

B.E.S.T EPC ALPHA PLUS REPORT

Prepared For:

NAME:

██████████

CLIENT ADDRESS:

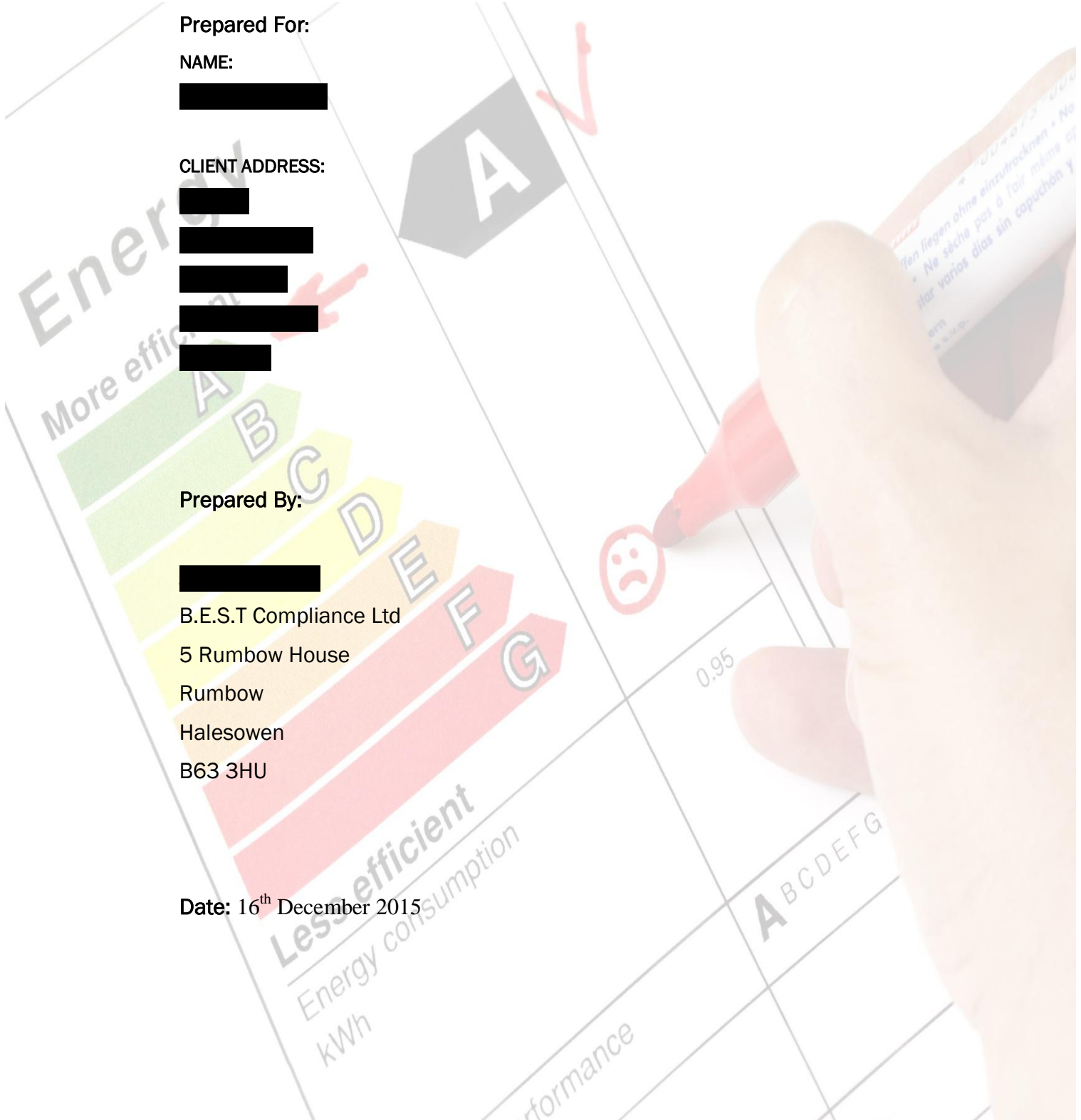
██████████
██████████
██████████
██████████
██████████

Prepared By:

██████████

B.E.S.T Compliance Ltd
5 Rumbow House
Rumbow
Halesowen
B63 3HU

Date: 16th December 2015



B.E.S.T EPC ALPHA PLUS REPORT

SUMMARY OF REPORT:

Below is the table of results that summarises this report's findings, recommendations and costings. All justifications for the results are within this report.

