CLIMATE RESILIENCE ASSESSMENT

PROPERTY: SAMPLE PROPERTY, 123 GROVE STREET, LONDON

GENERATED ON: 02 / 09 / 2023

PROPECO

Key findings

The following page summarises the key risks and opportunities that we have identified at this property.

Air quality

Relative to the UK average, air quality at this property is very poor (worse than **98.0%** of UK locations).

Subsidence

The current subsidence risk in this area is significant and likely to be exacerbated by climate change in the coming decades.

Planning restrictions

This property is a **grade II** listed building (view the record here). It is also located within a **conservation area**. As a result, your ability to upgrade it may be restricted.

Overheating risk

This risk of overheating is moderate, meaning that your property may become uncomfortably hot for periods during summer months.

Energy efficiency

According to the latest available data, the windows in this property are inefficient.

Energy use & emissions

Based on current prices, annual energy costs at this property are projected to be **£1,773**. This equates to a carbon footprint of **3.0 tonnes** p.a.

ASSESSMENTS

- Hot water: **Good**
- Heating: **Good**
- Windows: **Very poor**
- Walls: **Very good**
- Roof: **Very good**
- Floor: **N / A**

RECOMMENDATIONS

- Add secondary glazing
- Draught proofing
- Install a smart thermostat

Energy use

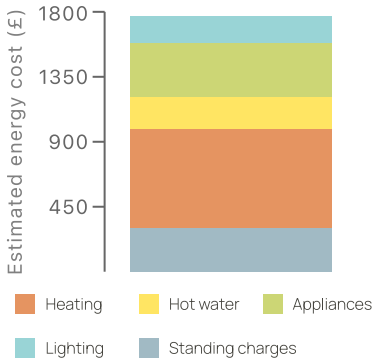
With fluctuating energy costs and emerging regulation, the energy efficiency of a property is of growing importance to its running costs and value. The charts below provide a breakdown of your projected energy use in this property.

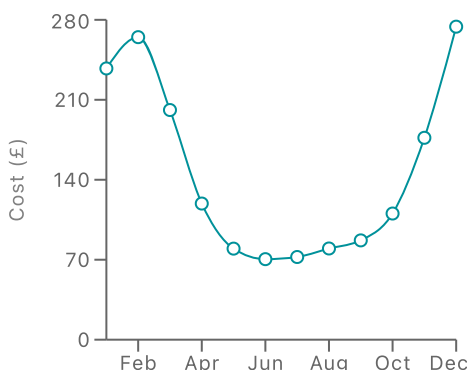
Energy costs

£1,773 p.a.

Carbon footprint

3.0 tonnes p.a.





Energy efficiency

The current EPC rating of this property is **C**, and the most recent assessment suggests that it will be difficult to improve this. The most recent assessment rated the efficiency of the property's key attributes as follows:

Hot water	Heating	Windows	Walls	Roof	Floor
Good	Good	Very poor	Very good	Very good	N / A

The following table shows how the energy efficiency and carbon footprint of this property (as detailed in its latest EPC) compares to local, regional and national averages:

Comparison	Energy efficiency	Carbon footprint
E3 5AN average	Better	Lower
Tower Hamlets average	Worse	Higher
London average	Better	Lower
England average	Better	Lower

Download the EPC for this property.

Find an accredited EPC assessor.

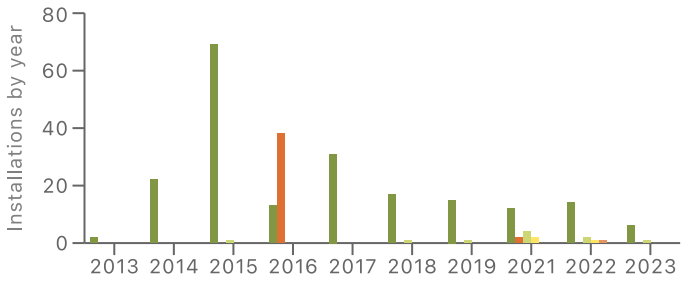
Access green home offers.

