





BEYOND RISK MANAGEMENT

How sustainability is driving innovation in commercial real estate finance

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We are the forum for our industry, providing opportunities to collaborate, network and learn for both industry participants and non-originating investors and borrowers. As the voice of our industry, we engage in constructive and informed dialogue with policymakers and financial regulators in the interests of a CRE debt market that supports the real economy effectively and profitably, without compromising financial stability.

Geophy is the independent global source for property information and analysis for everyone with financial exposure to real estate. As a technology company in the real estate space, GeoPhy works to gather data from disparate sources, clean it, enrich it, apply context, and pull it all together in a semantic way. The data is used to assess risk, value, and quality for every building in the world.

We work with leading institutional investors, lenders, and governments, operating a database of 105 million assets in 54 countries, with a dominant presence in the US and Europe. Our team of data scientists, developers, statisticians and economists is based in our offices in Delft, London, New York City, and Lithuana.

Sustainability is one of the cornerstones of the quality scoring mechanism that GeoPhy has developed, in addition to our specific sustainability data products, such as the carbon footprint for every building in the GeoPhy database, a GreenScore that reflects "green" building certification, and a buildingspecific climate risk assessment. ING is a global financial institution with a strong European base, offering banking services through its operating company ING Bank. The purpose of ING Bank is empowering people to stay a step ahead in life and in business. ING Bank's 52,000 employees offer retail and wholesale banking services to customers in over 40 countries. ING Group shares are listed on the exchanges of Amsterdam (INGA AS, ING.AS), Brussels and on the New York Stock Exchange (ADRs: ING US, ING.N).

ING Real Estate Finance is part of ING Bank and one of the leading commercial real estate financiers with a portfolio of approx. EUR 30 billion. We provide global coverage to clients from offices throughout Europe, US and Asia.

Sustainability forms an integral part of ING's strategy, which is evidenced by the number one position among 395 banks ranked by Sustainalytics. ING Group shares are being included in the FTSE4Good index and in the Dow Jones Sustainability Index (Europe and World) where ING is among the leaders in the Banks industry group.

Lloyds Bank Commercial Banking provides comprehensive expert financial services to businesses of all sizes, from small businesses through to mid-sized businesses and multinational corporations. These corporate clients range from privately-owned firms to FTSE 100 PLC's, multinational corporations and financial institutions.

Lloyds Bank Commercial Banking offers a broad range of finance beyond just term lending and this spans import and export trade finance, securitisation facilities and capital market funding. Its product specialists can work with you to tailor its products and services, including cash management, international trade, treasury and risk management services, to suit your individual needs.

Its heritage means it has a comprehensive understanding of business needs and a proven track record of supporting businesses across the sectors and regions. Taking a relationship approach, it provides support to its clients throughout the economic cycle.



Introduction



An estimated 47% of commercial real estate investment across Europe is in the form of debt finance¹. Commercial real estate lenders are therefore pivotal in driving growth. They provide the foundations for the creation, preservation and continued regeneration of our building stock. However, a lesser discussed point is the important role they can play in driving market transformation towards a sustainable built environment. This paper explores why and how this is beginning to happen and challenges the industry to do more.

In November 2015, the Better Buildings Partnership (BBP) published its Industry Insight Sustainability Bites? The Impact of Minimum Energy Efficiency Standards for Commercial Real Estate Lending. The paper explored how the sustainability agenda was beginning to impact on UK commercial real estate lending practices, focusing on how banks and alternative lenders were addressing legislative requirements around Minimum Energy Efficiency Standards (MEES) in their due diligence, underwriting and risk management practices.

Since then, activity in this area has shifted dramatically, with commercial real estate lenders exploring new opportunities that go well beyond what would be considered pure risk management. Based on the work of the BBP Commercial Real Estate Lending Working Group, comprised of leading European banks and debt funds, this paper highlights some of the innovative ways in which lenders are incorporating sustainability into their core business activities.

The paper is divided into four sections. First, it sets out the main drivers for why lenders are moving beyond risk management. Second, it presents a number of market leading case studies demonstrating the opportunities available to lenders. Third, it highlights major industry collaboration projects active in this area. And finally, it issues a call to action to all lenders and their advisers.

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Drivers for Action



Historically, sustainability considerations for lenders have focused on managing regulatory risk as part of due diligence and underwriting at the loan origination or acquisition stage. However, there are clear reasons why banks, debt funds and others involved in commercial real estate lending should adopt sustainability strategies that extend beyond risk management and benefit from the opportunities outlined below.