Current EPC	F	133				
Potential Action(s)	EPC Rating	EPC Score	EPC Improvement	Estimated Cost	Estimated Savings Per Year	Estimated payback period (Years)
(A) - Lighting	E	113	-20	£3,910	£1094	3.57 Years
(B) - HVAC	D	78	-55	£9,600	£2,839	3.38 Years
(C) - Fabric	Due to minimal improvement not recommended at this time					
(D) - Combined	B	49	-84	£13,510		

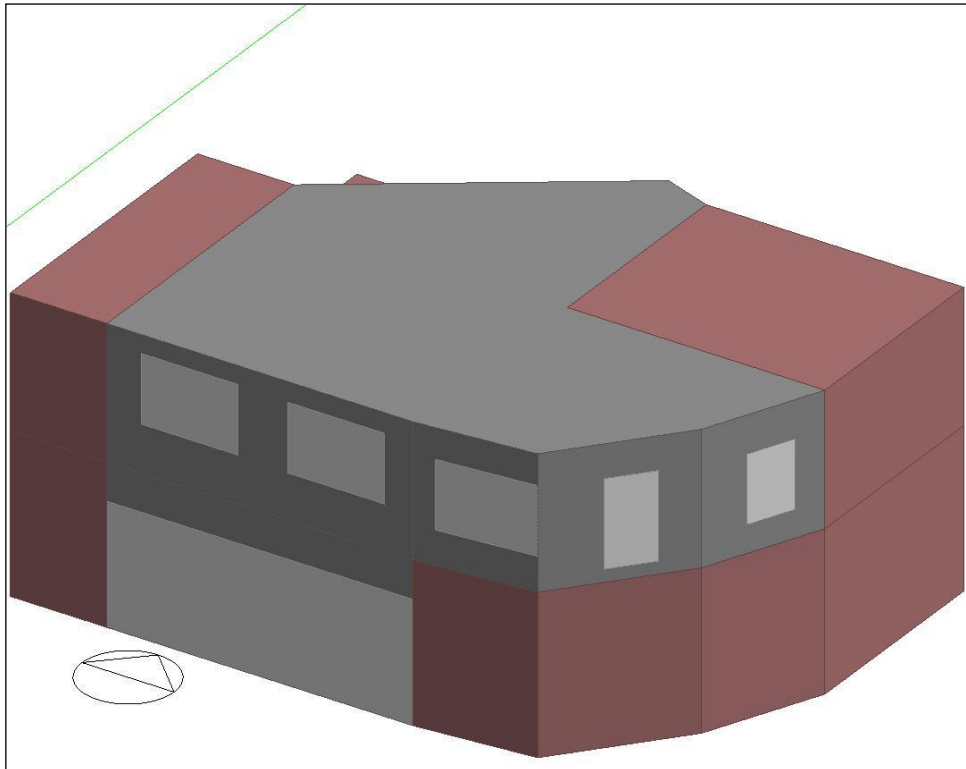
Recommendations:

Since the building has an EPC rating of (F 133) it would in its current state fail the M.E.P.S legislation, However the legislation is due to be renewed in 2018 in conjunction with the introduction of the new M.E.P.S. In all previous years reviews of building regulations (currently every 3 years) EPC's fall between half a grade and a full grade, putting current "E" rated properties in danger of being classified as F or lower upon re-issue of a new EPC.

To avoid such issues we would recommend this property was brought up to a standard no lower than a "D"

Given the specifications of this building we would recommend a standalone HVAC upgrade **Action B** above.

B.E.S.T EPC ALPHA PLUS REPORT



B.E.S.T EPC ALPHA PLUS REPORT

CONTENTS	Page
1.0 INSTRUCTIONS & BRIEF	6
1.1 DATA COLLECTION	7
2.0 INTRODUCTION	8
2.1 AIMS OF REPORT	9
3.0 BRIEF DESCRIPTION OF THE PROPERTIES & COMPLIANCE CHART	10
4.0 ASSUMPTIONS AND CALCULATIONS	11
5.0 ENERGY PERFORMANCE RESULTS AND INTERPRETATION	12
6.0 GENERAL RECOMMENDATIONS	13
7.0 RECOMMENDATIONS AND EPC IMPROVEMENT	14
7.1 ESTIMATED COSTS, SAVINGS AND PAYBACK PERIOD	15
8.0 ADDITIONAL ANALYSIS AND CONCLUSION	16
8.0 ILLUSTRATIVE ENERGY CHART	17
9.0 LIMITATIONS OF REPORT	18
APPENDIX I ENERGY ACT 2011 & RESERACH STATSISTICS	
APPENDIX II DRAFT EPC & ENERGY REPORT	
APPENDIX III COMBINED EPC & ENERGY REPORT	

