ACQUISITIONS SUSTAINABILITY TOOLKIT

Making better investment decisions

JULY 2017
Sustainability is one of the most rapidly evolving areas of change in property ownership and can no longer acceptably be ignored. From a real estate investment perspective, the drivers can be split into two main categories:

1. Risk management: protecting the medium to long term value and liquidity of real estate portfolios from factors such as occupier demand, investor requirements, regulatory exposure, climate change and energy security.

2. Value creation: realising opportunities that can improve the value of property portfolios, such as increasing occupier attraction and retention, increasing rental value and slowing the rate of depreciation.

Successfully managing these risks and opportunities reflects good governance and can result in attracting additional capital, receiving new mandates from a more diversified investor base, and securing new joint venture partnerships.

Fiduciary responsibility to investors is often perversely used as an argument for limited activity in this area. However, with growing awareness and evidence of the link between sustainability and investment performance, there is an increasing recognition that there is a duty to manage these issues. Future proofing portfolios against this is therefore not only a prudent action, but necessary to deliver long term performance.

Investment and acquisition teams need to understand how such factors can influence portfolio performance and ensure they are given due consideration within the investment decision making process. To support them in identifying the risks and opportunities, this document, based on the collective thinking of the Better Buildings Partnership, sets out the sustainability criteria that should be considered during the acquisition process. It has been developed to be a practical and realistic reflection of what can be expected of commercial property owners.

Who is this for?

The information provided within this document is designed to support investment and acquisition teams. It provides guidance that can be incorporated within their own internal acquisition process to help them understand and identify key sustainability risks and opportunities, as well as consider if any mitigation measures are required.
How to use this document?

Acquisition is a critical moment during the investment lifecycle for property owners to gather detailed property information that may not be possible at any other time. The aim of the Toolkit is to avoid any missed opportunities by ensuring investment and acquisition teams incorporate questions/information requests that will identify key sustainability risks and opportunities.

The Toolkit is for guidance only and not meant to be prescriptive. It is designed to be practical and flexible, allowing investment and acquisition teams to select the items that they feel are most material to them as a business and incorporate within their own acquisition/governance processes. This includes both internal review processes, as well as the instructions given to lawyers and external consultants responsible for gathering and reporting information.

The document has been designed to cover a wide range of property portfolios. As a result, the relevance of information provided will vary depending on the following:

- The property type.
- Location.
- The level of management control the owner will have.
- The investment strategy for the property e.g. redevelopment/major refurbishment vs. long-term holding.

It is hoped that this document will not only support more informed decision making, but enable the standardisation of information that is requested during the due-diligence phase of an acquisition. In turn, encouraging better record keeping of property information by commercial property owners, and ultimately, allowing the transfer of such information from one owner to another to become standard practice.

What’s included?

The Toolkit is split into two main sections:

1. **SUSTAINABILITY INVESTMENT CHECKLIST**
   Setting out the information which should be requested and reviewed as part of the due-diligence process, from initial pre-bid through to transaction. Provided in a checklist format, it aims to complement any existing due-diligence process by setting out the questions that should be asked; identifying where such information may be sought or requested; providing follow on questions to support further investigation of potential risks; and providing additional notes and links to supplementary industry guidance.

2. **100-DAY REVIEW**
   Setting out the key questions that should be considered post-acquisition to ensure a smooth transition into on-going management. This centres around reviewing all information that was gathered during due-diligence, identifying key information gaps, and considering how this information should feed into property management and future asset management plans.
This section sets out the information which should be requested and reviewed as part of the due-diligence process, from initial pre-bid review through to transaction.

Provided in a checklist format, it aims to complement any existing due-diligence process by setting out the questions that should be asked; identifying where such information may be sought or requested; providing follow on questions to support further investigation of potential risks; and providing additional notes and links to supplementary industry guidance.

In addition, it suggests the nature of the impact for each question and splits these into the categories listed in the table below.

<table>
<thead>
<tr>
<th>Investment Critical</th>
<th>Items that could have a material impact on an investment decision from a regulatory or financial aspect, and where a negative appraisal may preclude investment. It is likely such items will be considered as part of any pre-bid decision making, prior to entering into the post-bid due-diligence phase.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPEX Implication</td>
<td>Items which may require capital expenditure.</td>
</tr>
<tr>
<td>Required Information</td>
<td>Information relating to legal compliance or that should be required as a minimum.</td>
</tr>
<tr>
<td>Supports 100-Day Review</td>
<td>Information that is considered best-practice. This information is particularly useful post-acquisition as part of a 100-Day Review to ensure a smooth transition of ownership for the occupiers and integration into the new property owner’s relevant management systems. Requesting such information during due-diligence will also reduce future costs of commissioning any survey/reviews which historically may have been undertaken by the previous owner.</td>
</tr>
</tbody>
</table>

From a sustainability perspective, four investment critical items are included within the Sustainability Investment Checklist:


b. Flood risk.

c. Land contamination.


For each of these items, a decision tree has been developed to support property owners in identifying these risks, considering potential impacts and any mitigation measures which might be required. These are provided at the end of the section.

Early identification of investment critical items

The scope and extent of the due-diligence undertaken during the acquisition of any property will vary depending on the type, size and desired speed of acquisition; as well as the individual processes each property owner has in place.

Whatever the approach, after a property is identified it is typical for a property owner to undertake a pre-bid review of ‘investment critical’ elements to determine whether to proceed, and commit expenditure, into a phase of more detailed due-diligence.
Environmental Certification and Ratings

<table>
<thead>
<tr>
<th></th>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>What is the Energy Performance Certificate (EPC) rating?</strong></td>
<td>Within CPSE, Marketing Brochure &amp; National EPC Register.</td>
<td>Rating</td>
<td>Request the certificate, the recommendation report, .nct files, and any supplementary information available. Confirm whether the provided information matches what is listed on the National EPC Register. For any F or G rated property check whether the property is listed on the exemptions register. In Scotland, Section 63 Action Plans should be requested for properties and/or units over 1,000m².</td>
<td>Energy Performance Certificates (EPCs) advise on the potential energy efficiency of a property and are required by law when a property is built, sold or let. The EPC displays a grade from A (best) to G (worst) and a numerical score and is valid for a period of 10 years. EPCs can be sourced via their respective national registers. See <a href="http://www.ndepcregister.com">www.ndepcregister.com</a> (for England &amp; Wales) and <a href="http://www.scottishepcregister.org.uk">www.scottishepcregister.org.uk</a> (for Scotland). An EPC is used to determine whether there is a material risk in relation to The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 or The Assessment of Energy Performance of Non-Domestic Buildings (Scotland) Regulations 2016.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Is there a material Minimum Energy Efficiency Standards risk in relation to The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 or The Assessment of Energy Performance of Non-Domestic Buildings (Scotland) Regulations 2016?</strong></td>
<td>Internal review based on EPC. See <a href="#">Assessing MEES Risk Decision Tree to support decision making</a>.</td>
<td>Yes / No</td>
<td>As outlined in the Decision Tree, depending on the initial review of the EPC and how this compares to organisational standards, a new EPC assessment may be deemed necessary. If works are required to bring the property up to the organisational standard, then these costs should be factored into the investment decision making.</td>
<td>For properties in England &amp; Wales, Minimum Energy Efficiency Standards make it unlawful to let residential or business premises that do not reach a minimum energy efficiency standard, with that standard currently set at Energy Performance Certificate (EPC) rating “E”. This applies to all new leases from 1 April 2018 and all privately rented property (existing leases) within the scope of the regulations by 1 April 2023. For properties in Scotland, from October 2016 all lease and lease renewals over 1,000m² are required to meet 2002 Building Regulations. EPC assessments post October 2016 confirm if this is the case or not. Any property not meeting these standards is required to have a Section 63 Action Plan which sets out the measures needed to be implemented within a 3.5-year timescale. Therefore, for Scottish properties, any accompanying Section 63 Action plan will be of greater relevance rather than the EPC rating. The internal organisational standard of an EPC rating will be dependent on the investment strategy for the property (e.g. redevelopment opportunities; length of existing leases and length of expected holding) and risk appetite of the organisation. For further information see <a href="#">The non-domestic Private Rented Property minimum standard – landlord guidance</a> (for properties in England &amp; Wales) and <a href="#">S63-001 – Improving Energy Performance and Emissions in existing Non-Domestic Buildings – a guide for owners</a> (for properties in Scotland).</td>
</tr>
</tbody>
</table>
3 Where relevant, is there a Display Energy Certificate (DEC) or other operational energy certificate?