Risk Management

There is an emerging body of literature on the links between sustainability, default risk and value in commercial real estate. This has led to many lenders establishing policies and processes which address sustainability risks. Within the UK, the key piece of 'sustainability' legislation that is impacting how lenders consider new lending decisions and monitor existing loan conditions is the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 (more commonly known as Minimum Energy Efficiency Standards), which comes into force in April 2018. How lenders should address this risk is the topic of the BBP's Industry Insight Sustainability Bites? The Impact of Minimum **Energy Efficiency Standards for Commercial Real** Estate Lending and outside the scope of this paper.

ENHANCING BORROWERRELATIONSHIPS

Engaging with borrowers on the topic of sustainability is increasingly recognised by lenders as a way to deepen and enhance their overall customer relationships. When executed well, it provides a positive touchpoint with the borrower, builds trust and helps them own and operate a more sustainable building. This is the case whether the borrower is sustainability-savvy (where interests may be well aligned) or relatively unaware of the topic (as the lender can alert them to the risks and opportunities). It also may open up the possibility of providing further finance to those borrowers in the future, either in the form of commercial mortgage lending or other forms of finance e.g. decentralised energy projects or building retrofits.

To be successful, engagement needs to offer an incentive or benefit to the borrower rather than be a burden, as illustrated by the case studies in this paper. Examples include helping borrowers identify energy efficiency opportunities to upgrade their buildings or offering cheaper finance to meet specific sustainability requirements set by the lender.

INTEGRATED APPROACHES TO BANKING

Many of the BBP Commercial Real Estate Lending Working Group members note that the push to develop innovative sustainability approaches within their own activities is also being driven by organisation-wide initiatives. They report a more joined-up approach across business units to ensure a more forward-looking sustainability strategy across all lines of business. This is something that has been building since the financial crisis, driven partly by the need to rebuild the reputation of financial institutions and demonstrate a sense of purpose. As noted above, this has led to the customer relationships of the real estate lending unit being recognised as a route to offering other forms of "sustainable finance".

PRODUCT DEVELOPMENT

The use of a sustainability strategy to demonstrate market leadership can be seen in almost every business sector. However, as real estate lending is at an early stage compared to most other business sectors, it is worth considering what "market leadership" means in this context.



When reflecting on current market activity, leadership is perhaps most often demonstrated through "learning by doing". The starting point for this is recognising that the world is moving towards a low-carbon economy, where energy efficient buildings will be ubiquitous by 2050, and real estate finance will be essential for this to happen.

A recent paper from Standard & Poors² states:

"We also forecast an increased demand for financing for green projects and demand from investors for green-focused investment assets. Underwriting these new types of asset classes will require insurers and banks to develop new modelling and structuring approaches. However, acquiring the necessary experience and expertise could offer first movers a key competitive advantage."

Forward-thinking lenders are testing initiatives now, to learn and demonstrate leadership so that others will follow, thus creating a market for future financing opportunities in which they have a leadership position and, therefore, a market advantage. The Lloyds Bank Green Lending Initiative (highlighted later in this paper) is a strong example of this approach, and one that should be commended with the hope that it stimulates the wider lending sector to follow suit.

In April 2017, Lloyds Bank announced a €600m debt financing for Europe's largest commercial real estate business, Unibail-Rodamco as part of its Green Lending Initiative³.

INTEREST FROM INVESTORS

Several lenders have indicated an increasing interest, and in some cases pressure, from existing shareholders or fund investors to demonstrate how they integrate sustainability practices into their real estate lending business. This has partly been driven by the Global Real Estate Sustainability Benchmark (GRESB), which began issuing a real estate debt assessment in 2015. The GRESB <u>Debt Assessment</u> assess how lenders are integrating sustainability considerations under the headings of management, policies and disclosures, due diligence, monitoring and opportunities.

As well as enabling lenders to meet the expectations of existing investors, sustainability innovation may also open up new funding opportunities. Certain lenders have been able to attract new sources of funding, either in the form of green bonds or investment from investors with specific socially responsible investment (SRI) requirements, as well as a more diversified investor base.

In 2016, ABN AMRO launched a Climate Bonds Initiative certified Green Bond. By the end of 2016, it had announced its first green loan of €80m with OVG Real Estate which will fund the transformation of more than 50,000 square metres of commercial property, resulting in four new office buildings spread across Rotterdam and Amsterdam⁴.

INTEREST FROM RATINGS AGENCIES

Ratings agencies are becoming increasingly vocal and sophisticated in assessing how sustainability risks and opportunities impact on the financial services industry. A number are now actively working on how to reflect these risks and opportunities within their ratings models.