Get advice and tips on saving energy.

Green upgrades in this area

Over the past decade, **255** domestic renewable energy systems were installed in this area. The most popular upgrades were:

- Solar Photovoltaic (201)
- Solar Thermal (40)
- Air Source Heat Pump (10)
- Ground/Water Source Heat Pump (3)
- Biomass (1)



Upgrade options

Based on our assessment of this property we believe that the following upgrades are viable and have significant potential to reduce your energy consumption:

Install a smart thermostat. A smart thermostat will enable you to closely control your heating and reduce waste.

Cost	£ 300
Annual saving	£61
Annual carbon saving	197kg
Financial support available	n/a
Payback	5 years
Next steps	Buy now

Add secondary glazing. This will reduce the amount of heat that escapes from your home, while limiting the draughts, air pollution and noise that enters it.

Cost	£ 3,750
Annual saving	£45
Annual carbon saving	128kg
Financial support available	n/a
Payback	84 years
Next steps	Find an installer

Draught proofing. Plugging gaps around windows, doors, keyholes and chimneys represents a cheap, do-it-yourself way to save energy.

Cost	£ 145
Annual saving	£9
Annual carbon saving	30kg
Financial support available	n/a
Payback	16 years
Next steps	View guidance

Energy-saving 'quick-wins'. The following simple steps could save you hundreds of pounds each year:

Heat wisely. Turn your thermostat down by 1°C and heat only the parts of your home that are in use.

Manage your appliances. Use energy-saving settings and unplug appliances that are not in use.

Retain heat. Draught-proof windows and doors, cover keyholes, letter boxes and chimney openings, and insulate your hot water tank using a lagging jacket.

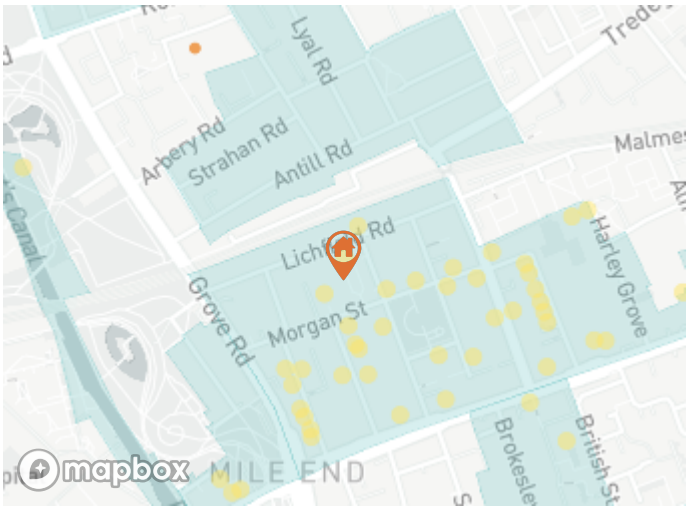
Assess your options

We can quickly source quotes from accredited installers and determine financing options for any of the above upgrades.
We can also help you unlock several ways to reduce the cost of upgrading your property, including:

- → Generating carbon credits
- → Coordinated buying opportunities
- → Discounts on home insurance
- → Monetising your data

REQUEST INFORMATION

Planning assessment. This property is located within a conservation area. As a result, your ability to upgrade it may be restricted.