Within CPSE & National EPC Register.

Yes / No

If yes then request copies of the certificate.

Display Energy Certificates (DECs) advise on the actual energy performance of a property over a 12-month period. All public authorities are required to have a DEC for properties where they occupy a floor area over 250m² and which are frequently visited by the public.

DECs can be sourced via their respective national registers. See [www.ndepregister.com](http://www.ndepregister.com) (for England & Wales) and [www.scottishepcregister.org.uk](http://www.scottishepcregister.org.uk) (for Scotland). For further information see Display Energy Certificates and advisory reports for public buildings.

4 Is the property certified under any third-party sustainability rating systems? e.g. BREEAM, LEED, SKA, WELL Buildings Standard

Within CPSE, GreenBookLive (BREEAM), US Green Building Council (LEED).

List those relevant with rating and date of certification.

If yes, request certificate and supplementary detail, including date of certification. In addition, review against any internal organisational standards / targets relating to portfolio sustainability certification.

Such information is useful for marketing to potential new occupiers, reporting in ESG surveys and supporting valuations for onward sale. The supplementary information included within certification assessments is also useful for the 100-Day Review to understand how systems were designed and intended to be used.

Property owners should note that the rating methodology evolves over time and that historic ratings may not reflect the same performance under the most recent rating methodology.

5 Is the property included within the scope of a certified Energy and/or Environmental Management System (EMS) system? e.g. ISO 14001, ISO 50001, OHSAS 18001.

Within CPSE.

Yes / No

If yes, request details of the EMS and certification date, as well as whether it applies at the property, property manager or entity level.

An EMS formally defines the procedures and processes for an organisation to follow when setting, managing and implementing environmental objectives.

Depending on the prior arrangements at the property the new owner will need to consider whether it is possible to continue any existing arrangements or not, whether the property should be integrated within any existing portfolio wide EMS, and who will be responsible for implementing and managing that process.

Properties certified under ISO 50001 are also beneficial to property owners as it provides a compliance route to the Energy Savings Opportunity Scheme (ESOS).

---

**Building Fabric and Materials**

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Are there any material risks identified in the Building Survey Report relating to the building fabric?</td>
<td>Within Building Survey Report.</td>
<td>Yes / No</td>
<td>If yes, these should be captured and included within the investment appraisal. This information should also be reviewed as part of the 100-Day Review to feed into the property's asset plan.</td>
</tr>
</tbody>
</table>

This should highlight any concerns regarding the level of insulation, risk of overheating, acoustic comfort and presence of deleterious materials.

For further information see BSRIA BG 35/2012 Condition Surveys and Asset Data Capture; CIBSE TM52 The Limits to Thermal Comfort and CIBSE TM59: Design methodology for the assessment of overheating.

Whilst out of scope of this Toolkit, consideration of asbestos and other deleterious materials should also be given at this stage. | CAPEX Implication |
### Building Services

<table>
<thead>
<tr>
<th>Building Service</th>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Are there any material risks identified within the M&amp;E report?</td>
<td>Within M&amp;E Report.</td>
<td>Yes / No</td>
<td>If yes, these should be captured and included within the investment appraisal. This information should also be reviewed as part of the 100-Day Review to feed into the property’s asset plan.</td>
<td>This should review existing ventilation, heating, cooling, lighting and control systems and highlight risks regarding the responsibilities for maintenance; the existence of obsolete equipment, equipment sizing, the level of supply, adequacy of capacity and level of controls. An existing Building Log Book, Air Conditioning Inspection Report and Building Information Model will all provide useful information in preparing the M&amp;E report.</td>
<td>CAPEX Implication</td>
</tr>
<tr>
<td>2  Are there any opportunities to improve the building services?</td>
<td>Within M&amp;E Report, any existing Energy Audit, EPC recommendations report and Air-Conditioning Inspection Report.</td>
<td>Yes / No</td>
<td>If yes, these should be captured and reviewed as part of the 100-Day Review to feed into the property’s asset plan.</td>
<td>Items reviewed should cover the potential for fuel switching (e.g. from electric or oil based heating to gas), on-site energy generation, upgrades to central plant, local air conditioning/mechanical ventilation systems, lighting systems, controls, local hot water generation systems, BMS systems and opportunities for improved metering. For further information see CIBSE Guide F: Energy Efficiency in Buildings and Society of Light and Lighting Guides.</td>
<td>Supports 100-Day Review</td>
</tr>
</tbody>
</table>

---

2  Are there any opportunities identified to improve the building fabric?

- Within M&E Report, any existing energy audit and EPC recommendations report.
- Yes / No
- If yes, these should be captured and reviewed as part of the 100-Day Review to feed into the property’s asset plan.
- This should include opportunities to improve the envelope performance in terms of daylighting, airtightness, solar shading and insulation; as well as the potential for natural ventilation and use of thermal mass.

3  Is there any information available regarding the construction materials used in the property? e.g. material type, source, disposal options and embodied carbon.

- Within Building Survey & CPSE.
- Yes / No
- If yes, request details.
- This will typically only be relevant for newly developed properties. However, details regarding materials use and embodied carbon etc. may be available for any major refurbishment works.
3 Where an air conditioning system has a combined cooling capacity greater than 12kW, has the latest Air Conditioning Inspection report and associated recommendations been supplied?

Within CPSE & National EPC register. 
Yes / No 
If yes, the date of the next inspection and any recommendations implemented to date should be noted. Any recommendations which have not yet been implemented should be included as part of the 100-Day Review to feed into the property’s asset plan. 
If no, an inspection will need to be commissioned.

Air Conditioning Inspections are a legal requirement under the Energy Performance of Buildings Directive (EPBD). All air conditioning systems with a combined cooling capacity greater than 12kW are required to have a valid Air Conditioning Inspection report and a certificate in place. Recertification is required every five years. CIBSE TM44: Inspection of Air Conditioning Systems offers a detailed methodology for the delivery of Air Conditioning Inspections, to wholly satisfy the requirements of the EPBD.

Air Conditioning Inspection reports can be sourced via www.ndepregister.com (for England & Wales).

