



Energy efficiency & energy savings **in commercial real estate**

Practical guide for building owners and users



*A green building
comes to life when
people who inhabit
it walk the talk.*

Gerald Hines

INTRODUCTION

ESG (Environmental, Social and Governance) aspects are at the top of business agenda today. For many companies, reporting ESG elements is either mandatory or under active consideration. Improving energy efficiency and increasing renewable energy is a key goal of the European Union on its way to carbon neutrality in 2050. Buildings and the industry are one of the biggest energy users and contributors to greenhouse gas emissions (GHG).

The current geopolitical situation has destabilized the energy market and boosted energy prices. The business has finally realised that energy is a scarce resource and energy efficiency needs to be taken more seriously. As energy can run out, it is crucial to consume less of it.

Buildings and the industry are responsible for 40% of energy usage in the EU and are significant contributors to the greenhouse gas emissions. Sustainable and energy-efficient buildings are key to tackle climate change. Sustainable buildings also benefit users, bottom lines, and investors.

When we look at energy procurement, there are two key issues now: the need for green energy and energy crisis for which timing is now critical. Also, building owners and occupiers now require access to consumption data.

Savills Energy Advisory is strategically placed to answer these business needs.



Tomasz Buras
CEO, Savills Poland

KEY POINTS:



Improving energy efficiency and decarbonization are the hottest topics for many organisations nowadays.



Making buildings more energy efficient will contribute significantly to the EU achieving its energy and climate goals.



Mobilising financing for energy efficiency investments is needed today more than ever before.





Energy Efficiency & SDGs



01 WHAT ARE SUSTAINABLE DEVELOPMENT GOALS (SDGs)

In September 2015, a Sustainable Development summit was held at the United Nations headquarters in New York City. During the summit, the document “Transforming our World: the 2030 Agenda for Sustainable Development” was adopted.

The document defines 17 Sustainable Development Goals and 169 associated targets reflecting three pillars of sustainable development (SDGs) – environmental, social and economic.

02 ENERGY EFFICIENCY PLAYS AN IMPORTANT PART IN #SDG7

Energy efficiency in buildings is an important part of global sustainability strategy. The 7th Sustainable Development Goal, #SDG7, is targeted at ensuring access to affordable, reliable, sustainable and modern energy for all.

Sustainable Development Goal 7.3 target calls for global progress on energy efficiency by doubling the rate of improvement in energy efficiency globally by 2030.

03 #SDGs & BUSINESS

The private sector plays a key role in delivering the 17 Sustainable Development Goals. SDGs provide a blueprint for business to set targets and actions, communicate performance and engage with stakeholders. SDGs help businesses to gain access to new capital and market opportunities. More and more business refer to selected SDGs in their organisations business strategies. Savills is globally committed to 9 selected SDGs including Goal 7 across our own business.

04 #SDGs & ESG

SDGs are becoming increasingly important to investors, as they represent a material ESG perspective (environment, social, governance) that investors take into account as part of the investment due diligence process.

There is a strong business case for investing in companies aligned with the SDGs as research shows that they secure steady returns on investment, are future-proof and provide long-term competitive advantage.

05 #SDGs & THE EU

The European Green Deal, the EU’s new development strategy aimed at transforming the EU into a modern, resource-efficient and climate neutral economy (communicated by the European Commission, December, 2019), directly refers to the Sustainable Development Goals.

[click to find out more](#)

SAVILLS COMMITMENT TO SDGs 

Why do we need to **save energy in buildings?**

Key facts

*Did you know that
electricity can run out?*

55%

Electricity consumption in building operations represents nearly 55% of global electricity consumption.

60%

Energy is the main contributor to climate change, it produces around 60% of greenhouse gasses.

14%

More efficient energy standards could reduce building and industry electricity consumption by 15%.

13%

13% of global population still lacks access to modern electricity.