For example, the paper by Standard & Poors (S&P)² notes the threat of growing reputational, regulatory, fiscal, and legal risks, as well as the possibility of future pressure from financial regulators and higher capital requirements. It also highlights how opportunities such as financing the transition to a low carbon economy may have positive impacts on ratings.5

Some of the specialist environmental, social and governance (ESG) research providers have developed sustainability rating methodologies for commercial real estate lenders. For example, imug, partner of Vigeo Eiris, has a dedicated rating methodology for bank bonds, including uncovered bonds, public sector covered bonds, mortgage covered bonds and ship mortgage bonds. imug's methodology assesses both the sustainability performance and management systems of the issuer and the sustainability of securities in the cover pool. This method allows for consideration of the sustainability performance of a financial



institution, as well as the business model that provides the basis of the security at hand. The criteria set for the sustainability assessment of issuers of mortgage covered bonds includes the impact of ESG factors on fair value, mortgage lending value and LTV ratios.

"Our methodology, developed as a result of client demand, provides a platform for investors to scrutinize the sustainability of financing businesses and cover pool assets allowing them to identify and direct investments



towards pioneers that understand their leverage on sustainable development through their core business."

Jan Köpper, Head of Client Relations, imug, Vigeo Eiris Global Network Partner

INTEREST FROM FINANCIAL REGULATORS

The last two decades have seen mounting legislation and regulation in countries across the globe aimed at mitigating climate change, mainly through promotion of renewable energy and energy efficiency. Regulation aimed specifically at commercial real estate investment has tended to be directed at occupiers, developers and property owners. While lenders have not initially been targeted, it would not be surprising to see the focus widening to include them as well. Arguably, evidence of this is already starting to show.

Governments, central banks and other regulators responsible for financial stability are becoming aware of the risks and opportunities created by the direct impacts of climate change, as well as those associated with the rapid transition to a low-carbon economy. For example, the Bank of England, has made several pronouncements on the topic of financial stability risks posed by climate change, and how building new markets in climate transition and green finance could help mitigate them.

Whilst the Bank of England are yet to draw specific attention to commercial real estate investment and lending, at least one other central bank has done so. The Dutch Central Bank (DeNederlandscheBank or "DNB"),

"The combination of the weight of scientific evidence and the dynamics of the financial system suggest that, in the fullness of time, climate change will threaten financial resilience and longer-term prosperity ... With better information as a



foundation, we can build a virtuous circle of better understanding of tomorrow's risks, better pricing for investors, better decisions by policymakers, and a smoother transition to a lower-carbon economy."

Mark Carney, Governor of the Bank of England, 29th September 2016.6

regards the energy transition as one of the economy's key long-term challenges and therefore commissioned an exploratory study on the transition to a carbon-neutral economy, Time for Transition.

Published in March 2016, the report notes that the Paris climate change agreement has shifted the question from whether there will be a transition towards carbon-neutral energy systems to how this transition should be brought about. It analyses the impact of sudden energy transition on various sectors of the economy, including real estate lending and makes recommendations to reduce the likelihood of abrupt adjustments that may impair economic growth. Its key conclusion is that climate risks should be made more transparent.

In relation to real estate investment the report notes that:

"the ambition of limiting global warming to less than 2°C implies that the transition to a carbon-neutral economy must be completed well before the end of this century, i.e. within the expected service life of the homes and offices we are building today." ... [and] ... "it is conceivable that climate policy could also affect real estate valuations. Increasing attention is being paid to assessing the energy efficiency of real estate projects, because such projects run the risk of being impossible to let or sell if energy efficiency requirements become stringent."



Further evidence is highlighted by recent work undertaken by a taskforce set up by the Financial Stability Board (FSB), an international body that monitors and makes recommendations about the global financial system at the direction of the G20 Finance Ministers and Central Banks. Its Task Force on Climate-related Financial Disclosures (TCFD) was established to design a set of recommendations for the consistent disclosure of information that will help the financial services industry better understand climate-related risks.

A TCFD's report⁷ published in December 2016 is recommended reading for the financial sector, including those providing real estate finance. It provides both a useful framework to analyse climate-related risks and opportunities, and detailed guidance on metrics and disclosures that are likely to be required in the future. It suggests a number of sustainability disclosures grouped under the topics of governance, strategy, risk management, and metrics and targets. Whilst recognising the limitations of greenhouse gas (GHG) emissions reporting, the report states:

"the Task Force views the reporting of GHG emissions associated with investments as a first step and expects disclosure of this information to prompt important advancements in the development of decision-useful, climate-related risk metrics."

It should be noted that the suggested metrics relate to opportunities as well as risks. For example, the report recommends the disclosure of investments in or revenues from products and services designed for a low carbon economy.

Loan Portfolio Carbon Footprinting

One emerging theme amongst real estate lenders has been towards trying to obtain information on the carbon footprint of their real estate loan portfolios.