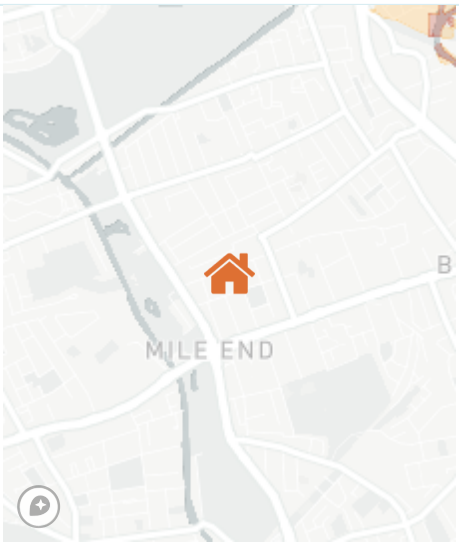


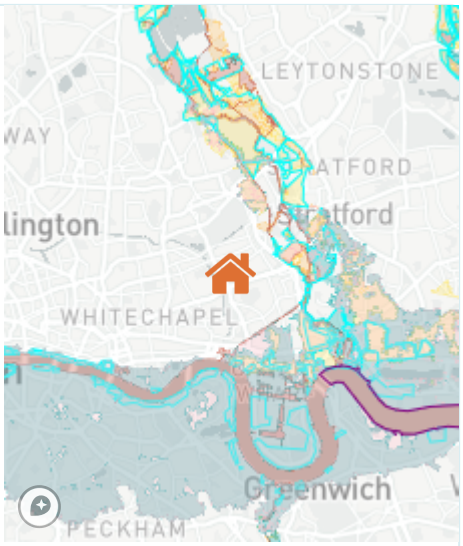
Conservation area · World Heritage Site · National park · Listed building · Solar panels

Over the coming years, climate change is likely to make millions of additional properties across the UK vulnerable to risks including flooding, overheating and extreme weather.

Flooding

Overall risk:	**Negligible**
Nearest flood zone:	**> 1000m**
Closest body of water:	**337m**
Height above sea level:	**11.5m**
Distance to coast:	**49.4km**
Coastal erosion risk:	**No**
Future flood risk:	**Very Low**





River / sea flood risk: Very Low Low Medium High

Historic flood outlines Flood protection zones Potential erosion

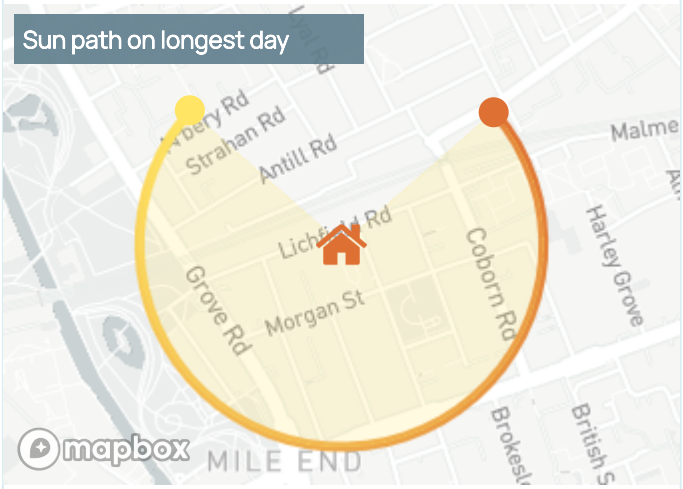
Rainfall On average, this area receives 658mm of rain each year. It is drier than approximately **91%** of the UK, with around 250 rain-free days each year.

Sunshine On average, this area receives 1,631 hours of sunshine each year. Living here, you can expect to enjoy more sunshine than **83%** of the UK.

Temperature The average annual temperature in this area is 12.1°C, making it warmer than **99%** of the UK. The highest recorded temperature here is 37.6°C.

Overheating

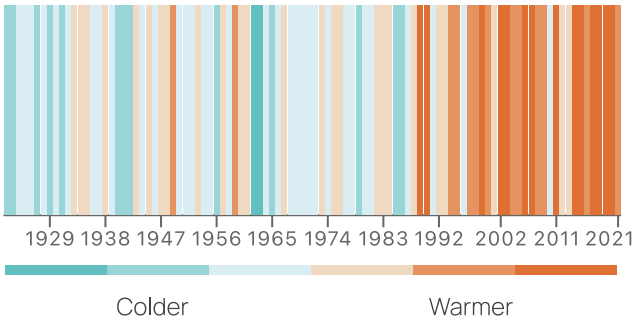
This risk of overheating is moderate, meaning that your property may become uncomfortably hot for periods during summer months.



Sunrise Sunset Sun path

Climate change

This chart highlights how temperatures have been changing at this location over the past century (relative to a 1970-90 reference period).