B.E.S.T EPC ALPHA PLUS REPORT

1.0: INSTRUCTIONS AND BRIEF

Client:

[REDACTED]

Client Contact:

[REDACTED]

Property Type:

Retail Unit

Reason for EPC Alpha Plus:

M.E.P.S Compliance study

Limitations on scope of inspection:

Roof inaccessible due to access.

Occupancy and use during inspection:

Occupied Estate agency

Confirmation of Instructions:

[REDACTED]

Dated Inspected: 14/12/2015

Weather: Overcast 9 Degrees Celsius

Orientation: South East Facade.

B.E.S.T EPC ALPHA PLUS REPORT

1.1: DATA COLLECTION CHECKLIST

In response to the request for the following report, the more information received before writing the report the more accurate the report will be, as no data received normally results in default values being used in the SBEM programme, which will directly affects the outcome of the buildings EPC value.

Below is a checklist to indicate what pre survey information has been provided:

DATA PROVIDED BY CLIENT		
	YES	NO
BUILDING ADDRESS & AUTHORISATION TO ENTER	√	
HEALTH & SAFETY DOCUMENTATION		x
O&M MANUALS		x
SCALED BUILDING PLANS	DWG NUMBER:	x
REFURBISHMENT/EXTENSION SPECIFICATIONS		x
ATTACHED EPC ON PROPERTY		x
YEAR OF CONSTRUCTION & EXTENSION BUILD DATES		x
DATA ON ANY RENEWABLE ENERGY INSTALLED		x
DATA ON INSULATION IN ROOFS/ WALLS/ FLOORS		x
ANY OTHER INFORMATION	None	

B.E.S.T EPC ALPHA PLUS REPORT

2.0: INTRODUCTION

This report has been produced following the instructions received on the 4th December to prepare and analysis for improvement on the aforementioned building. The ultimate goal of the analysis is to achieve a minimum Energy Performance Certificate rating of an E grade set by the conventions of the date the report was prepared.

Our inspections included a desktop study of the building followed by a purely visual inspection, this meant that no intrusive investigation was undertaken and no equipment was turned off to help us with our inspection.

To help generate the report calculations, we included a variety of data including the forms of construction, a measurement survey to ascertain volumetric area, individual room zoning and thermal performance. This has enabled us to generate a computer representation 3D model of the building that we have been able to run through a variety of simulations to prepare the EPC and calculate the resulting energy rating of the property.

Further information collected has been used to make recommendations on improvements that can be undertaken in order to improve the energy performance of the building. The resulting recommendations have been assessed for the anticipated energy rating of the building as well as an estimated cost for such improvement.

The purpose of this report and survey is only to undertake the preparation of the non domestic energy performance certificate and to make improvement recommendations through a desktop study to determine possible viable upgrades with basic estimated costs, these costs savings are made without using actual building energy readings. This report should be construed or used as a detailed building survey.

B.E.S.T EPC ALPHA PLUS REPORT

2.1: AIMS OF REPORT

Using our approach, we are able to undertake a desktop analysis to highlight the key areas of risk within a portfolio. In our view, not all E, F and G rated building are equally at risk. A majority of these can be rectified with little cost during routine maintenance, cyclical renewal of key components or lease events.

In recognition of the commercial issue potentially facing Landlords and Investors, B.E.S.T Compliance Ltd have developed a bespoke service providing strategic advice mitigating against the risks.

We assess the overall degree of risk across an investment or operational property portfolio which will then form a strategic approach to mitigate any risks.

B.E.S.T EPC ALPHA PLUS REPORT

3.0: BRIEF DESCRIPTION OF THE BUILDING

██████████ is part of a retail block housing multiple retail units. The building is constructed out of Old English Bond solid brick walls and flat roof and comprises of a basement, Ground floor and part First floor.

The property is located to the top of ██████████ Street at the point it starts from the slip road off the ring road.

The building has had all its first floor windows replaced in 2007 with Doubled glazed units the remainder consist of a mixture of single glazed units.