Banks and alternative lenders are often keen to point out that they do not control the buildings on which their loans are secured and they have little or no power to require data on energy consumption, carbon emissions or other environmental metrics from their borrowers. Indeed, under recognised protocols for carbon accounting the emissions of 'financed buildings' would at most be 'Scope 3' and therefore unlikely to be reported. Nevertheless, as a result of the drivers mentioned in this paper there is a clear growth in interest amongst lenders to understand carbon exposure.

Carbon or energy footprint data on buildings within a loan portfolio will not normally be collected based on actual energy use data obtained directly from borrowers (though in certain cases this will be possible, such as buildings financed by the Lloyds Bank Green Lending Initiative). Instead we are seeing banks developing methodologies to estimate this data using information they already possess such as building type, floor areas, age of construction, Energy Performance Certificate ratings, use and occupancy rates. Some of the more interesting developments in this area are from specialist real estate data companies such as GeoPhy that assist clients with gathering, processing and analysing property data from a variety of online and offline sources. One application has been to help banks, investors and fund managers to model the carbon footprint of real estate debt and equity investments. For example, GeoPhy are working with both PGGM and ABN AMRO, on their real estate equity and loan portfolio respectively, to help them assess sustainability risks by monitoring environmental certification (e.g. EPCs and BREEAM ratings), energy consumption and CO₂ emissions.



Innovation case studies



This section provides case studies of innovative sustainability approaches from banks and alternative lenders that are already in progress. They provide examples that are replicable across the real estate finance industry and from which other lenders can learn, specifically with respect to:

Improved borrower engagement,

where ING and ABN AMRO have used innovative technology as an engagement tool to help their borrowers identify energy improvement measures that will provide both a financial return and improved environmental performance.

New lending products,

where Lloyds Bank has launched its Green Lending Initiative, and whilst not the focus of this paper, an example of innovation within residential mortgage lending by Fannie Mae and Freddie Mac.

Deep integration of sustainability **practices**, where BBP members Hermes Investment Management and TH Real Estate have taken learnings from their longstanding direct real estate investment funds and are applying this to the newer debt side of their business.

FANNY MAE AND FREDDIE MAC'S GREEN FINANCING LOANS



Two US government sponsored residential lenders, Fanny Mae and Freddie Mac, have a range of green lending products to reward greener homes or incentivise energy refurbishments and retrofits. These all apply to the multifamily apartment market where the borrower is typically a property investor or developer (rather than the individual home occupier).

First, in 2015 Fannie Mae launched its suite of Multi-Family Green Financing Loans. This includes its 'Green Rewards' program, offering preferential pricing (at least 10 basis points), additional loan proceeds and a free energy and water audit report to borrowers who wanted to finance green property improvements. The borrower must commit to property improvements that are projected to reduce the whole property's annual energy or water use by at least 20%.

They also offer a 'Green Preservation Plus' programme providing additional loan proceeds to finance energy and water efficiency improvements for existing Multifamily Affordable Housing (MAH) properties; and its 'Green Building Certification Pricing Break' which rewards buildings that already have a recognised green certification (such as EnergyStar or LEED) with preferential pricing on the loan.

That was swiftly followed up by a competing product from Freddie Mac in 2016 with its 'Multifamily Green Advantage' program. This suite of offerings with names such as 'Green Assessment' and 'Green Up' offers similar benefits such as lender-funded energy audits, better pricing and additional funds (based on the lender underwriting a significant portion of the projected energy savings when calculating Net Operating Income) for borrowers that commit

to making eligible energy or water improvements.

These products also enable the disclosure of the loan as a 'Green MBS' (mortgage backed securities) to the bond market providing liquidity advantages.

\$5.2BN ISSUED WITHIN FANNIE **MAE GREEN MBS SINCE 2015**

"The returns on the green MBS are the same as the returns on everything we do. [But] we think in the long run it will broaden our investor base,"

Jeff Hayward, Head of Multifamily at Fannie Mae⁸.



ING BANK'S SUSTAINABILITY **APP FOR BORROWERS**



"Sustainability is not nice to have, it's a pure necessity. Since the start of our REF sustainability app in 2015, we guide all our real estate clients towards a full sustainable portfolio of real estate assets."

Peter Göbel, Head of ING Real Estate Finance Netherlands



ING has a commercial real estate loan portfolio of around €30bn worldwide and is the largest financier of commercial real estate in the Netherlands. It also has a longstanding commitment to sustainability, having published its first sustainability report in 1996 and set up a Sustainable Lending Team in 2012.