The latest climate models suggest that, by 2050, summer temperatures at this location could rise by **7.5°C** (to reach **45.1°C**). Rainfall during summer could drop by up to **14%**, but increase by **26%** during winter.

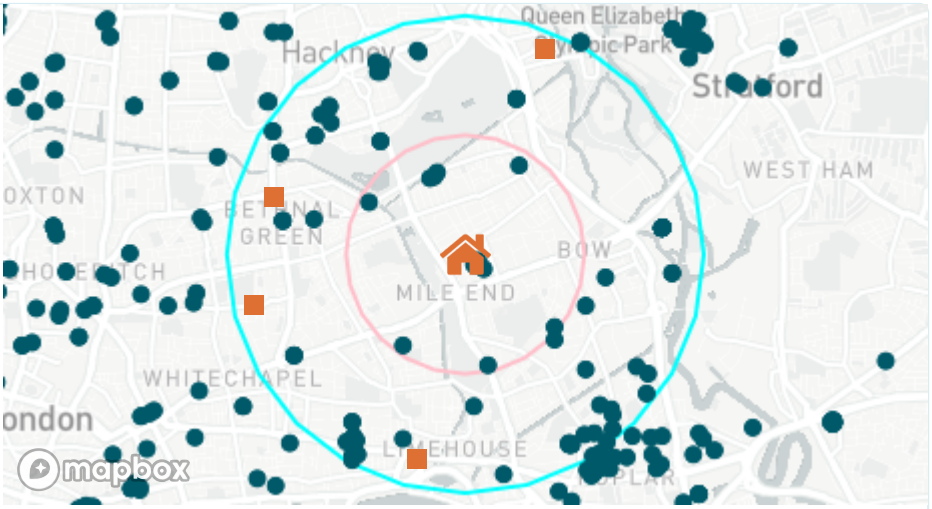
The following features of this location could have a significant impact on your lifestyle and wellbeing.

4 train stations within 2kms.

11 public E.V. charging points within 1km.

This property sits within a low emission zone. View details here.

The closest airport is London City Airport (**7km** away).



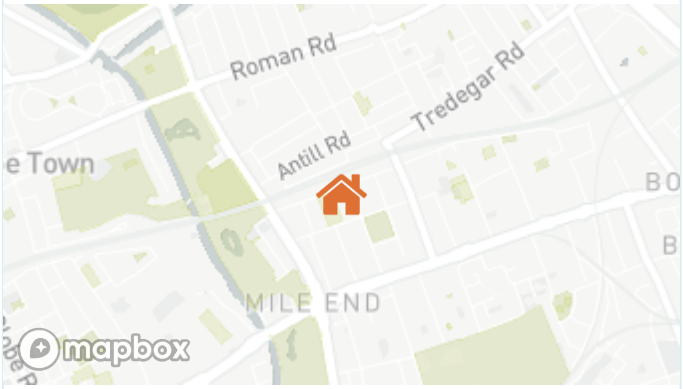
15 mins walk | 15 mins cycle | Train station | EV charge point

Access to amenities is **very good**. Within a 15-minute walk there are:

- 19 Supermarkets
- 20 Schools
- 9 Pharmacies
- 13 ATMs
- 5 Banks
- 20 Bars
- 20 Cafes
- 20 Restaurants
- 7 Dentists
- 20 Doctors
- 20 Gyms
- 6 Post offices

Greenspace

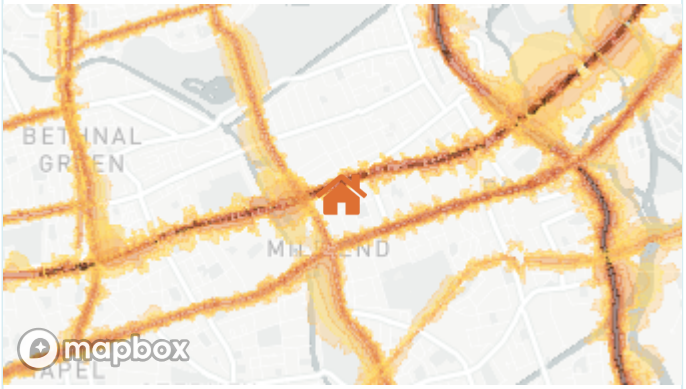
Access to greenspace - which accounts for **22.4%** of nearby land use - is **good**.