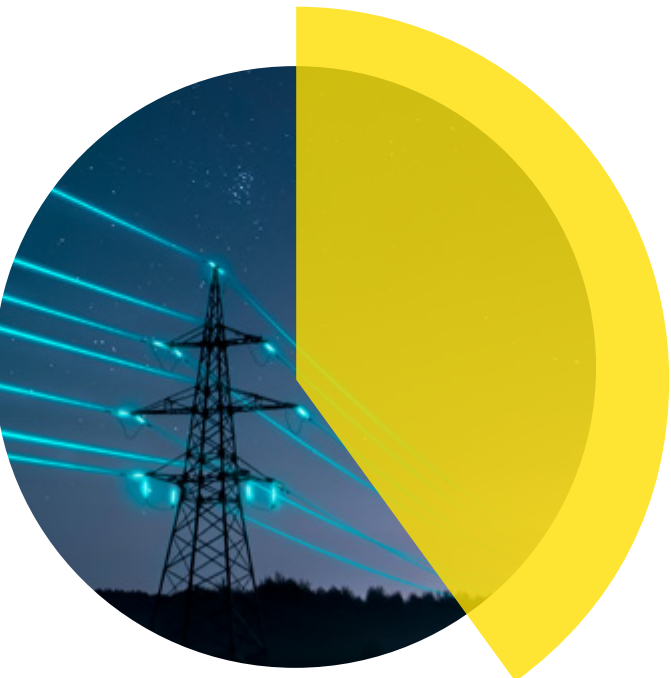
EXPERT'S
OPINION

Katarzyna
Chwalbińska-Kusek
Head of ESG
& Sustainability

Energy usage and carbon emissions of buildings must be reduced urgently. In the past, energy and carbon reduction efforts were largely focused on easy-to implement energy efficiency measures. This won't be enough to achieve the deep decarbonization that is needed across the real estate sector today. Energy efficiency needs to be implemented with other elements of sustainability to benefit building's users, the planet and the bottom lines.

Energy efficiency & savings in buildings

The built environment accounts for:



40%
of energy
consumed



36%
of energy- related
greenhouse gas emissions



75%
of EU buildings are not
energy efficient



85-95%
of EU buildings are expected
to still be standing in 20250

What can be done by the building owner/ occupier & property manager?

The current situation requires a combination of demand-side energy management and energy efficiency strategies and actions. To build a business case owners should also implement co-benefits of energy efficiency to create a fully sustainable space.

Demand-side energy management

Demand-side energy management involves strategies designed to decrease the amount of energy used by facilities for reasons like: reducing consumption on the grid, saving money, reducing air pollution and decarbonization of a property.

Energy efficiency

Energy efficiency is the permanent reduction of energy demand through the installation of efficient systems including improvements and upgrades to existing equipment or new devices.

SOURCE: BUILDINGS FACTS, EUROPEAN COMMISSION, 2021.

Energy efficiency measures in buildings



EXPERT'S OPINION

Jakub Jędrys
Head of Building
& Project
Consultancy

Energy efficiency and energy management is an important part of our advisory work. Energy efficiency leads to lower energy bills and lower carbon footprint, but the cheapest energy is the one we do not use.



EXPERT'S OPINION

Nick Green
Energy, Renewables
and Infrastructure

While the key technology for onsite generation for buildings is solar PV, at the right site the less common micro-wind and micro-hydro can also be attractive over the long term. These benefits of decreased energy costs, increased energy security, and improved sustainability for the building all add up to a convincing case for deploying onsite generation and storage for building owners.