4 Are air conditioning systems and/or other systems utilising refrigerant gases subject to appropriate servicing and maintenance?

Within Air Conditioning Inspection report, M&E report and PPM Schedule. 
Yes / No 
As part of this assessment, the Plant Register, including the nature of refrigerant gas, quantity, required frequency of servicing based on calculated global warming potential, and evidence of servicing by appropriately qualified company and personnel, should be requested.

Refrigerant gases known as F-gases (including R410A, R134A, R404A) are subject to directly applicable European Regulations that set out the minimum frequency for leak detection, service and maintenance. Where the property owner is responsible for systems containing F-gases, they must ensure that the system is subject to leak detection at the required interval to prevent loss of F-gases to the atmosphere.

5 Does the property use obsolete refrigerants or refrigerants that are due to be phased out?

Building Survey, CPSE and Air Conditioning Inspection report. 
Yes / No 
If yes, determine capital costs of replacement or required upgrades to the HVAC system, which should then be included within the investment appraisal. The vendor may have historically carried out this exercise. 

Since 1st January 2015, it has been illegal to use R22 refrigerant to maintain or repair air conditioning systems in the UK. R22 was a very common refrigerant used in systems installed prior to 2004. If the property’s air conditioning system uses R22 then the system will either need replacement or modification to use a new refrigerant before, or at the point of, system failure. It is recommended that owners take a proactive rather than reactive approach to R22 phase out with, the costs of upgrades factored in to investment appraisals. Additionally, it is recommended that owners review service charge clauses to determine possible contributions from occupiers. Other refrigerants may be phased out in the future so it is important to check the status of all refrigerants used in a property and maintenance records.

Air Conditioning Inspection reports must identify any refrigerants in air conditioning systems, therefore, they are valuable documents in helping identify associated risks.
### 6 Is there any on-site low carbon/renewable technology present at the property?

- **e.g.** photovoltaics, solar thermal, biomass boilers, combined heat and power (CHP), ground source heat pump, air source heat pump, wind turbines, fuel cells, district heating connection.

<table>
<thead>
<tr>
<th>Information Requested</th>
<th>Response</th>
<th>Details</th>
</tr>
</thead>
</table>
| Within CPSE, M&E report, legal review and service charge report.                     | Yes / No | If yes, request details of the following:  
1. Ownership arrangements.  
2. Financial arrangements regarding generation e.g. registration to any Government scheme such as Renewables Obligation Certificates (ROCs), Feed-in Tariffs (FiTs), Renewable Heat Incentive (RHI) etc; who it’s registered under; where payments are registered to and whether any recharging exists.  
3. Export arrangements e.g. to grid, common parts or occupiers.  
5. Maintenance arrangements and contracts.  
6. Condition survey and age of plant.  
7. Last 12 months of generation and associated emissions (e.g. NOx emissions if relevant).  
   
Such information should be assessed as part of the 100-Day Review. |

On-site low carbon/renewable energy systems are becoming more common as a result of planning requirements, the desire to reduce carbon emissions and reliance to the National Grid. The existence of such systems can be advantageous for property owners, however, ownership and financial arrangements linked to government incentives can be complex. As a result, it is imperative that the incoming owner ensures all relevant details are requested from the vendor during due diligence to ensure a smooth transition of the system’s ownership.

For further information see BSRIA BG 1/2008 Illustrated Guide to Renewable Technologies as well as relevant CIBSE Guides.

### 7 Does a Building Information Model (BIM) for the property exist?

<table>
<thead>
<tr>
<th>Information Requested</th>
<th>Response</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, request a copy. In addition, request details of the type of BIM and when it was last updated.</td>
</tr>
</tbody>
</table>

A Building Information Model (BIM) is a digital model of a property in which information about a project is stored. It is a very useful tool for the property owner as it provides a detailed account of all aspects of the building design, including the location of all the plant, the services, the materials used in construction, energy use and carbon performance. It provides a detailed account of how the building was designed to be operated, which is not only useful for buildings management, but also to ensure occupier comfort. It also helps reduce costs of identifying and rectifying issues, as well as any future improvements by acting as a baseline to model scenarios. BIM models are only likely to be available for recent large developments.
<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Have details of the metering arrangements been provided?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, identify how many meters and sub-meters exist for electricity, fuel, heat, coolth and water.</td>
<td>This information should ideally be in the form of a Metering Plan which includes details of all on-site meters and sub-meters, their locations, MPAN and MPRN numbers, details of what they serve, whether they are MID approved and any photos to aid their location and reference. If the property management team is changing, this information will be helpful to the incoming team. If this information does not exist, the new property owner will need to consider appointing an engineering company to develop a Metering Plan so that the energy usage of the property can be efficiently managed by the property management team.</td>
</tr>
<tr>
<td>2 Does the property contain a Heat Network as described under the Heat Network (Metering and Billing) Regulations 2014?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, request copies of heat network notifications and cost effectiveness / viability tests. If heat meters for billing are stated as present, then confirm that this is referenced within any Metering Plan.</td>
<td>Under the Heat Network (Metering and Billing) Regulations 2014, property owners are required to notify the Government of the existence of Heat Networks every four years and test the viability for the installation of heat meters. Where heat meters exist, the regulations set requirements regarding the billing of occupiers for the consumption of heating, cooling and hot water. For further information see <a href="http://www.gov.uk/guidance/heat-networks">www.gov.uk/guidance/heat-networks</a> and <a href="http://www.bbp.org.uk/heat-networks-update">BBP Heat Networks Update</a>.</td>
</tr>
<tr>
<td>3 Do sub-meters exist for occupier recharging?</td>
<td>Within CPSE &amp; Metering Plan.</td>
<td>Yes / No</td>
<td>If yes confirm details of type, reference numbers and locations e.g. electricity, heat / coolth and district heating. Details of occupier billing arrangements should be requested and reviewed as part of the 100-Day Review.</td>
<td>This information should ideally be in the form of a Metering Plan which includes details of all on-site meters and sub-meters, their locations, MPAN and MPRN numbers, details of what they serve, whether they are MID approved and any photos of meters to aid their location and reference.</td>
</tr>
<tr>
<td>Question</td>
<td>Location</td>
<td>Answer</td>
<td>Details/Notes</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>4 Do sub-meters exist for major plant?</td>
<td>Within CPSE &amp; Metering Plan.</td>
<td>Yes/No</td>
<td>If yes, confirm details of type, reference numbers and locations. This information should ideally be in the form of a Metering Plan which includes details of all on-site meters and sub-meters, their locations, MPAN and MPRN numbers, details of what they serve, whether they are MID approved and any photos of meters to aid their location and reference.</td>
<td></td>
</tr>
<tr>
<td>5 Is metering data being automatically collected?</td>
<td>Within CPSE.</td>
<td>Yes/No</td>
<td>If yes, request details and permission to retrieve historic data. Automatic Meter Reading (AMR) meters provide the ability to read consumption automatically and at high frequency (typically half-hourly). Half-hourly data from such meters are transmitted over a communications network to a data collector or aggregator (often a utility company). The data can then be passed on to the building management team or property owner for analysis within their own aM&amp;T system. For further information see the BBP Better Metering Toolkit.</td>
<td></td>
</tr>
<tr>
<td>6 Have the Meter Operator (MOP) Contracts been provided?</td>
<td>Within CPSE.</td>
<td>Yes/No</td>
<td>If Meter Operator Contracts are not in place for electricity supplies, the property management team will need to make the necessary arrangements to put them in place. A Meter Operator Contract is a legal requirement for all half hourly electricity supplied meters over 100kW demand (and best practice for &lt;100kW demand). The contract covers the supply of the meter, maintenance and the necessary telecommunications for sending consumption half-hourly data to the electricity supplier. It is important to know who the meter operator is to ensure half-hourly data is sent to the designated energy supplier to support accurate billing and energy management.</td>
<td></td>
</tr>
<tr>
<td>7 Have the utility supply arrangements been provided?</td>
<td>Within CPSE.</td>
<td>Yes/No</td>
<td>The requested information should include the name and contact details of the vendor representative who deals with energy supplies relating to the property and confirm that the purchaser may make contact in order to obtain information about the services supplied. This should cover the configuration in which the owner and/or occupier(s) purchase utilities for the property, relevant supply contracts and tariff details, and meter start reads for new ownership etc.</td>
<td></td>
</tr>
<tr>
<td>8 Has information on the apportionment of occupier service charge and billing arrangements been provided for utilities, waste and on-site sustainability initiatives?</td>
<td>Within Service Charge Report.</td>
<td>Yes/No</td>
<td>This should include calculation methodology and administration fees for the last 12 months.</td>
<td></td>
</tr>
</tbody>
</table>
# Environmental & Climate Change Risk