Greenspace

Noise

This property is unlikely to be exposed to significant levels of noise from cars, trains or aeroplanes.



Car / train noise (dBs): 75+ — 50

Air quality

Relative to the UK average, air quality at this property is **very poor** (worse than **98.0%** of UK locations).

Pollutant	WHO Limit	This property	Potential health impacts
$PM_{2.5}$	5 µg/m^3	9.4 µg/m^3	Increased risk of asthma, compromised lung function, cancer and stroke.
PM_{10}	15 µg/m^3	17.4 µg/m^3	Increased risk of bronchitis, cardiovascular and respiratory mortality.
NO_2	10 µg/m^3	26.6 µg/m^3	Increased risk of disease-related mortality.
SO_2	10 µg/m^3	1.9 µg/m^3	Inflammation and irritation of the respiratory system.

The following factors may also impact the long-term liveability and value of this property:

Major roads There are several busy roads nearby, including the A1205 (200m away) and A11 (279m away).

Landfill There is a historic landfill site located **776m** from this property.

Radon The property is in an area where less than 1% of homes are estimated to have a radon concentration that requires mitigation.

Crime Tower Hamlets is ranked as **33** out of 318 local authorities in terms of crime. **1345** crimes were reported within 1 mile of this property in the last month.

Broadband & mobile coverage

Access to broadband at this property is **good**, with predicted maximum download speeds of **71Mbps** and upload speeds of **16Mbps**. Mobile network coverage at this property is **very good**, meaning that you are likely to enjoy uninterrupted service on most major networks.

Broadband type	Highest available download speed	Highest available upload speed
Standard	18Mbps	1Mbps
Superfast	71Mbps	16Mbps
Ultrafast	Not available	Not available

	EE	3	O2	Vodafone
Indoor data	Good coverage	Good coverage	Excellent coverage	Excellent coverage
Indoor data (no 4G)	No signal	No signal	Unreliable signal	No signal
Outdoor data	Excellent coverage	Excellent coverage	Excellent coverage	Excellent coverage
Outdoor data (no 4G)	Good coverage	Good coverage	Good coverage	No signal
Indoor voice	Good coverage	Good coverage	Excellent coverage	Excellent coverage
Indoor voice (no 4G)	Good coverage	Good coverage	Excellent coverage	Excellent coverage
Outdoor voice	Excellent coverage	Excellent coverage	Excellent coverage	Excellent coverage
Outdoor voice (no 4G)	Excellent coverage	Excellent coverage	Excellent coverage	Excellent coverage

No signal · Unreliable signal · Connectivity issues · Good coverage · Excellent coverage

Subsidence

The table below outlines indicative levels of subsidence risk at this property:

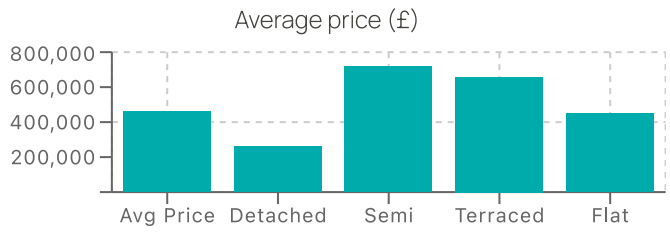
Risk	Risk level
Collapsible deposits	Low
Compressible ground	Significant
Landslides	Low
Running sand	Moderate
Shrink–swell	Significant
Soluble rocks	Low