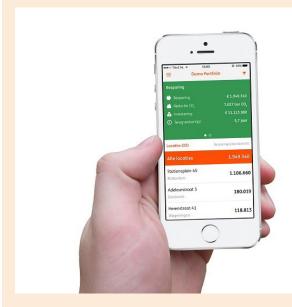
ING has a strategy to empower the shift to a green economy and sets targets for all areas of its wholesale banking arm to "finance sustainable transitions". By 2015, ING was looking at how best to do this within its real estate finance business. Cognisant of the fact that buildings in the European Union are responsible for more than a third of the bloc's carbon emissions, ING felt that as a market leader in real estate finance it should be able to make a difference. The

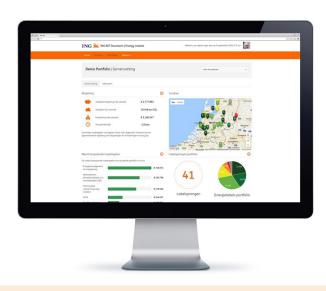
feedback ING received from its clients was that they wanted to reduce their energy costs and carbon emissions, but found it difficult to get started. The challenge for ING was working out how it could best engage and support its real estate clients.

ING worked with partners to develop a tool to help their borrowers identify the energy improvement measures for their buildings that provided the most attractive financial returns and greatest carbon emission reductions. It came in the form of an app, which was offered to all Dutch clients. The borrower enters certain basic information about their buildings such as type, age of construction and floor area. The app analyses their portfolio and recommends the top 10 measures per building to lower energy costs and reduce CO₂, showing indicative

costs, financial returns and carbon reductions. Furthermore, if the app indicates energy savings greater than €15,000 per year for a building, the client is offered a free on-site BREEAM and energy audit.

Within its first two years, the app had been used to scan 18,000 buildings measuring 10 million sqm (65% of ING REF's financed portfolio). ING's goal is to empower 5,000 Dutch clients to 'sustainabilise' their portfolio, equating to a total of 28,000 buildings. Building on this early success, ING plans to roll out the app to other European countries. In addition, to help stimulate the Dutch market ING has started providing discounts on 'sustainable loans', as well as providing subsidy advice and offering free Energy Performance Certificate assessments for its clients.







ABN AMRO'S SUSTAINABLE INVESTMENT **TOOL FOR BORROWERS**



"The step towards sustainable real estate is the right one to take. For our clients, this step should be swift, smooth and satisfying"

Olaf Rutten, Transition leader, ABN AMRO Real Estate Clients



Sustainability is an integral part of ABN AMRO's long-term strategy across all business lines. Real estate finance is an important part, with a commercial real estate loan portfolio of around €10bn. ABN AMRO has a stated ambition of becoming the most sustainable property bank in the Netherlands and aims "to accelerate the transition to sustainable commercial property".

ABN AMRO has a specific sustainability policy for commercial real estate, which applies to corporate loans to clients within the commercial real estate sector, as well as loans secured against real estate assets (development or acquisition). It provides details of how ABN AMRO manages sustainability aspects related to its commercial real estate clients and integrates these into the bank's appraisal and decision-making processes. The policy states:

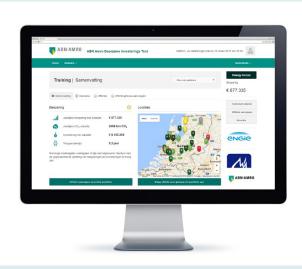
"As a provider of financial services, ABN AMRO is strongly committed to being a value-adding partner to its clients in the commercial real estate sector. Within this sector, sustainability is regarded as a strategically important topic in terms of risk and opportunity management."

The five crucial sustainability issues for the commercial real estate sectors identified by ABN AMRO are: energy consumption and greenhouse gas emissions, regulatory risk, vacancy levels, asset value and innovation. Each of these five issues have established processes and targets used to monitor and manage the associated risks.

When reviewing the information ABN AMRO held across its loan portfolio, it could see that much of the property level information could be used to help inform energy efficiency investment opportunities. In addition, ABN AMRO also realised it might be better positioned to provide such information than many of their individual borrowers. Therefore, ABN AMRO developed a web application targeted at the CFOs of their clients that assesses and analyses energy efficiency opportunities available to them.

The online ABN AMRO Sustainable Investment Tool is populated with data such as building type, age, location and floor area for each building secured by loans to each borrower. The tool provides a desktop assessment of investment costs, financial returns and carbon reductions for the top 5 applicable measures to the building type such as lighting, A/C optimisation, boiler/ heating upgrades, insulation and PV panels. The borrower can log in and see these investment opportunities at a building or portfolio level. The tool also provides guidance on the availability of finance, government subsidies and technical partners to implement solutions.

To support their borrowers further, in 2016. ABN AMRO made €1bn available to finance and install such upgrades.





LLOYDS BANK'S GREEN LENDING INITIATIVE



"We are conscious how the real estate lending community can be a real impetus for change. As a bank that is committed to supporting the transition to a low carbon economy, we take seriously our responsibilities as a leading participant in the sector to be proactive in encouraging that change."