<table>
<thead>
<tr>
<th></th>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Has a flood risk assessment previously been undertaken and / or is the vendor aware of any flood events which have impacted the site?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, request a copy.</td>
<td>Flooding (surface water, ground water, artificial water, sewage/drain or coastal / river) can have a significant impact on the value of a property, as well as the ability to obtain insurance and let the space. A flood risk assessment will evaluate the various flood risks present at (and potentially beyond) the site, the potential impact and likelihood of occurrence, as well as suggest any appropriate mitigation measures.</td>
</tr>
<tr>
<td>2</td>
<td>Does the available information indicate a flood risk at the site that exceeds organisational standards?</td>
<td>Available information may include national flood risk maps, prior flood risk assessments and/or an independent flood risk review. See Assessing Flood Risk Decision Tree to support decision making.</td>
<td>Yes / No</td>
<td>If yes, undertake an assessment to understand mitigation options, costs &amp; timescales which should feed into the investment appraisal.</td>
<td>The level of information required to determine how to proceed will be based on the individual risk appetite of each organisation. For further information on assessing flood risk for properties in the UK see <a href="http://www.gov.uk/check-flood-risk">www.gov.uk/check-flood-risk</a>.</td>
</tr>
<tr>
<td>3</td>
<td>Has a land contamination assessment previously been undertaken?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, request a copy.</td>
<td>Contaminated land can have a significant impact on the value of a property, as well as result in high remediation costs, increased risk of insurance cover being withdrawn and even criminal penalties for directors. A land contamination assessment (typically provided within the Phase I Environmental Report) will evaluate any associated environmental risks, liabilities and remediation costs for the site.</td>
</tr>
<tr>
<td>4</td>
<td>Does the available information indicate a contamination risk at the site that exceeds organisational standards?</td>
<td>CPSE &amp; Phase 1 Environmental Report. See Assessing Land Contamination Decision Tree to support decision making.</td>
<td>Yes / No</td>
<td>If yes, undertake an assessment to understand mitigation options, costs &amp; timescales which should feed into the investment appraisal.</td>
<td>The level of information required to determine how to proceed will be based on the individual risk appetite of each organisation.</td>
</tr>
<tr>
<td>5</td>
<td>Does the site lie in an area of high radon gas risk?</td>
<td>Phase 1 Environmental Report and UKradon Map.</td>
<td>Yes / No</td>
<td>If yes, request the results of radon gas monitoring in the property, and details of radon protection and/or mitigation measures installed if required.</td>
<td>Radon is a naturally occurring radioactive gas that may occur as a result of local geology. Protection against radon ingress may be required in new properties or extensions by the Building Regulations (see BR 211: 2015 BRE Radon: Guidance on protective measures for new buildings for guidance). For further information see <a href="http://www.ukradon.org">www.ukradon.org</a> and BRE.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>6</td>
<td>Are there property characteristics that may negatively affect the flexibility of use, or ability to change the future use of the property?</td>
<td>Internal review based on Building Survey, Structural Survey and M&amp;E Report.</td>
<td>Yes / No</td>
<td>If yes, request details.</td>
<td>Properties which convert easily between different end uses can reduce leasing and sales risk, cut refurbishment costs and extend the life of the property. Items which may pose a risk include: • Low-storey (not ceiling) heights (&lt;3.2m). • Irregular floor-plate shape (offices). • Frequent or obstructive internal supports. • Irregular planning grid (columns and façade). • Single floor/street access points. • Limited service risers. • Limited incoming services/energy supply. • Limited internal and external plant space. • Presence of overhead power lines or telecommunication masts.</td>
</tr>
<tr>
<td>7</td>
<td>Are there any characteristics that may have an adverse impact on performance as a result of future climate predictions? e.g. risks of overheating; localised urban heat island effect; extreme weather events; flooding etc.</td>
<td>Internal Review / specialist advice needed.</td>
<td>Yes / No</td>
<td>If yes, request details.</td>
<td>Whilst relatively uncommon across the real estate industry, forward thinking property owners are now starting to assess the potential of future climate risks to their property portfolios. Such information may be useful in assessing risks associated with value retention for medium to long-term ownership. For further information see CIBSE TM52: The Limits of Thermal Comfort: Avoiding Overheating in European Buildings; CIBSE KS16: How to Manage Overheating in Buildings and RICS Climatic Risks Toolkit.</td>
</tr>
</tbody>
</table>
Socio-economic risks

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Does any occupier pose a risk, to either the purchaser's reputation or having operations with high environmental impacts?</td>
<td>CPSE.</td>
<td>Yes / No</td>
<td>If yes, state the risk.</td>
<td>Real estate investors are increasingly interested in the risks posed by occupiers of the companies they invest in. Either reputationally (e.g. tobacco, gambling, poor working conditions for employees/supply chain) or those where their operations have high environmental impacts (e.g. Arctic oil drilling, deforestation).</td>
</tr>
<tr>
<td>2 Are there any socio-economic requirements linked to the property the purchaser should be aware of?</td>
<td>CPSE.</td>
<td>Yes / No</td>
<td>If yes, request details.</td>
<td>Such requirements will typically only be relevant when acquiring a speculative or recent development. However, it is important to be aware of any potential socio-economic requirements. For example, whether the Local Authority has specific S.106 socio-economic requirements for the development, or commitments in the development agreement to report annually on socio-economic indicators. If any conditions do exist, the property owner should request copies of any socio-economic appraisal/study that was undertaken.</td>
</tr>
</tbody>
</table>

Property Management

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
</table>
| 1 Has all required property management information been provided? | Within CPSE. | Yes / No | List all information which has been provided as a record. | Required property management information may include, but is not limited to:  
• PPM Schedules.  
• Asset registers.  
• Building Logbook.  
• BMS log-in details.  
• Occupier handbook.  
• Occupier engagement programmes.  
• Local community engagement details.  
Such information is important as part of the 100-Day Review to ensure adequate property management processes are in place.  
For further information see CIBSE Guide M: Maintenance Engineering & Management. | Supports 100-Day Review |
2 Is there a Building Log Book?  
Within CPSE.  
Yes / No  
If yes, request a copy.  
Building Regulations Approved Document L2A(2) requires information to be provided about the fixed building services and their maintenance requirements. Therefore, properties constructed after 2002 should have a Building Log Book that includes details of installed building services plant and controls, their method of operation and maintenance, and other details that enable energy consumption to be monitored and controlled.  
For further information see CIBSE TM31 Building Logbook Toolkit.