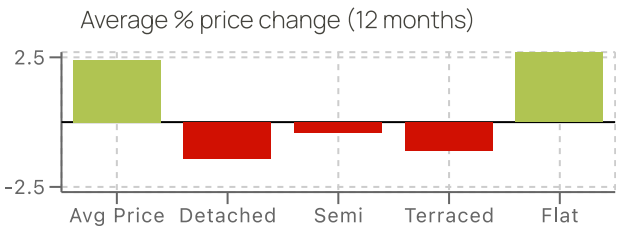
According to the British Geological Survey, subsidence risk at this property is likely to increase as a result of climate change:

Timeframe	Climate scenario	Change
Medium-term	Medium-emissions	Possible
Long-term	Medium-emissions	Probable
Medium-term	High-emissions	Probable
Long-term	High-emissions	Probable

Searches suggest that this area is unlikely to be affected by mining-related subsidence.

Property prices The average property price in this area is currently **£460,962**. This has increased by **2.4%** in the past 12 months.





If you are thinking about implementing a green home upgrade, bear the following points in mind:

Smart thermostat. Research shows that the impact of smart thermostats is often nullified because people override the settings. Note also that the potential benefits are likely to be lower if you spend a lot of time in your home (and thus have fewer untapped opportunities to turn off your heating).

Secondary glazing. Installing secondary glazing - which involves installing another glass layer behind an existing single glazed window - can help you save energy, although its impact is likely to be less than that of double or triple glazing. It will also make your home more comfortable and secure, reduce indoor moisture and mould, and provide a degree of sound-proofing.

Other things to consider

Upgrade advice. If considering major upgrades to enhance your heating system, it pays to be proactive. A planned replacement will generally be less disruptive and far cheaper than one induced by an emergency, particularly during periods of cold weather (when breakdowns are most likely). You should also bear in mind that, as stricter energy efficiency requirements come into place, the inevitable rush to upgrade will almost certainly lead to increased costs and longer wait times, particularly given the shortage of trained installers within the UK.

Beware the rebound effect. Research shows that upgrades that are designed to improve the energy-efficiency of homes are often cancelled-out by behaviour changes such as turning up the heating or opening windows in stuffy rooms. While it can be easy to start using energy more liberally after installing a more efficient boiler or solar panels, remember that consuming less is always the best option for your budget and the environment!

View this property on our interactive dashboard:

GO TO DATA EXPLORER

Regulation

As the UK seeks to decarbonise its housing stock, the regulatory environment is likely to evolve. Bear in mind that:

Immediate

EV charging. New build homes are now legally required to have an electric vehicle charging point. In time, this may become a feature that most home buyers throughout the UK expect as standard.

0% VAT on energy efficient products and installation. Professionally-installed green home upgrades currently incur no VAT. This incentive is due to be in place until 31 March 2027.

Planned

Gas boilers. The government has plans to phase-out gas boilers. At present, it is expected that - from 2035 - gas boilers will not be installed in new homes while homeowners will need to select greener alternatives when seeking to replace older heating systems.

Mandatory sustainable drainage for new developments. To relieve sewage systems and storm drains sustainable drainage systems such as soakaways, grassed areas, wetlands, and other permeable surfaces will be mandatory accompaniments to new developments from 2024.

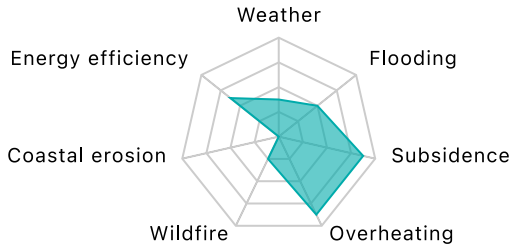
Possible

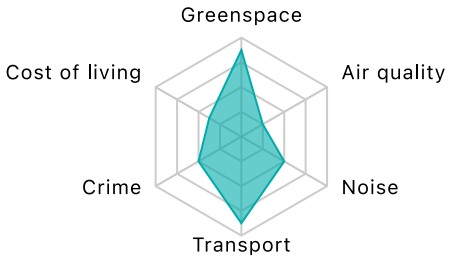
Rental restrictions. The UK government has previously explored mandating stricter energy efficiency standards (requiring an EPC rating of C or better) in rental properties. While these plans are currently on hold, similar requirements could be introduced in the future.