Richard MacDowel, Relationship Director, Commercial Real Estate - Major Private Groups, Lloyds Bank

Lloyds Bank is one of the UK's largest commercial real estate lenders, completing £8.6bn in lending in 2016. Sustainability is an integral part of all Lloyds Bank's business activities, articulated through its "Helping Britain Prosper" campaign.9

Recognising the scale of its commercial lending activities and the potential impact it could have, Lloyds Bank has taken a market leadership stance and embedded sustainability into its core business offering. It has developed a new product that provides commercial real estate debt at advantageous rates to reward and incentivise better sustainability performance.

Lloyds Bank's Green Lending Initiative was launched in March 2016 with a pledge of £1bn of commercial mortgage lending incorporating a discount of up to 20 basis points available for eligible clients.

The process of applying for a green loan begins with an assessment using a bespoke scorecard developed with

independent consultants, Trucost. It evaluates borrowers in two discrete areas: the sustainability performance of their assets and the sustainability strategies of their businesses. The scorecard is designed to be compatible with accepted industry benchmarks and standards, whilst being quantitative, fair and consistent across different lending opportunities.

The borrower has to reach a minimum score to be eligible. However, ultimately the scorecard provides Lloyds Bank with an understanding of the trajectory of performance to assist in setting the covenants i.e. if the borrower is already a high performer, Lloyds Bank looks to set covenants at a level to maintain that performance. If the borrower has acquired or manages higher risk assets but has a strategy to mitigate these, then it sets the covenants at a level to incentivise stepped improvement.

An eligible borrower will work with the bank to develop tailor-made sustainability covenants that will sit within their finance agreements.

These outline the target performance level and define specific outcomes and reporting methods. The covenants are broad in scope and can be structured around specific interventions and actions that the borrower commits to undertake, or can be structured around outputs that the borrower is expecting to achieve (e.g. energy or carbon intensity improvements). The margin discount is then linked to these covenants, so that while the borrower is compliant, it benefits from a lower cost of debt. Importantly for the borrower, noncompliance does not result in a loan default. The borrower simply does not benefit from the margin discount.

It is interesting to hear why Lloyds Bank's has gone down this route. A clear aim of the Initiative is to support its clients' sustainability programmes and incentivise improved energy efficiency. However, Lloyds Bank also hopes it will spark interest

ASSESSMENT CRITERIA FOR LLOYDS BANK'S GREEN LENDING SCORECARD

PROPERTY'S SUSTAINABILITY CREDENTIALS

- Energy Intensity

BORROWERS' SUSTAINABILITY CREDENTIALS

- Corporate targets



LLOYDS BANK'S GREEN LENDING INITIATIVE

among the lending community and catalyse demand for similar lending products across the industry. Additionally, it incentivises borrowers to reduce sustainability risks, which improves Lloyds Bank's loan security. And finally, the incentive (and assessment / information requirements) drive better loanlevel data for future reporting requirements for the bank.

The Initiative has now made five loans totalling £132m¹⁰ with very positive feedback from borrowers. Though a 20-basis point discount may be a modest incentive in cash terms, it can have an important psychological effect. Anecdotally, it is understood to have acted as a catalyst to spur collaboration and action on energy efficiency between the building owner, occupier and lender that would not otherwise have occurred.

our growth by adding a landmark the ability to continue to enhance it

Edmund Costello, Partner at

TH REAL ESTATE'S APPROACH TO **ESG INTEGRATION**

H Real Estate

"Sustainability is rising up the agenda within the debt space following a regulatory push, investor appetite, and some early indications that sustainability could lead to more secure debt investments (i.e. less risk of default). In short, sustainability has become a commercial reality."



Abigail Dean, Head of Sustainability, TH Real Estate

TH Real Estate is an established investment management company, specialising in real estate equity and debt investment worldwide. TH Real Estate provides commercial real estate debt finance in the UK through its Enhanced Debt Fund (approx. £1bn in value) and on behalf of segregated account clients. It has established and implemented sustainable investment principles across the direct investment side of the business. Sustainable investment practices form a key part of TH Real Estate's Tomorrows World strategy. More recently it has been integrating sustainable investment into its real estate debt platform, focused mainly on due diligence, underwriting and transaction closing processes.

TH Real Estate utilises a combination of borrower information, third party surveyors and internal processes including a sustainability assessment of the borrower and the assets/ leases to develop a comprehensive risk profile for debt transactions. Two particularly material risks are:

- 1. flood risk, and
- 2. compliance with the England and Wales Minimum Energy Efficiency Standards ("MEES") legislation.

TH Real Estate review the borrower's EPC ratings and expiry dates along with loan term and lease event dates to produce an EPC risk analysis by income exposure.

Results go into the due diligence findings as evaluated by its Real Estate Debt Investment Committee - this includes the Heads of Risk, Treasury, and Sustainability, along with other senior management which must approve all transactions.