3.1: FURTHER COMPLIANCE ISSUES

Compliance			
COMPLIES OR NOT APPLICABLE	FURTHER INVESTIGATION NEEDED	DOES NOT COMPLY OR NOT UNDERTAKEN	
EPC Compliant?	No		EPC Not Present, on Register
Air Conditioning Compliant?	Unknown	May be under the 12 KW limit	None seen on site.
Periodic Electrical Inspection?	Unknown		None seen on site.
Gas Safe Certificate?	Unknown		None seen on site.
F-Gas Compliant?	N/A	No F Gas seen on site	N/A
Asbestos Register?	Unknown		None seen on site.
Fire Risk Assessment?	Unknown		None seen on site.
Risks.	As no EPC is currently lodged for this building if it were to go back on the market, one will be needed to be undertaken.		

B.E.S.T EPC ALPHA PLUS REPORT



4.0: ASSUMPTIONS FOR EPC CALCULATIONS

Assumptions for heat issues are listed below:

FABRIC ELEMENT	U-VALUE
WALLS:	2.1 W/m ² K
FLOOR	0.24 W/m ² K
ROOF	2.8 W/m ² K
GLAZING	4.74 W/m ² K

*U-values taken from SBEM and are based upon building regulations in force at the assigned date of construction and/or renovation where applicable

Heating, Ventilation & Air Conditioning systems:

SYSTEM	CURRENT SYSTEM/ PLANT MODEL	HEATING EFF	COOLING EFF
	Worcester 24i Junior	79%	N/A
	Fujitsu AOY18UNKBL	N/A	2.84 EER

B.E.S.T EPC ALPHA PLUS REPORT

5.0: ENERGY PERFORMANCE RESULT AND INTERPRETATION

EPC GRADE	FALL INTO MEPS CATERGORY	POTENTIAL TO FALL INTO MEPS IN 2018
F133	YES	YES

Type of Building	Floor Area Surveyed (m ²)
Retail Unit	126

The EPC rating for the building is **133**.

Which equates to an **F**. Rating.

New build benchmark and typical stock values for the building are: **31 -90**

With the introduction with MEPS in 2018 it should be taken into account that should this building come back on the market after 2018 it will be prevented from having a new lease attached to the property by new legislation until the building reaches a minimum of an E Grade.

Heating efficiencies are based on the current existing heating apparatus and replacement with higher efficiency products would, not surprisingly improve the asset rating.

B.E.S.T EPC ALPHA PLUS REPORT

6.0: GENERAL RECOMMENDATIONS

- LIGHTING-

The quickest gains in energy saving can usually be made through the improvement of the lighting system.

This can be achieved initially through the replacement of the existing lamps with modern efficient compact fluorescent or LED lamps

Further energy savings can be made by improving the lighting system by assessing if the efficacy of the system and luminescence levels can be provided with modern energy saving ballast fittings.

-HVAC-

Improvements in the HVAC equipment can also improve the rating. Recommended HVAC upgrades include the installation of high efficiency boilers, split systems and Gas air heaters where applicable. SBEM conventions can allow for discretion in allocating HVAC systems within certain building zones. This can help different building types to achieve a better rating. Additionally, it may also be recommended to remove certain HVAC services from certain zones which are not used or necessarily functional to bypass it in the calculation which may result in a better rating.

-FABRIC-

Further gains in energy saving can be made through the improvement of the building fabric. Improvement/ installation of insulation to cavity walls, pitched and flat roofs and/or recladding in modern high performance materials can significantly reduce heat loss and improve the rating. Fabric upgrades usually aim to achieve a u-value similar to the assigned specification outlined in modern building regulations

Further improvements could be made by the replacement of all windows with modern double glazed units; however payback on this will be long.

B.E.S.T EPC ALPHA PLUS REPORT

7.0: RECOMMENDATIONS AND EPC IMPROVEMENT CHART

	Current EPC	F	133		
	Action	EPC Rating	EPC Score	EPC Improvement	In MEPS
1	Lighting	E	113	-20	NO
2	HVAC	D	78	-55	NO
3.	Fabric	No improvement on EPC if undertaken			
4	Combined	B	49	-84	NO

B.E.S.T EPC ALPHA PLUS REPORT

7.1: ESTIMATED COSTS, ANNUAL SAVINGS AND ESTIMATED PAYBACK PERIOD

	Recommended Upgrade	Estimated Upgrade Costs	Estimated Savings (per year)	Estimated Payback period	Golden Rule Achievable
1.	Lighting	£3,910	£1,094	3.57 Years	√
2	HVAC	£9,600	£2,839	3.38 Years	√
3	Combined	£13,510			

Basic Costs

To initiate works a basic cost is estimated, this takes into account notices, scaffolding, skips and a few more minor issues however it does not entail any planning or building regulation fees. The basic fee estimate in this case is approx £740 which is not included on the above table.