3 Does the property have a Building Management System (BMS) in place?  
Within M&E report & within CPSE.  
Yes / No  
If yes, request the BMS access codes and schedule. A review should be undertaken as part of the 100-Day Review to assess what the BMS serves, how it has been programmed and its suitability for current occupier usage.  
A BMS is a computer based central control system which is installed to manage the operation of building services e.g. heating, cooling, ventilation, hot water and lighting; and in some cases, the integration with the building envelope through control of shading devices and windows. A building with a well-managed BMS should provide occupiers with a high level of comfort.

Energy Efficiency

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Has historic energy data been provided?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, determine whether the property presents a material risk to portfolio energy performance against organisational standards.</td>
<td>The latest 12-24 months of energy data should be requested. This should be, as a minimum, in the form of utility bills/manual meter reads; but preferably as an output from an energy management system based on half-hourly data.</td>
</tr>
</tbody>
</table>
| 2 Does the property present a material risk to portfolio energy performance against organisational standards? | Historic energy data request within CPSE followed by internal review.  
See Assessing Portfolio Operational Energy Performance Impact Decision Tree to support decision making. | Yes / No | Depending on the level of information provided, the relative performance of the property and level of risk perceived, an owner may wish to carry out an independent energy audit to identify improvement opportunities and estimated upgrade costs. | Firstly, historic energy data should be requested (last 12-24 months). Energy intensity can then be calculated using appropriate denominators (e.g. floor area to calculate kWh per m² per year). Intensities can then be compared to industry benchmarks (e.g. Real Estate Environmental Benchmark) and the impact on portfolio targets assessed.  
Any historic energy audits and contextual information regarding the use and activities within the property will be useful in assessing risks. | Investment Critical |
3 Has the property had an energy audit undertaken in the past four years?

| Within CPSE. | Yes / No: If yes, request the audit report and any schedules of actions carried out against recommendations made in the audit report. This information should then be reviewed as part of the 100-Day Plan to feed into the property's asset plan. | An energy audit may exist in different forms such as an ESOS audit or detailed third party investment grade audit. Specific standards include BS EN 16247 and ISO 50002. An audit could provide useful information regarding the: • Main building services, lighting and control systems. • How energy is transported within the property. • Predominant areas of energy usage. • Patterns of use. • Energy supply and distribution arrangements. • Types of metering. • How performance compares to standard benchmarks. • Opportunities for energy and cost savings with recommendations for action. An Air Conditioning Inspection and EPC Recommendations Report will also suggest a number of improvement opportunities. For further information also see CIBSE Guide F: Energy Efficiency in Buildings. |

4 Is the property a Participant Equivalent as defined by the CRC Energy Efficiency Scheme (CRC)?

| Within CPSE. | Yes/ No If yes, confirm how any CRC related charges are recharged to occupiers and request a copy of the evidence pack for the property where relevant. | Qualification for the CRC Energy Efficiency Scheme is based on whether the organisation as a whole used at least 6,000 megawatt hours (MWh) of electricity through all its settled half hourly meters (sHHMs). A Participant Equivalent (PE) is any individual undertaking within an organisation that would have met the qualification criteria for participation in CRC in its own right had it not been part of a larger organisation. PEs are defined at qualification only. Irrespective of the level of increase or decrease of energy use during the phase, the PE status of an undertaking does not change during a phase. If an organisation acquires a PE this is a significant event under the CRC and the regulator will need to be notified. For further information see https://www.gov.uk/government/publications/crc-guidance-for-participants-in-phase-2. |
## Water efficiency

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
</table>
| 1 Has the property had a water audit undertaken in the past four years? | Within CPSE. | Yes / No | If yes, request the audit report and any schedules of actions carried out against recommendations made in the audit report. This information should then be reviewed as part of the 100-Day Review to feed into the property’s asset plan. | An audit could provide useful information regarding the:  
• Predominant areas of water usage.  
• The existence of water saving devices.  
• Patterns of use.  
• Supply and distribution arrangements.  
• Existence of water metering.  
• How performance compares to standard benchmarks.  
• Opportunities for water and cost savings with recommendations for action. | Supports 100-Day Review |
| 2 Has a Site Drainage Plan been provided? | Within CPSE. | Yes / No | If yes, review to ensure the accuracy of the document. This information should then be reviewed as part of the 100-Day Review to identify requirements for maintenance, upgrades or environmental permits for discharges. | A Site Drainage Plan is important in maintaining and achieving ISO14001. It should provide a layout of the site and details of:  
• All drain locations e.g. foul drains and surface drains.  
• On-site effluent treatment tanks or storage.  
• Discharge points from the site.  
• Watercourses, springs and boreholes, on or near to the site.  
• Mains water supply and sprinkler control valves.  
• Location of emergency equipment like spill kits and drain covers etc. | Required Information |
| 3 Has historic water consumption data been provided? | Within CPSE. | Yes / No | If yes, determine whether the property presents a material risk to portfolio water performance against organisational standards. | The latest 12-24 months of water consumption data should be requested. This should be in the form of utility bills. | Supports 100-Day Review |
| 4 Is the property a material water user and / or an ‘inefficient’ property according to organisation standards? | Internal review. | Yes / No | Depending on the performance of the property, consider if a further audit is necessary post-acquisition. | Firstly, historic water consumption data should be requested (last 12-24 months). Water intensity can then be calculated using appropriate denominators (e.g. floor area to calculate m$^3$ consumption per m$^2$ per year). Intensities can then be compared to industry benchmarks (e.g. Real Estate Environmental Benchmark) and the impact on portfolio targets assessed.  
Any historic water audits and contextual information regarding the use and activities within the property will be useful in assessing risks. | Supports 100-Day Review |
# Waste management

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Has all relevant waste management arrangements been provided?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, review to ensure the accuracy/completeness of the information.</td>
<td>This should include the Site Waste Management Plan, waste management contract details (including contact information), Duty of Care documentation and relevant risk assessments relating to hazardous waste.</td>
</tr>
</tbody>
</table>
| 2 Has the property had a waste audit undertaken in the past four years? | Within CPSE. | Yes / No | If yes, request the audit report and any schedules of actions carried out against recommendations made in the audit report. | A waste audit should provide details of the:  
• Breakdown of on-site waste streams and their estimated weights.  
• Current waste management strategy and on-site provisions.  
• Effectiveness of current waste management provisions and recommendations for improvements in line with the waste hierarchy and European Waste Framework Directive 2008/98/EC. | Supports 100-Day Review |
| 3 Has historic waste generation data been provided? | Within CPSE. | Yes / No | If yes, determine whether the property presents a material risk to portfolio waste performance against organisational standards. | The latest 12-24 months of waste generation data should be requested. This should be in the form of a summary based on reported waste data and invoices from waste management service providers. | Supports 100-Day Review |
| 4 Is the property a material waste user and / or an 'inefficient' property according to organisation standards? | Internal review. | Yes / No | Depending on the performance of the property, consider if an audit is necessary post-acquisition. | Firstly, historic waste generation data should be requested (last 12-24 months). Performance can then be compared to industry benchmarks (e.g. Real Estate Environmental Benchmark) and the impact on portfolio targets assessed. Any historic waste audits, Duty of Care documentation and contextual information regarding the use and activities within the property will be useful in assessing risks. | Supports 100-Day Review |
## Health, Wellbeing & Occupier engagement

