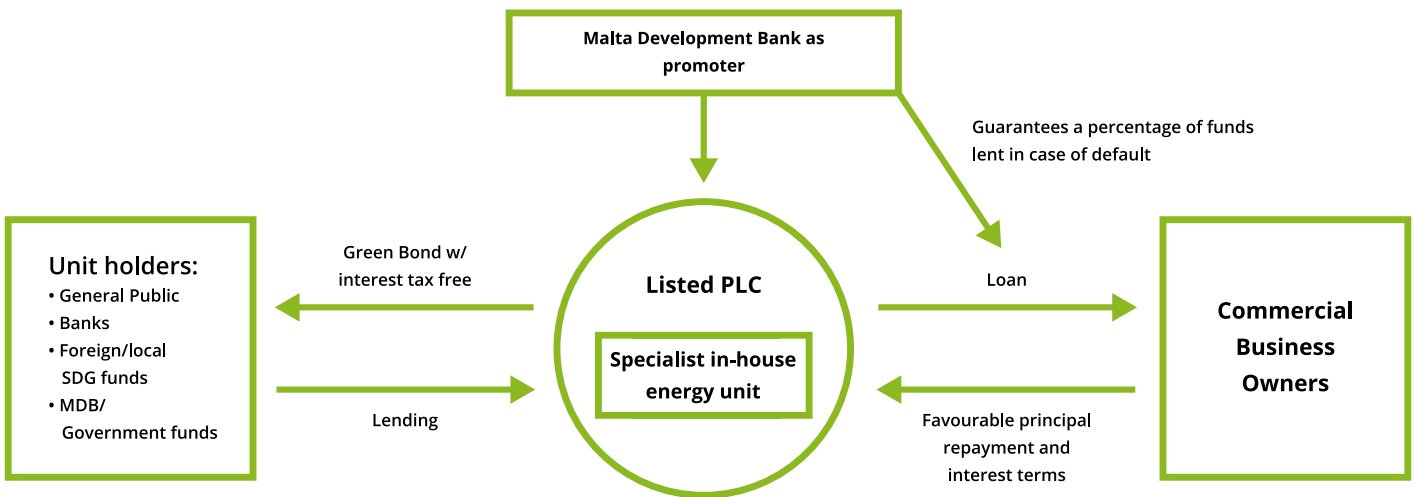
The second alternative also contemplates the set-up of a structure by the MDB, however in the form of a standard Malta public limited liability company (the 'Company'). The Company will also be designed to serve as a dedicated and specialist lender to commercial building owners for retrofitting of their buildings in line with the EPBD precepts and will house an internal specialised energy unit. The Company will however seek to offer debt securities to the public through the issuance of bonds admitted on the MSE, potentially on the Green Bonds List. Legislative intervention is proposed to allow investors to benefit from a tax exemption on interest received in terms

of such bonds. The Company will in turn utilise the funds generated through the issuance of the bonds for the provision of loans to commercial building owners at lower than market interest rates and at favorable principal repayment terms in order to facilitate (and for the sole purpose of ensuring) compliance with the EPBD precepts.

Again, for the purposes of enabling uniform access to financing and irrespective of any prior security claims being incumbent upon commercial buildings, the Company will require the provision of personal letters of guarantee by building owners so as to secure the successful completion of the project.

Similarly to the previous scheme, eligibility criteria for such loans will be put in place and will have strict terms to ensure the funds are used for retrofitting/energy performance in terms of the revised EPBD. It is proposed that the MDB as shareholder of the Company also guarantees a percentage of the funds lent so as to mitigate the Company's exposure to credit default risk.

However, it should be noted that, for this Financing scheme, there are also regulatory considerations to be assessed, including, the potential requirement to procure a FI license from the MFSA and the requirement to comply with the MSE's Capital Markets Rules and publish a Prospectus.



**Financing Scheme 2: Tax credits<sup>6</sup>**

The scope of application of this scheme is principally relevant to funding for commercial/industrial building owners and contemplates the conversion of unutilised tax credits into funding for the

purposes of retrofitting of buildings in line with the EPBD.

Nonetheless, it should be noted that, legislative intervention along with approvals from the appropriate

competent authorities should be required for the implementation of such a scheme.

<sup>6</sup>The comments on this proposed financing scheme have intentionally been left broad as its implementation will require input from a tax policy perspective and will require various discussions and collaboration with the relevant authorities.