Renewable energy on site

Landlords' perspective



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out more



click to find
out more



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out more





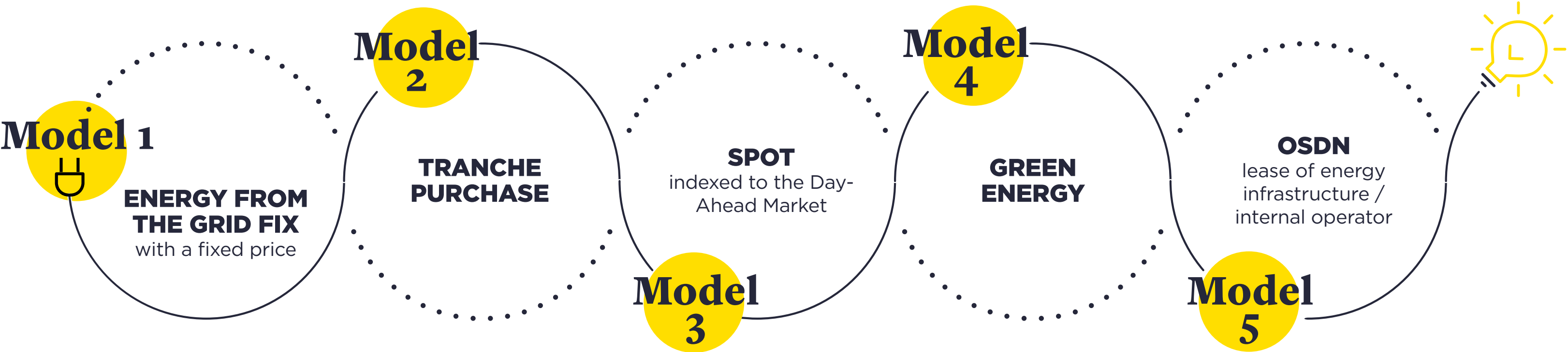
EXPERT'S
OPINION

Michał
Bryszewski
Head of Property
& Asset Management

From a technical tender on an annual basis to a complex, data-based, tactical decision process – energy contracting strategy highly impacts the building performance, thus it requires skills and expertise.

Energy contracting

Why green energy is important?



Fixed term contract

A fixed term contract, where the Electricity and the Guarantee of Origin (GoO) are procured for the term at the point of contract for the duration of the contract.

This gives budget certainty at the point of contract, however, one will not benefit from any potential future reductions in price.

Flexibly procured contract

A flexibly procured contract, where the Electricity Contract is put in place, however the actual electricity is purchased at different times of the year (alongside the GoOs) for proportions of the contract amount. This is usually either a percentage of a month, quarter, year or a season and often purchased a year or so ahead. There is no budget certainty until you have purchased the full volume of energy for the contract. Also in a rising market, there is little benefit purchasing a proportion of the energy, unless one believes it could fall.

Corporate power purchase

A Corporate Power Purchase agreement, where you undertake a deal with a renewable generator to buy the electricity and the GoOs directly from them.

This electricity can be at a fixed rate and or set at a discount the wholesale price. This is then transferred to a supply contract.

[klik to find out more](#)

Cooperation with tenants

Landlords' perspective

A strong relationship with tenants is key for carbon emissions reduction in a building. Collaboration and communication with tenants is critical to energy savings & carbon emissions goals.

Tenants should be engaged in a building's decarbonization strategy from lease negotiations through space fit-out and ongoing space operations. Engaging tenants throughout the leasing cycle can help to achieve the best energy efficiency and decarbonization outcomes for both landlords and tenants.

Suggested ways for landlords to engage with tenants



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Best practices of engaging communication with tenants
to lower operational costs and carbon emissions



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MEASURE CARBON EMISSIONS





FACT
40-60%

Commercial tenants consume on average 40-60% of total energy used by a large office building.

What could **tenants** do?

Tenants' perspective

What actions can tenants take to maximise their energy savings, reduce energy costs and minimize their carbon footprint.

01

Perform Energy Usage Audit

02

Install Energy Metering

03

Improve Heating Ventilation & Air Conditioning (HVAC)



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04

Install Smart Lighting and introduce more daylight



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05

Install Energy-Efficient Equipment and use it smartly



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06

Encourage good practices among the staff



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07

Consider Green Buildings and Green Offices



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08

Implement Energy Certifications



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09

Additional tips



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FACT
30%

Plug loads typically total 30% of building energy use.