<table>
<thead>
<tr>
<th></th>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does the property have equipment installed to monitor Indoor Environmental Quality? e.g. temperature, relative humidity, CO₂, CO, VOCs, PM10, PM2.5, noise, light.</td>
<td>Within CPSE &amp; M&amp;E Report.</td>
<td>Yes / No</td>
<td>If yes, request details of monitoring equipment, what it measures, how data is collected, where data is stored and what information has historically been communicated to occupants. Particular attention should be given to any licencing that is in place to continue the service and any constraints regarding data ownership.</td>
<td>With rising interest in the health &amp; wellbeing agenda, occupiers are becoming more conscious of how the indoor environment can impact on how their employees feel, perceive, and interact with their surroundings. Occupiers are increasingly asking owners to provide evidence of performance and, as a result, owners are installing equipment to monitor internal conditions. It is therefore important for any incoming owner to understand the level of monitoring (if any) that exists, how that information has been stored and what information has previously been communicated to occupiers. For further information see World Green Building Council’s Better Places for People campaign.</td>
</tr>
<tr>
<td>2</td>
<td>Has an indoor air quality test been undertaken for the property in the past three years?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, request a copy.</td>
<td>Indoor air quality can influence the health, comfort and well-being of occupiers. Poor air quality has been linked to Sick Building Syndrome and reduced productivity. A recent Air Quality Test is a useful gauge to assess the adequacy of current ventilation systems and whether improvement works are required. It should be noted that a property will need to achieve a certain level of air quality if a property owner or occupier wishes to achieve a certification linked to health &amp; wellbeing e.g. WELL Building Standard or FitWell.</td>
</tr>
<tr>
<td>3</td>
<td>Do occupiers have any access to ecological/green amenity space?</td>
<td>Within the Building Survey &amp; Building Plans.</td>
<td>Yes / No</td>
<td>If yes, provide details, including maintenance arrangements and costs.</td>
<td>An amenity space for occupiers can comprise planting, or other ecological features such as a pond, together with seating and benches. Spaces can be within an internal courtyard, terracing or as part of the external landscaping. Amenity space should be attractive to occupiers. Studies have indicated that such spaces can lead to improved occupier satisfaction, health, wellbeing and productivity.</td>
</tr>
<tr>
<td>4</td>
<td>Have any green provisions been identified within any Leases or Licences for Alternations?</td>
<td>Within the Title Report.</td>
<td>Yes / No</td>
<td>If yes, consider whether they present any material risks.</td>
<td>For further information into the types of green provisions that are becoming standard practice, see BBP Green Lease Toolkit. Whilst arguably not a ‘green provision’, any legal review should check for the existence of provisions that limit risks associated with Minimum Energy Efficiency Standards which may sit within the Lease or Licence for Alternations.</td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
<td>Details</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Is an Occupier/Building Management Forum in place?</td>
<td>Yes / No</td>
<td>Within CPSE. If yes, request details including frequency of meetings, the owner / property management’s role and minutes of previous meetings. Occupier/Building Management Forums provide a platform from which to review the environmental performance of the property and to share ideas on how to improve its operational and occupational efficiency. This may have been formalised via a Memorandum of Understanding. They provide owners with an opportunity to explain to occupiers how their property is currently performing and can help stimulate action by occupiers to reduce their own environmental impacts. For further information see the BBP Green Building Management Toolkit and BBP Green Lease Toolkit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Has a post occupancy evaluation, an occupancy satisfaction and/or a health &amp; wellbeing perception survey been carried out in the last three years?</td>
<td>Yes / No</td>
<td>Within CPSE. If yes, request a copy of the report. A Post-Occupancy Evaluation is a process of receiving feedback on a property’s operational performance in comparison to its design intent. This is normally carried out within the first 24 months of construction or a major refurbishment and can cover: • The effectiveness of the space planning. • Aesthetic quality. • The standards of lighting, acoustic environment, ventilation, temperature and humidity. • Air-pollution and air quality. • User comfort. • Maintenance and occupancy costs. • Defects. • The balance between capital and running costs. • Environmental performance and operational energy consumption. An Occupier Satisfaction Survey will provide recent feedback of occupier perceptions and their experience of using the property, as well as suggestions for improvements. Examples include the BUS Methodology and BRE Design Quality Method. For further information see BSRIA BG 63/2015 Building Performance Evaluation in Non-Domestic Buildings.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Biodiversity

<table>
<thead>
<tr>
<th></th>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Additional Requirements</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are there any biodiversity risks or constraints that could impact or limit activity at the property?</td>
<td>Within CPSE, Building Survey &amp; Title Report.</td>
<td>Yes / No</td>
<td>If yes, provide details.</td>
<td>Items to be reviewed should include: whether the property is on, or adjacent to, a designated site for the protection of the natural environment; has a tree preservation order; contains or has the potential for protected species (e.g. bats in derelict buildings); contains or has potential for invasive plants to invade the site. In relation to building infrastructure, items to be reviewed should include whether there exists a green/brown roof, living wall or biophilic spaces which require special management provisions.</td>
</tr>
<tr>
<td>2</td>
<td>Does a Biodiversity Action Plan exist?</td>
<td>Within CPSE.</td>
<td>Yes / No</td>
<td>If yes, provide a copy of the Plan.</td>
<td>A Biodiversity Action Plan will set out the policies and measures in place, as well as the opportunities that may exist to preserve and enhance the biodiversity at the property.</td>
</tr>
</tbody>
</table>
| 3 | Are there any opportunities to improve the biodiversity on-site? | Specialist review. | Yes / No | If yes, provide details. | Research is increasingly highlighting the important role of on-site biodiversity in supporting occupier health, wellbeing and productivity. As a result, maintaining and enhancing on-site biodiversity is becoming an additional asset management consideration. Such information may exist within a Biodiversity Action Plan for the property. Opportunities often include the:  
  • Selection of specific fauna and flora.  
  • Creation of ecological spaces / wildlife habitats.  
  • Installation of green/brown roofs or walls.  
  • Use of indoor plants. |
## Transport

<table>
<thead>
<tr>
<th>How information should be requested / sourced</th>
<th>Response</th>
<th>Supplementary Information</th>
<th>Nature of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Are there any concerns identified relating to the access to the property and travelling within the site premises?</strong></td>
<td>Internal review of Building Survey &amp; Plans, Title Report.</td>
<td>Yes / No</td>
<td>If yes, assess whether any mitigation measures are required and feed associated costs &amp; timescales into the investment appraisal.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Items for review may include the:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Distance to public transport node and frequency of service in relation to property opening / operating hours.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Existence of designated and safe footpaths, walkways and cycle paths to access public transport and on-site facilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Adequate / space to include on-site cycle storage and facilities e.g. changing areas, showers, lockers and drying areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Adequate provision of car park spaces.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Existence of electric charge points and the financial charging arrangements.</td>
</tr>
<tr>
<td><strong>2 Are there any opportunities identified to improve transport provisions to the property and within site premises?</strong></td>
<td>Internal review.</td>
<td>Yes / No</td>
<td>If yes, this information should then be reviewed as part of the 100-Day Review to feed into the property’s asset plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Possible opportunities could include the:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Provision (or addition) of on-site cycle spaces.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Development of a Green Travel Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Creation of designated and safe footpaths, walkways and cycle paths to access public transport and on-site facilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Installation of electric vehicle charging points.</td>
</tr>
</tbody>
</table>
For each Investment Critical item included within the Sustainability Investment Checklist, the following decision trees have been developed to support property owners in identifying the risks, considering the potential impacts and determining whether any mitigation measures are required.