B.E.S.T EPC ALPHA PLUS REPORT

8.0: ADDITIONAL RECOMMENDATION ANALYSIS AND CONCLUSION.

- HVAC Upgrade-

- It is recommended to install a High efficiency Air conditioning Inverter split throughout the estate agency; this will allow the efficiency of the HVAC to drastically improve as the heating element will be using a heat pump instead of electric heating. It should also be advised as there is no need to heat the basement area under conventions so this area has been left unheated. The combi boiler should be left insitu and be used to provide hot water.

-

Lighting Upgrade

It is recommended that all tubular lights within the building shall be refitted with LED strip lights as a replacement or LED Golf fitting bulb giving out a high efficiency of 85 Lumens per Watt accompanied by a light output ratio of 100. The display lights are mainly LED with a few still to be changed as I suspect they are being changed as the bulbs life expires.

-

B.E.S.T EPC ALPHA PLUS REPORT

8.0: ILLUSTRATIVE CHART FOR [REDACTED]

B	35		
	40		
	45	Combined Upgrade (49)	£13,510
C	50		
	55		
	60		
	65		
	70		
D	75	HVAC Upgrade (78)	£9,600
	80		
	85		
	90		
	95		
E	100		
	110		
	115	Lighting Upgrading (113)	£3,910
	120		
	125		
F	130	Current Rating (133)	Below M.E.P.S 2015
	135		
	140		
	145		
	150		
G	155		
	160		
	165		
	170		
	175+		

B.E.S.T EPC ALPHA PLUS REPORT

9.0: LIMITATIONS

U Values (Heat Loss)

During our inspection if specific thermal conductivity values for walls, roofs, windows and other elements of building's envelope were not available, from conventions we have to work to, we resort to using default values from the Building regulations specific from the date of construction. Even more so if the date of construction has not been communicated the assessor will have to use best judgment from their experience

Costs

All recommendations that will require a change in building fuel for example oil to gas, or for a more practical explanation from Storage electric heaters to wet central heating powered by a gas boiler are based on the assumption that the proposed fuel is readily available on site and the cross over has no extra charge or cost.

All costs given should be used as estimates and should be used as illustrative guides only, Whilst our prices have been extrapolated from previous jobs undertaken and reputable price books each job will have differing factors for the undertaking of refurbishment. The costing's do not allow for remedial works or any structural works of any kind. If any changes to the building structure are required this is to be deemed as extra and outside the remit of this report

Payback Periods

It should be noted that Energy Performance Certificates are not based upon actual building energy usage they are based on notional assumptions generated from the SBEM file. The costs are based upon individual unit price and cost per meter square.

The KW/m² assumptions for all the recommendations have been used with a notional price for units for gas and electricity that are average at the time of this report and have not been checked on site. Accurate paybacks cannot be guaranteed as the data provided and costs generated are illustrative and, although every effort has been made to ensure they are as accurate and viable as possible, remain rule of thumb and illustrative.

Recommendations

The recommendation BEST Compliance have stipulated are assigned in principle and may not translate practically on site and should be checked on site by a suitably qualified tradesperson or engineer prior to any works or agreements are set in motion..

Proposed EPC Ratings

The proposed EPC ratings are only viable as long as the current conventions used to generate the EPC remain relevant and active. We cannot guarantee the proposed ratings longevity as ratings can improve or worsen over the course of updates and changes to work in practice and alterations and updates in software which are beyond our control. If works are to be carried out on a project or building it is advised to recalculate and/or recheck the EPC as soon as practically possible to ensure the end rating is still within the primary goal.

B.E.S.T EPC ALPHA PLUS REPORT

APPENDIX I

The purpose of our research is to highlight the salient issues affecting those managing commercial property including landlords and investors, these stem from a result of legislative changes and we advise on how to mitigate against them by using a head on approach.

On the 18th October 2011 the energy bill received royal assent and became the Energy act 2011, this was first introduced to the house of lords during 2010 and completed by September 2011.

The major goal and from the act would become known as the 'Minimum Energy Performance Standard' (MEPS), this stipulated that as from the 1st April 2018 it will become unlawful to grant a lease on a building in England and Wales which has an Energy Performance Certificate Asset rating 'F' or 'G'. MEPS will be effective on new leases from 1st April 2018 and on lease renewals as of 1st April 2023.