## Financing Structure for Residential Buildings

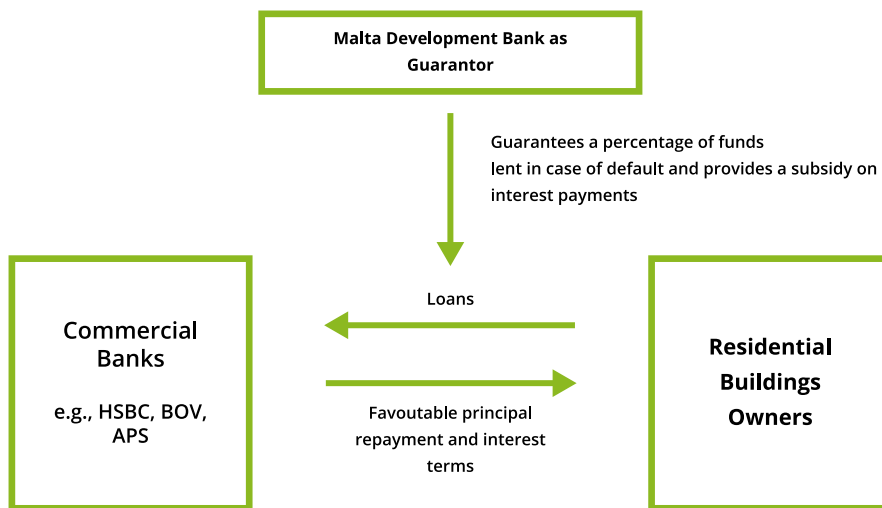
### Financing Scheme 3: Guaranteed Bank Lending

The scope of application of this scheme is primarily relevant to financing for residential building owners as it contemplates the provision of loan facilities directly by Maltese commercial banks whose risk appetite for commercial loans and for specialised purposes tends to be limited or subject to unattractive terms and would typically be subject

to the imposition of various forms of security upon the relevant immovable property.

The scheme would involve commercial banks providing direct lending under specialised loan terms purely for the purposes of facilitating financing to meet EPBD obligations. Again, eligibility criteria for such loans will be put in place and will have strict terms to ensure the funds are used for retrofitting/energy performance in terms of the EPBD.

Here, it is proposed that the MDB (i) guarantees a certain percentage of the funds lent by the commercial banks; and (ii) provides interest rate subsidies. This approach should alleviate the credit risk borne by the lending banks and should also enable residential building owners to have access to financing on more favorable terms than would otherwise be available to them.





# Other considerations

## Enforcement and skills needs

As the revised EPBD introduces much more ambitious standards and requirements which buildings will have to comply with, it will necessitate a robust enforcement and reporting system. This includes, for instance, the proper production and use of EPCs, as well as their assessment to ensure compliance. In this respect, the report partnership has consulted a limited number of businesses, experts, and professionals with an interest in the topic to help gather input and commence discussions on this key issue. While the feedback is not representative, it does shed light on several considerations which need to be sufficiently addressed to facilitate implementation of the revised EPBD. The usefulness of mandatory mechanisms such as EPCs as means to assess and compare the energy performance of buildings are clear. Nonetheless, there are doubts on the current usefulness and value being given to this reporting.

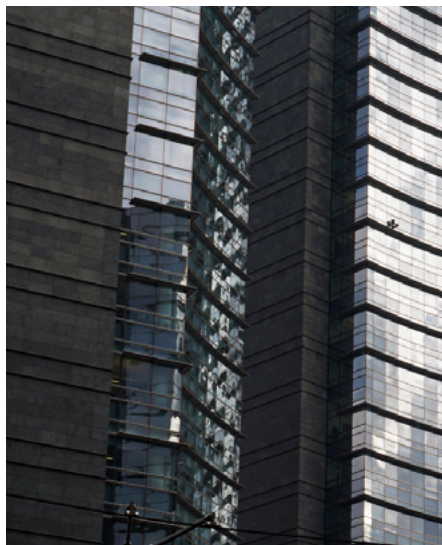
Several concerns have been raised, including:

- Outdated EPC software which does not meet all requirements introduced by the EPBD.
- The need for more EPC vetting to ensure the accuracy of the data being claimed, and to reduce discrepancies between EPC results and a building's actual energy performance.
- The need to give more market value to EPCs when buildings are sold or rented.

More generally, several measures could be introduced to increase the energy performance of the Maltese building stock, especially in terms of new buildings. A starting point should always be to include energy measures in the design stage of the building project, as this will prove to be more efficient and cost-effective than attempting to retrofit and upgrade an existing building. When these measures are included in the design, it is paramount that they are then actually implemented in the

construction stage. Increased compliance checks and on-site inspections during construction, including the collection of evidence during this stage would also help guarantee compliance with minimum requirements.

Training and skills needs are also a crucial factor which cannot be overlooked for the vision of achieving a truly zero-emission building stock to become a reality. Among the professionals and tradespersons involved in a construction project, only four of the key figures are formally qualified. Foremost is the 'perit', a warrant holder authorised to provide architectural and/or civil engineering services. Another is the mason, who is often inadequately trained to deal with the complexity of contemporary building techniques and materials, but who is also unregulated after obtaining a licence. Next, the mechanical and electrical engineers, who are often not involved in small to medium scale projects, are very often engaged after the main structural works have been finalised, thus often resulting in conflicts which may also impact the structural aspects of the design and the overall performance of the finished building. The fourth figure is the project supervisor required to be appointed under the Occupational Health and Safety regulations.