Investment Critical Decision Trees
1. ASSESSING MINIMUM ENERGY EFFICIENCY STANDARDS RISK

For properties in England and Wales, The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015, more commonly known as Minimum Energy Efficiency Standards (MEES), make it unlawful to let residential or business premises that do not reach a minimum energy efficiency standard, with that standard currently set at Energy Performance Certificate (EPC) rating “E”. This applies to all new leases from 1 April 2018 and all privately rented property (existing leases) within the scope of the regulations by 1 April 2023.

Whilst there could be situations where the property owner may be satisfied with the quality of the EPC, it is considered best-practice to carry out a new EPC assessment if the EPC rating does not meet the organisational standard. This confirms the accuracy of the rating and provides up-to-date information that can be used to adequately determine costs to meet the organisational standard.

Questions to consider when assessing quality:
• How old is the EPC? The EPC calculation methodology changed in April 2011 to reflect the latest Building Regulations. Therefore, EPCs prior to this date will not reflect an up-to-date assessment.
• When does the EPC expire?
• Does the EPC match the EPC on the national register?
• Does the information on the EPC match the internal organisational standard of an EPC rating will be dependent on the investment strategy for the property (e.g., redevelopment opportunities; length of existing leases and length of expected holding) and risk appetite of the organisation. For Scottish properties, any accompanying Section 63 Action Plan will be of greater relevance rather than the EPC rating.

For properties in Scotland, from October 2016 all lease and lease renewals over 1,000m² are required to meet 2002 Building Regulations. EPC assessments post October 2016 confirm if this is the case or not. Any property not meeting these standards is required to have a Section 63 Action Plan which sets out the measures needed to be implemented within a 3.5-year timescale.

The following decision tree can be used to support the assessment of risk against either of these pieces of legislation and whether further action is required as part of the acquisitions process.

Obtain the EPC from the vendor

Are you satisfied with the quality of the EPC?

Y >> Does the EPC meet organisational standards?

N >> Redo EPC

N >> Does the EPC meet organisational standards?

N >> Determine costs to meet organisational standard

Y >> Integrate costs into investment appraisal

Do the capital costs have a material impact on pricing and predicted returns?

Y >> Renegotiate / terminate transaction

N >> Proceed with transaction
2. ASSESSING FLOOD RISK

Flood risk is an area of growing significance to property owners, investors, lenders and insurers. Flooding (surface water, ground water, artificial water, sewage/drain or coastal / river) can have a significant impact on the value of a property. It can cause damage requiring refurbishment works; result in the loss of rent if the property becomes incapable of being occupied or access is restricted; increase the risk of insurance cover being withdrawn and even cause resale to become difficult or impossible.

Available information may include national flood risk maps (or local equivalent), prior flood risks assessments and/or independent flood risk reviews. To assess flood risk of properties in the UK see www.gov.uk/check-flood-risk

Assessment should not simply be restricted to the specific site but also consider local transport infrastructure which may affect access and business continuity.

The level of information required to determine how to proceed will be based on the individual risk appetite of each organisation.

Does the available information indicate a flood risk at the site that exceeds organisational standards?

- Y
  - Undertake assessment to understand mitigation options, costs & timescales
  - Do the capital costs or perceived residual risk have material impact on pricing and predicted returns?
    - Y
      - Renegotiate / terminate transaction
    - N
      - Ensure mitigation measures are reviewed in 100-Day Review
      - Proceed with transaction

Proceed with transaction
3. ASSESSING LAND CONTAMINATION

Contaminated land is an area of high risk for property owners, investors, lenders and insurers, from both a financial and regulatory perspective, that requires appropriate consideration and attention. It can have a significant impact on the value of a property, resulting in high remediation costs, the loss of rent if the building becomes incapable of being occupied, increased risk of insurance cover being withdrawn, resale becoming difficult/impossible and even criminal penalties for directors. Conversely, an accurate land contamination assessment of associated environmental risks, liabilities and costs may also present opportunities, especially in cases where previously those risks have been overstated and considered prohibitive to a transaction.

This information is typically provided within the Phase I Environmental Report. Alternatively, it can be requested directly from the vendor.

The level of information required to determine how to proceed will be based on the individual risk appetite of each organisation.

Does the available information indicate a contamination risk at the site that exceeds organisational standards?

Y

Undertake assessment to understand costs and timescales of remediation

Do the remediation costs or perceived residual risk have material impact on pricing and predicted returns?

N

Renegotiate / terminate transaction

Is there an ongoing requirement for monitoring or maintenance of contamination or ground gas mitigation measures?

Y

Proceed with transaction

N

Ensure remediation measures are reviewed in 100-Day Review
4. ASSESSING PORTFOLIO OPERATIONAL ENERGY PERFORMANCE IMPACT

There is an increasing trend for property companies to set long-term energy reduction targets, which in some instances might be linked to external accreditation schemes e.g. the Science Based Targets Initiative. In order to meet these long-term targets, property owners will need to consider the energy performance of properties as they come into their portfolios rather than looking solely at the efficiencies possible for those properties already under ownership.

As part of setting these targets, property companies are expected to benchmark current portfolio energy performance and develop a trajectory to meet the target. The target KPI is likely to be energy intensity (i.e. energy use per m²) and based on a technical assessment of achievable energy savings.

By tracking portfolio energy intensity over time against a trajectory, property owners will also be able to assess the impact of a new acquisition on overall portfolio performance by undertaking simple calculations using historic energy consumption data and floor area.

As part of the process for assessing the potential impact on targets, it is also important that the business plan for the property is taken into account. For example, if a property is being acquired in order to be repositioned, then the energy performance is less relevant in comparison to acquiring a property with the intention to hold it for a number of years with no plans of carrying out any capital upgrades.

The following decision tree can be used to support the assessment of the risk presented by an acquisition on the overall portfolio operational energy performance.
Once acquisition is complete, it is important to take stock and review all the information that has been collected about a property. This section sets out the various items that should be considered by the property owner and their property management team over the first 100 days post-transaction.

It is considered best-practice to pose the following questions at this stage to facilitate the process of reviewing the information that was gathered during due-diligence, identifying key information gaps, and considering how this information should feed into property management and asset management plans.

1. **HAS ALL THE RELEVANT INFORMATION BEEN INTEGRATED INTO THE PROPERTY OWNER’S SYSTEMS?**

   It is important for the property owner to consider how all the information gathered during acquisition is stored and made available for future use e.g. any asset management software, property management software, environmental management software.