About this assessment

The recommendations in this report are based on the property attributes set-out below. These are derived from several sources, including the latest EPC assessment, which was conducted in **November 2015** (estimated attributes are highlighted with *).

Property type:	Flat	Year built:	1967-1975
Floor area:	80m^2	No. habitable rooms:	Unknown
Extensions:	Unknown	Local authority:	Tower Hamlets
Lat / Lng:	51.53 / -0.03	Building height:	18.4m





Climate risk score: **39**

Wellbeing score: **46**

Track new risks & opportunities

Many things that affect your property are constantly evolving. Our monitoring service makes it easy to keep track of everything that will impact the climate resilience of this property, including:

- → Changes in the environment
- → Regulatory & market updates
- → Emerging research
- → New products and services
- → New funding opportunities

When something that impacts you happens, we will send you a personalised update explaining the change and what you can do about it.

FIND OUT MORE

Disclaimer

This report is designed to provide an overview of the potential risks and opportunities that will impact this property as a result of climate change. Given the uncertainty inherent in predicting exactly how global climatic conditions will change, and what the impacts will be, the information contained in this report should be viewed as a 'best guess' and is by no means definitive. We therefore suggest that you use it as one of several inputs to guide your property decisions.

The information in this report is generated automatically by PropEco. This report is for information purposes only and should not be relied on for any other purpose without our prior written consent. This report is no substitute for conducting your own due diligence. We accept no responsibility or liability for the information contained in this report (including without limitation due to any errors or omissions).

Flood risk

River / sea flood risk. The map on page 3 shows the chance of flooding from rivers and the sea, taking account of flood defences and the condition they are in. It contains the results of a national flood risk assessment undertaken using modelling and local expertise. This splits affected areas into 50m x 50m cells and allocates each one of four flood risk likelihood categories:

- **High**: each year, there is a chance of flooding of greater than 1 in 30 (3.3%).
- **Medium**: each year, there is a chance of flooding of between 1 in 30 (3.3%) and 1 in 100 (1%).
- **Low**: each year, there is a chance of flooding of between 1 in 100 (1%) and 1 in 1000 (0.1%).
- **Very Low**: each year, there is a chance of flooding of less than 1 in 1000 (0.1%).

While it is regularly updated when new data is available, like many other flood models, it does not take individual property threshold heights into account and so the assessment at property level is indicative only. Flood estimation is not an exact science and any flood risk assessment needs to be understood and used in that context.

Historic flood outlines depict the maximum extent of all recorded floods.

Flood protection zones refer to areas that are currently protected by flood defences.

Radon

Radon is a colourless, odourless radioactive gas that occurs naturally throughout the UK. In some places, radon concentrations are high enough to pose a potential health risk. If your property is located in such a 'radon affected area', you should get it tested and, if necessary, take steps to reduce it.

Overheating risk

This assessment is based on factors including location, property type, orientation, glazing level and design.

Data sources

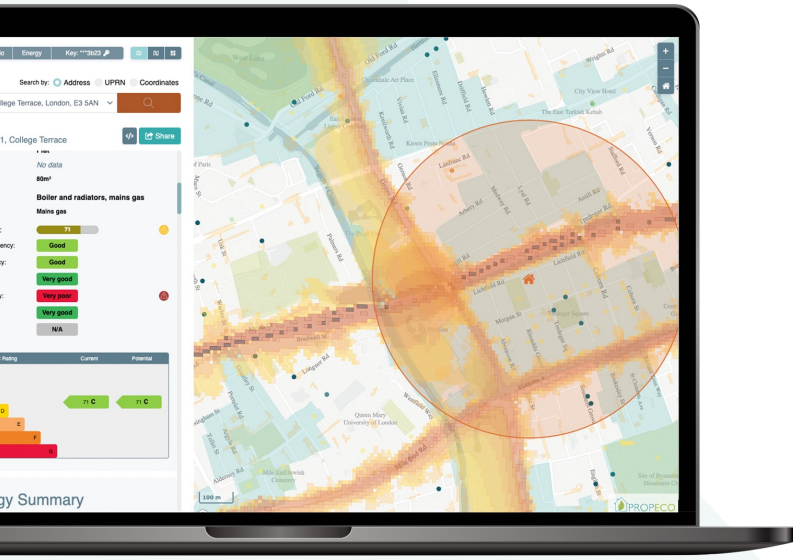
This report incorporates data from sources including:

PROPECO

Future-proofing property with advanced data & analytics

www.propeco.io
info@propeco.io

The physical and transition risks associated with climate change will dramatically alter the value and liveability of millions of properties. PropEco provides **quick**, **easy** and **cost-effective** access to the **data** and **tools** that property professionals need to manage the resulting complexity and **future-proof property**.



Data Explorer

A web-based tool that helps mortgage assessors, conveyancers, insurers and other property professionals assess the **physical** and **transition climate risks** facing a property.

By simply submitting an address, users can instantly access more than **1,000 data points** covering topics such as flood risk, air quality, EPC rating and much more. The data is presented in an **easy-to-consume** format, alongside maps and an interactive energy use model.

Find out more at **www.data-explorer.propeco.io**.

API

Access the most comprehensive and up-to-date catalogue of **property-specific data** relating to **climate risks**, **energy efficiency** and **wellbeing impacts**.

- Properties
- Location
- Energy model
- EPCs
- Solar
- Green retrofit
- Flooding
- Risk ratings
- Overheating

Seamlessly integrate with existing products and services to improve decision-making, boost engagement and reduce risks.

Find out more at **www.propeco.io/api**.

- Save time & money
- Reduce risk exposure
- Make better decisions
- Generate new business

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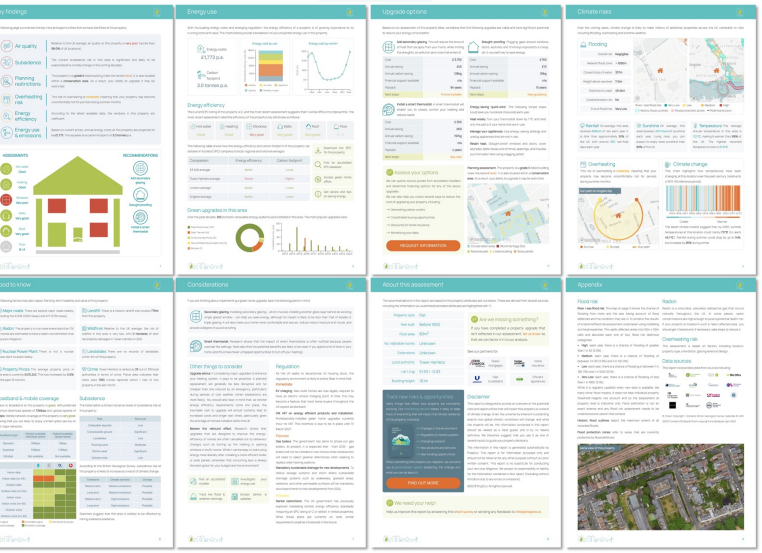
Future-proofing property with advanced data & analytics



Property Reports

PropEco provides **property-specific** reports and assessments that cover physical and transition climate risks, as well as wellbeing impacts.

The content and styling is **fully customisable** so can be designed to match client branding and tailored to the needs of different customer types.

Enhance customer relationships and **boost engagement** while decarbonising and de-risking your property portfolio.

Find out more at **www.propeco.io/property-reports.**

Portfolio Assessment

Assess and monitor current and future risk exposure across your property portfolio with our **real-time**, **flexible** and **comprehensive** assessment and monitoring service.

Leverage the power of our **interactive dashboard** to streamline reporting, monitor trends and uncover new insights.

Find out more at **www.propeco.io/portfolio-assessment.**

Find out more. For more information about the PropEco platform - or to arrange a demonstration – go to **www.propeco.io** or contact us at **info@propeco.io**.

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Future-proofing the built environment with advanced data & analytics