Where material sustainability risks are identified, the Committee will ask the Fund team to carry out further investigations. This results in either engagement with the borrower to mitigate those risks appropriately or rejecting the transaction if a solution cannot be agreed. TH Real Estate's Head of Sustainability participates in the fund strategy reviews to ensure that sustainable risks are managed effectively.



HERMES INVESTMENT MANAGEMENT'S APPROACH TO ESG INTEGRATION



"As an industry we need to anticipate change rather than look back on past performance. This is why we integrate responsibility in our investment processes, such as in our real estate debt strategy. By doing so we act in the long term interest of our clients while striving to improve the economy, communities and the environment they invest in."



Chris Taylor, Head of Private Markets, Hermes Investment Management

Hermes is a leading real estate investor with over £8bn commercial real estate (private equity) assets under management by gross asset value. In recent years Hermes has started providing real estate debt through senior loans, whole loans and mezzanine

loans across real estate sub-sectors with over £300m capital drawn from cornerstone investors. For its investors. Hermes aims to generate strong risk adjusted returns responsibly.

The Hermes debt strategy relies on a solid underwriting process

focusing on the ability of the underlying property collateral to generate sustainable income in the long term. Hermes' approach builds on expertise acquired in its direct investment portfolios to embed responsibility into the lending process. This covers:

1. Underwriting and due diligence

During its due diligence process Hermes requests the borrower to submit sustainability information alongside appraisal or valuation reports. Findings from the acquisition due diligence are integrated into the decision-making process through risk assessment and mitigation requests. These are then integrated into the asset business plan to be agreed with the borrower.

2. Loan origination & documentation

At loan origination the overall business plan agreed is included in the loan documentation. It includes all mitigation activities identified and detailed in the asset business plan, asset refurbishment plans and/or planned and preventive maintenance programmes.

3. Management and monitoring post-closing, asset upgrade finance

As part of its asset debt portfolio management processes, Hermes has a system in place to collect and manage the sustainability information held on the borrowers and the assets. 11 Hermes provides capital for refurbishment to properties in its loan books in accordance with pre-agreed refurbishment plans which include sustainability requirements. Hermes takes an active role in this process, and has a detailed procedure for monitoring the refurbishment works.¹²



Industry Collaboration



In addition to initiatives from leading commercial real estate lenders, there are a number of major industry collaboration projects looking to develop and prove innovative business models, as well as define common standards, metrics and terminology for the real estate finance sector.

THE ENERGY EFFICIENT **MORTGAGE INITIATIVE**



The Energy Efficient Mortgage Initiative is premised on the belief that mortgage lenders "can play a game changing role in providing long-term financing for energy improvements to the existing European housing stock". The initiative brings together a consortium led by the European Mortgage Federation (EMF) and funded by the EU's Horizon 2020 Programme to develop a standardised energy efficient mortgage based on preferential interest rates for energy efficient homes and renovations resulting in improved energy efficiency.

The underlying concept is that mortgage lenders in the EU will offer households the possibility of a preferential interest rate and/or additional funds at the time of origination of the mortgage/re-mortgage in return for making energy efficient improvements to the property. A standardised approach to the provision of mortgage financing for energy efficient investment will also ensure the ultimate 'pricing-in' of the added value triggered by improvement measures.

The proposed mechanism rests on two key assumptions regarding market characteristics that will be tested by the initiative:

- 1. Retrofitting impacts positively on property value, ensuring wealth conservation and loss mitigation by preventing "brown discount"; and
- 2. Energy efficiency leads to a reduction in the impact of energy costs on income, reducing the borrowers' probability of default.

The consortium includes the World Green Building Council, RICS, E.ON, the University of Ca Foscari (Venice), and Goethe University (Frankfurt), and a number of leading banks across Europe who will be piloting the scheme and working to substantiate the correlation between a property's energy rating and the financial performance of the mortgage.

The two-year Project will officially begin in June 2017, with more information available at www.hypo.org.



THE ENERGY EFFICIENCY FINANCIAL INSTITUTIONS GROUP



The Energy Efficiency Financial Institutions Group (EEFIG) was established in 2013 by the European Commission Directorate-General for Energy (DG Energy) and United Nations Environment Program Finance Initiative. It created an open dialogue and work platform for public and private financial institutions, industry representatives and sector experts to identify the barriers

to long-term financing for energy efficiency, and propose policy and market solutions. It includes amongst its members many banks and funds that provide commercial real estate finance.

EEFIG is currently developing a Value and risk appraisal framework for energy efficiency finance and investments that is due to be published in June 2017. It is designed to be a tool to assist

financial institutions in building capacity in energy efficiency investments by helping them better evaluate both value and risk: provide a standard framework for evaluating investments; and foster a common language between project developers, owners and investors. One section covers how energy efficiency retrofits of commercial buildings can be funded through the use of debt finance.