   It is considered best-practice to record such information digitally and for it to be widely accessible within an organisation. This avoids information remaining in organisational silos. A further benefit of this approach is that information is readily available for transfer to a new property owner, if a decision is made to dispose of the property.

2. **IS THERE STILL INFORMATION OUTSTANDING FROM THE VENDOR THAT WAS REQUESTED DURING DUE-DILIGENCE?**

   If information was requested as a part of the due-diligence process and remains outstanding at the time of the 100-Day Review, either due to a lack of response or no relevant information being available at the time, such issues should be reviewed at this stage.

   Property owners may want to consider commissioning their own independent assessments to overcome any information gaps since it is unlikely that the vendor will respond to any outstanding requests for information. e.g. Metering Plan, Energy Audit, Site Drainage Plan, Occupier Handbook.

3. **IS ALL THE INFORMATION RECEIVED FROM THE VENDOR OF SATISFACTORY QUALITY?**

   It is possible that information provided by the vendor is out-dated or to an unsatisfactory quality, meaning it is of limited use. The owner will therefore need to consider whether any reports and assessments require recommissioning e.g. Energy Audit, Metering Plan etc.
4. **HAVE THE RISKS AND OPPORTUNITIES IDENTIFIED DURING DUE-DILIGENCE BEEN SATISFACTORILY MANAGED?**

All risks and opportunities identified during due-diligence should be reviewed with roles and responsibilities identified (e.g. between asset management and property management teams) and incorporated into the relevant plans and schedules for the property, including any budgeting implications i.e. asset management plans, capex / service charge budgets and property management programmes.

Risks and opportunities will typically be identified from the following sources: EPC Recommendations Report, Building Survey, M&E Report, Air Conditioning Inspection Report, level of metering, Energy, Water and Waste Audits, Post-Occupancy Evaluations.

5. **ARE YOU SATISFIED THAT ALL THE PROPERTY MANAGEMENT INFORMATION HAS BEEN HANDED OVER AND INTEGRATED INTO PROPERTY MANAGEMENT PROGRAMMES?**

It is important to review the current property management programmes in place and ensure the property management team have all the necessary information to allow them to effectively manage the property. This should include:

- Copies of all property management documentation e.g. PPM Schedules; Asset Registers; Building Log Books and Occupier Handbooks.
- Understanding of responsibilities in supporting or managing compliance of environmental regulations e.g. Air Conditioning Inspections, F-Gas management, CRC Energy Efficiency Scheme, DECs, EPCs, ESOS, Heat Network Regulations. Note that if the property was included in the previous owner’s CRC submission, then the recovered CRC funds for the service charge year will need to be apportioned between the previous and current owner appropriately.
- BMS access and review of schedules.
- Utility purchase arrangements.
- Utility and wider environmental performance data collection and monitoring arrangements.
- Occupier billing and service charge arrangements.
- Waste management arrangements and service provisions.
- Requirements for maintaining certifications e.g. ISO 14001.
- Occupier engagement programmes.
- Local community engagement details.

If the property management is being carried out by a third party it is also important that appropriate management processes are put in place to ensure the property owner’s expectations are met.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>aM&amp;T</td>
<td>Automatic Monitoring &amp; Targeting</td>
</tr>
<tr>
<td>AMR</td>
<td>Automatic Meter Reading</td>
</tr>
<tr>
<td>BIM</td>
<td>Building Information Model</td>
</tr>
<tr>
<td>BMS</td>
<td>Building Management System</td>
</tr>
<tr>
<td>BREEAM</td>
<td>Building Research Establishment Environmental Assessment Method</td>
</tr>
<tr>
<td>CAPEX</td>
<td>Capital Expenditure</td>
</tr>
<tr>
<td>CIBSE</td>
<td>Chartered Institute for Building Services Engineers</td>
</tr>
<tr>
<td>CO</td>
<td>Carbon Monoxide</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon Dioxide</td>
</tr>
<tr>
<td>CPSE</td>
<td>Commercial Property Standard Enquiries</td>
</tr>
<tr>
<td>CRC</td>
<td>Carbon Reduction Commitment Energy Efficiency Scheme</td>
</tr>
<tr>
<td>DEC</td>
<td>Display Energy Certificates</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental Management System</td>
</tr>
<tr>
<td>EPC</td>
<td>Energy Performance Certificate</td>
</tr>
<tr>
<td>ESOS</td>
<td>Energy Savings Opportunities Scheme</td>
</tr>
<tr>
<td>ESG</td>
<td>Environmental, Social and Governance</td>
</tr>
<tr>
<td>FiTs</td>
<td>Feed-in Tariffs</td>
</tr>
<tr>
<td>HVAC</td>
<td>Heating, Ventilation and Air-conditioning</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organization</td>
</tr>
<tr>
<td>kWh</td>
<td>Kilowatt-hour</td>
</tr>
<tr>
<td>LEED</td>
<td>Leadership in Energy and Environmental Design</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Mechanical &amp; Electrical</td>
</tr>
<tr>
<td>MID</td>
<td>Measuring Instruments Directive</td>
</tr>
<tr>
<td>MOP</td>
<td>Meter Operator</td>
</tr>
<tr>
<td>MPAN</td>
<td>Meter Point Administration Number</td>
</tr>
<tr>
<td>MPRN</td>
<td>Meter Point Reference Number</td>
</tr>
<tr>
<td>OHSAS</td>
<td>Occupational Health and Safety Assessment Series</td>
</tr>
<tr>
<td>PPM</td>
<td>Planned Preventative Maintenance</td>
</tr>
<tr>
<td>RHI</td>
<td>Renewable Heat Incentive</td>
</tr>
<tr>
<td>ROCs</td>
<td>Renewables Obligation Certificates</td>
</tr>
<tr>
<td>VOCs</td>
<td>Volatile Organic Compounds</td>
</tr>
</tbody>
</table>
Acknowledgements

Authors

Dan Grandage
Christopher Botten
Amrita Dasgupta
Sophie Carruth
Debbie Hobbs
Nina Reid
Abigail Dean

Aberdeen Asset Management
Better Buildings Partnership
Better Buildings Partnership
LaSalle Asset Management
Legal & General Real Assets
M&G Real Estate
TH Real Estate

Contributors

Valuable contributions to this report were provided, in their personal capacity, by:

Chris Miller-Jones
Charles Everest
Michael Borello
Lucy Elderfield
Sarah Ratcliffe
David Bleicher
Hywel Davies
Janine Cole
Jonathan Gibson
Louise Ellison
Madeleine Velupillai
Charles Sainsbury
Jonathan Winston
Paul Bosworth
Tim Clare
Chris Day
Pamela Hall
Neil Loescher
Richard Hamilton-Grey
Jane Wakiwaka
Karen Jamison
Robert Cohen
Paul Stephan
Pat Dowley
Simon Clouston

Arcadis
Aviva Investors
Aviva Investors
Better Buildings Partnership
Better Buildings Partnership
BSRIA
CIBSE
Great Portland Estate
GVA
Hammerson
Landsec
Landsec
Low Carbon Workplace
Ramboll Environ
Ramboll Environ
Ramboll Environ
Ramboll Environ
TH Real Estate
The Crown Estate
Workspace Group
Verco
Verco
WSP
WSP