Energy Performance Certificates data

- As of Spring 2013 28% of all commercial building stock does not currently have a valid EPC attached to their property
- Of those 64% that do nearly 19% currently have an F or G rating ,whilst E grades are 17%, this is massively expected to grow in 2018 of up to 38% of all commercial building stock falling foul of MEPS due to the increased standards set out in the Building Regulations; Approved Document Part L.
- For each update of the building regulations, EPC grades fall up to almost a full grade every time, with this in mind older EPC's will not be reflective of their true grade.

B.E.S.T EPC ALPHA PLUS REPORT

Lending and Valuation Statistics

- 64% of lenders say they will have procedures in place for monitor risk to ongoing value, indicating procedures are now being adopted to assess existing stock and looking at the impact of poor rated properties against its value.
- 70% of lenders look at the cost improvement before deciding to lend
- 9% of lenders said they would reject buildings with poor ratings
- Loan Facilities Will be Restricted For Poor Rated Property
- 21% of lenders said they would proceed without further investigation.
- Lenders Are Now Adopting Procedure Against Existing Stock

Our research shows that lenders are already looking closely to MEPS and it is directly affecting their mandate of lending. Valuations of buildings are also being heavily affected in terms of sale of property and square meterage when it comes to letting property.

Exemption to MEPS legislation

There are exemptions to every piece of legislation and MEPS in no different, if you are exempt you will still need to be placed on the exemption register which is being launched late in 2016

- Where no EPC is required for the building
- Where the capital cost of improvements are not cost effective, this is worked from the Green Deal 7 year payback period, even though green deal has been scrapped the payback period still remains the same

For example of the green deal payback, if the upgrade stipulated installing a high efficiency split system to a property which would cost £14,000 the air conditioning system must save at least £2,000 a year to comply

- The cost improvements do not meet the Green Deal's Golden Rule which is a 20 year payback period. For example, if a boiler which was a qualifying energy improvement under the green deal cost £14,000, the boiler must save £700 following deduction of interest and other charges;
- Improvements would diminish the capital value by more than 5%; and,
Despite reasonable efforts, the landlord cannot obtain consent from third parties

B.E.S.T EPC ALPHA PLUS REPORT

Risks to Landlords and Investors

- Penalties Regime for Non-Compliance
- Publication of Non-Compliance
- Difficulty Securing Finance
- Reduction in Asset Value
- The Tenant's Fit Out May be Causing Poor EPC Ratings
- BEST research shows that lenders are looking at age of the EPC, and who prepared it. With so many Assessors it is essential to obtain an EPC from a reputable source. Where an EPC has already been prepared, it is possible to assess the associated data and date for accurate and make recommendations for reassessment if necessary.
- Failing to provide false information or providing false/misleading information - £5,000
- Renting a non-compliant property for less than 3 months – 10% of rateable value up-to £50,000
- Renting a non-compliant property for more than 3 months – 20% of rateable value up-to £150,000
- If a Landlord fails to comply with the regulations, in some cases, the infringement will be made public to encourage compliance.
- Our research shows lenders in most instances are now assessing the EPC rating as part of their due diligence. Some lenders are either rejecting loans against poor rated properties or requiring improvement as part of the loan facility.
- The RICS guidance note on Valuation places more emphasis on considering sustainability as part commercial property valuation. Coupled with the issues relating to poor rated buildings, the industry believes the poor EPC ratings will impact the value of a property.
- The optimum time to undertake an EPC is likely to be without the tenant's alterations in place. Consideration should be given to reassessing the property's EPC following strip out works, before installation of new. Assessment of the cause of a poor rating will help target any essential works. We are likely to see Landlords benchmarking EPC ratings at lease commencement to ensure the tenant yields up the property at lease end with the same or better EPC rating.

B.E.S.T EPC ALPHA PLUS REPORT

Infringement	Penalty	
Providing false or misleading information to the PRS Exemptions Register; Failing to comply with a compliance notice from a local authority	£5,000 Publication of non-compliance	
Renting out a non-compliant property	Less than 3 months non-compliance 10% of rateable value, but with a minimum penalty of £5,000 and a maximum penalty of £50,000 Publication of non-compliance	3 months or more of non-compliance 20% of rateable value, but with a minimum penalty of £10,000 and a maximum penalty of £150,000 Publication of non-compliance