EXPERT'S
OPINION

Michał
Będkowski-Kozioł PhD
Partner, Energy
& Infrastructure
Kocharński & Partners

For non-compliance with the restrictions in the supply and consumption of electricity, clients may be sanctioned with a fine in the amount of not less than PLN 10,000 and not more than 15% of the punished entrepreneur's income earned in the previous tax year.

Limitations in the supply & consumption of energy

The war in Ukraine and the resulting energy crisis in Europe make the risk of limitations in the supply and consumption of electricity reappear. The owners of office and commercial buildings as well as their tenants are also exposed to it. Is it possible to avoid this risk and what should we look for in the event of limitations in the supply and consumption of electricity?

When may restrictions on the supply and consumption of electricity be introduced?

Pursuant to the provisions of the Energy Law Act (Articles 11 - 11d) and the Regulation of the Council of Ministers of November 8, 2021 on detailed rules and procedures for introducing restrictions on the sale of solid fuels and the supply and consumption of electricity or heat (Polish Journal of Laws of 2021, item 2209) in the event of a threat to the energy security of the Republic of Poland consisting in a long-term imbalance on the fuel and energy market, or security of electricity supply, or safety of people, or finally the occurrence of significant material losses, restrictions in the sale of solid fuels and in the supply and consumption of electricity or heat may be introduced in the territory of the Republic of Poland or its part.

Who may be subject to restrictions in the supply and consumption of electricity?

Restrictions in the supply and consumption of electricity apply to electricity consumers in the scope of their facilities, for which the total contractual capacity specified in the contracts is at least 300 kW, and who do not belong to the category of "protected customers".

Protected customers are electricity consumers in the scope of their facilities throughout the duration of the restrictions, for which the total contractual capacity specified in the contracts is below 300 kW. In addition, protected customers are customers for which the total contractual capacity specified in the contracts

is 300 kW and more in the scope of the facility:

1. which is a hospital and other medical rescue facility;
2. serving defence purposes;
3. used directly for:
 - a. broadcasting radio and television programs with nationwide coverage,
 - b. ensuring air transport, rail transport and public collective transport,
 - c. extraction of fossil fuels from deposits, their processing and delivery to customers, including the extraction, transmission or distribution of gaseous fuels,
 - d. implementation of tasks significantly influencing the fulfilment of environmental protection requirements, including the collection and treatment of wastewater in the field of collective wastewater disposal,
 - e. production, transmission or distribution of electricity or heat,
 - f. performance of tasks by entrepreneurs for the benefit of state defence.

IMPORTANT: The above means that the owners of office and commercial facilities are, in general, subject to limitations in the supply and consumption of electricity, if the total amount of contracted capacity specified in their contracts with the energy company amounts to at least 300 kW. However, in the case they also act as a local operator of a distribution network (local DSO) distributing electricity to its tenants, they are protected against these limitations with regard to the electricity they are distributing through their grid.

READ MORE



About Savills

*Savills is one of the leading international real estate consultancy company.
It was founded in 1855 in Great Britain. It has a network of over 600 offices located all over the world.*