Other participants in the industry, other than electricians, are unregulated. There is therefore an urgent need to bolster registration, licensing and classification of contractors, which should be based on competences and qualifications as well as considerations relating to their workforce, their equipment and capacity.

A starting point should include training and awareness raising among engineers, architects, and other professionals who are ultimately responsible for the technical design of the building project and who ensure appropriate measures are being carried out. This could include, for instance, dedicated sessions on the exact rationale and objectives of the revised EPBD and new requirements which are being introduced, for professionals to better understand the renewed importance of their role.

On the other hand, training should also start at the grassroots, meaning for the workers who are buying and using the construction materials, and for those who are ultimately constructing the building. Construction workers should be aware of latest energy efficient methods and products available in the market.

This is by no means a comprehensive assessment of the enforcement and skills need of the building sector but serves as a useful starting point which will feed into subsequent discussions by the report partnership with stakeholders and policymakers.

## Consistency across EU proposals and national strategies

Given the urgency of climate action and the enormous legislative effort undertaken by the EU institutions over the last (and next) few years, member states and businesses are facing several proposals concerning new and revised legislation covering virtually all aspects which bear an environmental or climate impact. These proposals are also complemented by

member states' own strategic documents and plans which pave the way to achieving the objectives being set out at the EU level. It is clear that some proposals may overlap in both topic and scope, introducing the risk of double-regulation and overburdening member states, and businesses especially, with multiple pieces of legislation trying to achieve the same thing.

The buildings sector by nature holds deep inter linkages with several sectors, resulting in spillover effects into other policy areas. Consequently, the proposal for a revised EPBD cannot be seen in isolation. Rather, its consistency with other past, present, and planned policy and strategies needs to be ensured to facilitate easier implementation and achieve results.

The Commission's proposal itself recognises these inter linkages through, for instance, provisions within the revised EPBD proposal concerning the setting up of Electric Vehicle (EV) charging points in building car parks depending on the size and number of parking spaces available (Art. 12). Meanwhile, a separate legislation

governing alternative fuel infrastructure (AFIR), including EV charging infrastructure has also been put forward. In brief, the principal aim of AFIR is to ensure that there is enough infrastructure for cars, trucks, ships and planes to (re)charge, or (re)fuel with alternative fuels (e.g. hydrogen and liquefied methane), with good enough coverage across the EU as to reduce users' range anxiety. The link between AFIR and the EPBD proposals is clear. It is crucial that the same level of ambition is provided in both legislations. An insufficient level of ambition and inconsistencies across proposals will (i) inhibit the uptake of greener mobility options, and (ii) risk businesses investing in EV charging points which may ultimately go underutilised due to inappropriate infrastructure across Malta.

There is also a potential inconsistency between the current definition of 'zero-emission buildings' as defined in the revised EPBD, and Malta's ambition in relation to the Renewable Energy Directive II (RED II) and its revision. As it stands, renewable energy generation is considered as a key condition for a building to be considered zero-emission. Meanwhile,

Malta has indicated a conservative renewable energy target (11.5%) expressed in the 2030 National Energy & Climate Plan (NECP) published in 2019. Next versions of the NECP should account for the greater ambition required by recent EU proposals, including the revised EPBD. It is crucial that efforts across different Commission initiatives and government commitments must be consistent to avoid potential implementation issues further down the line.

More generally, Malta's LTRS 2050, which is a key planning document published in 2021, sets out how the Malta aims to tackle the challenge of modernising its building stock and make it more efficient. Nonetheless, this document focused primarily on achieving a nearly zero-emission building stock (NZEB), falling short of the revised EPBD's key ambition. We argue that the LTRS should be updated to reflect the increased ambition. This includes a revision of the financial investment needed, including the schemes to be provided to facilitate this investment.





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The Malta Business Bureau represents the Malta Chamber of Commerce, Enterprise and Industry and the Malta Hotels and Restaurants Association (MHRA) in Brussels and Malta. It does so by liaising directly with the European institutions, the Maltese Permanent Representation and with umbrella organisations such as BusinessEurope, EUROCHAMBRES and HOTREC on all policy and funding issues affecting Maltese business interests.

The MBB provides information to the Maltese business community with regards to EU policy and legislation related to their operations, while also keep them up to date in the sphere of EU funding for business. The MBB also has vast experience in EU funding projects which bring together the EU vision and the interests of the Maltese business community. In addition, the MBB has experience in the field of business support, especially through its Enterprise Europe Network (EEN) service-provision.

In Brussels, the organisation plays a key role in continuing to develop and strengthen the organisation's ties with its Pan-European networks and European partners. The MBB's technical experts make it possible for the organisation to thrive in its EU advocacy and policy work, continue following business-related EU policies and also make it possible to target legislative lobbying in Brussels with European legislators, allowing MBB to play an active role in the EU's legislative process.

This document has been jointly produced by Deloitte and The Malta Business Bureau.

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