THE LENDERS PROJECT



The LENDERS Project (Levering Economics for New Drivers to Energy Reduction & Sustainability) is a project being undertaken in the UK by a consortium of eight partners - Nationwide Building Society, the Buildings Research Establishment, the UK Green Building Council, Principality Building Society, the Energy Saving Trust, UCL Energy Institute, Constructing Excellence Wales and Arup.

Funded by Innovate UK, the project will build the evidence base for using more accurate estimates of energy bills in residential mortgage affordability calculations. If successful, this could allow higher lending for

more efficient properties and eventually lead to a greater link between efficiency and property value. The project goals are:

- To improve the accuracy of predictions used to estimate home owners' fuel/energy costs when calculating mortgage affordability;
- To give this improved method to the mortgage industry (free of charge), in a fashion that they can adopt as easily as possible;
- To provide sufficiently robust supporting evidence to the industry to allow them to be confident in switching to the new method.

The consortium is undertaking analysis of existing datasets on EPC ratings and actual or modelled energy consumption, to try to establish a robust but practical way to estimate energy costs that can be readily and efficiently incorporated into the mortgage sales process.

The project runs until the summer of 2017 with more information available at www.epcmortgage.org.uk.



Call to Action



The commercial real estate lending sector has been slower than the real estate equity investment sector when it comes to incorporating sustainability into business strategy. Lenders are simply not as close to the buildings as their owners, cannot exert comparable influence and are a step removed from the economic consequences of improvement measures. However, the industry is now witnessing a marked change in the uptake and action from a number of leading lenders.

Starting from an appreciation of the risks of paying insufficient attention to sustainability, a number of forward-thinking lenders are going a step further and trying to seize the opportunities. Innovative products and services are being developed to reward and incentivise more sustainable buildings, often providing new lending opportunities and allowing better market data to be captured.

To stimulate the industry further, the BBP Commercial Real Estate Lending Working Group calls on the lending community to:

RECOGNISE THE HUGE OPPORTUNITY FOR POSITIVE CHANGE

It is becoming clear that real estate lenders can drive market transformation through the provision of finance to a wide range of property owners. Whilst many of the large equity investors have led the way, lenders have a very diverse customer base and can have significant impact and influence on the mid- and smaller sized property owners, and assets that are not necessarily at the forefront of best practice.

EXPLORE THE COMMERCIAL AND REPUTATIONAL PRIZES TO BE WON

As the case studies demonstrate, innovative action on sustainability within commercial real estate lending can help drive new business, strengthen customer relationships and greatly improve the quantity and quality of information lenders hold about the buildings in which they have an interest. For many financial institutions that saw their brands damaged in the financial crisis, a focus on sustainability can help transform how they are perceived not only by customers, but also by investors and policymakers.

COLLABORATE

Take it seriously, take action and share with others. There is a need for collaboration so that metrics, terminology and standards can be harmonised to the degree necessary for these innovative products and services to become truly mainstream.

Those who work directly in real estate lending, or who advise this sector as a lawyer, valuer or consultant, are encouraged to share this paper and consider what role they can play. For with a full understanding of the opportunities available to them, lenders can play an important role in driving market transformation to a sustainable built environment by acting as a catalyst to those commercial property owners who rely on debt finance.

Banks and alternative lenders with significant real estate lending activities are welcome to get in touch with the BBP if they are interested in joining the BBP Commercial Real Estate Lending Sustainability Working Group.



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- The S&P Ratings Direct paper is a useful starting point for commercial real estate lenders to understand what indicators ratings agencies will be using to assess sustainability risks and opportunities when rating financial services organisations. Issues such as strategy, management, policies and collecting data on carbon emissions of the lending portfolio are likely to be included. It lists a set of "Indicators To Help Assess A Company's Risk Exposure To Climate Change" which includes "Property assets in coastal areas as a proportion of total assets " and "Carbon footprint of the company, including that of lending/investments."
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- 10 as of March 2017
- 11 In particular Hermes hold health & safety data, flood risks and action plans, EPC ratings for the majority of its loan books (80%), and detailed asset refurbishment plans.
- 12 Hermes believes in sector engagement to support market transformation whether through the BBP, GRESB or other industry initiatives. Working with leading sector organisations, UNEP FI, PRI, IIGCC, IGCC and CERES, Hermes was the co-author of the Real Estate Climate Action Framework, which has a dedicated section on how real estate debt investors can identify and take action to address climate risks and opportunities in their portfolios http://www.unepfi.org/ fileadmin/documents/SustainableRealEstateInvestment.pdf



Better Buildings Partnership



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