£ 2.15 billion
Revenue in 2021

Over 600
Offices in the world

Over 39,000
employees

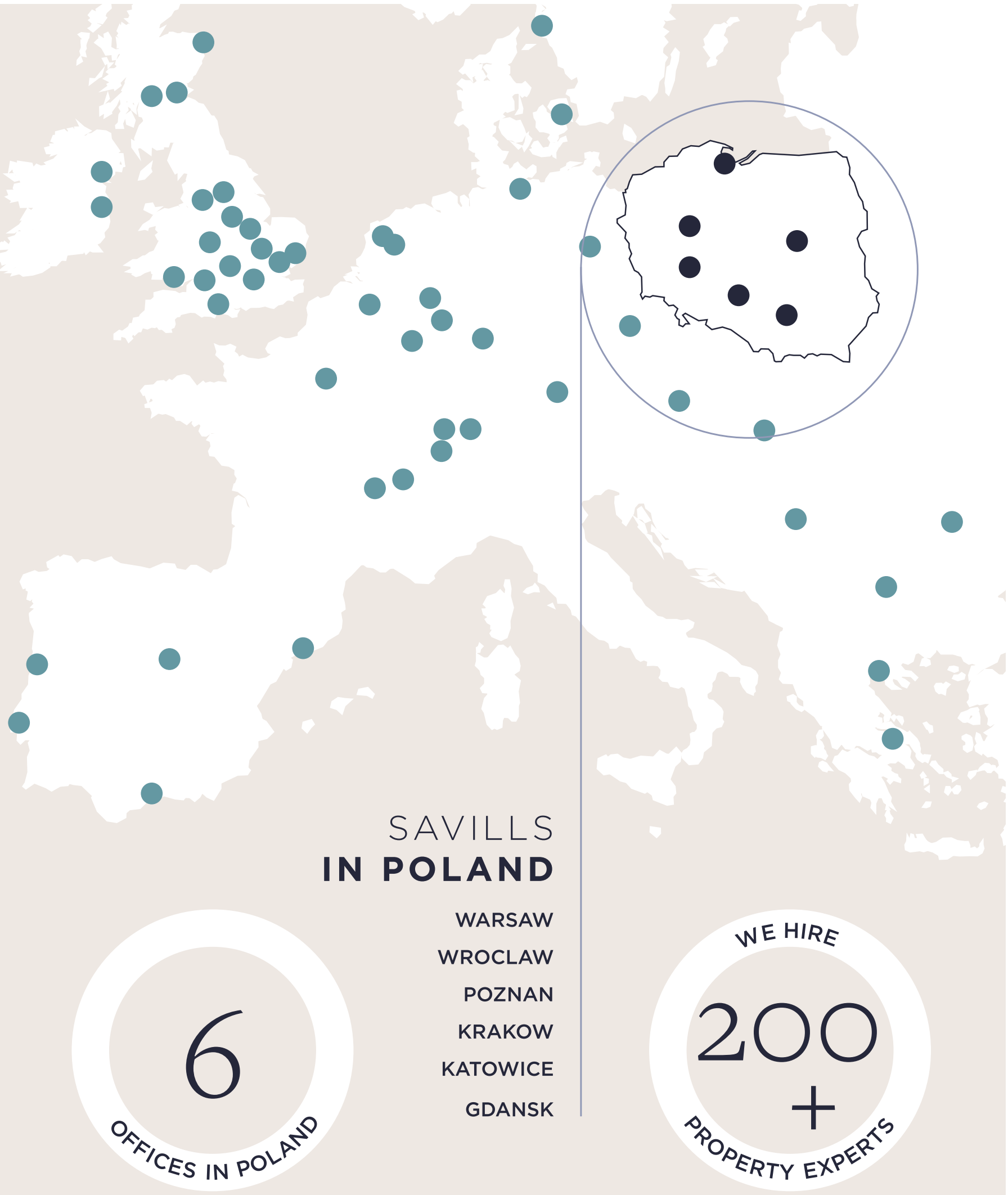
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& CHANNEL ISLANDS
131 OFFICES &
ASSOCIATES

CONTINENTAL
EUROPE
138 OFFICES &
ASSOCIATES

US, MEXICO
& CARIBBEAN
97 OFFICES &
ASSOCIATES

MIDDLE EAST
& AFRICA
269 OFFICES &
ASSOCIATES

ASIA
PACIFIC
72 OFFICES &
ASSOCIATES





Contact us to take the next step in your company's sustainable development journey.



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