Ten Principles for Sustainable Property Underwriting & Valuation

Scott Muldavin FRICS presents ten key principles of sustainable property underwriting and valuation devised by the Green Building Finance Consortium (GBFC)



istorically unprecedented change in regulator, space user and investor demand for sustainable property necessitates refinement of existing real estate underwriting and valuation methodologies. Within this context of change, the Green Building Finance Consortium (GBFC) was founded to develop underwriting and valuation methods and practices to enable private sector commercial and multi-family property investors to evaluate "green" buildings from a financial/fiduciary perspective.

This article presents ten key principles of sustainable property underwriting and valuation arising from the Consortium's research and preparation of its foundational book being released in the coming months: "Underwriting Sustainable Property Investment". The book will be available on the Consortium's Web site as well as through other trade groups and professional associations.

"Underwriting Sustainable Property Investment presents the foundation for underwriting including financial modeling and analyses, valuation, and risk and compliance related due diligence. Guidance is provided on the role of sustainable definitions in underwriting, cost-benefit analyses, first cost considerations, green leasing, and underwriting potential benefits, beyond cost-savings, from improved energy performance and enhanced space user health and productivity.

The book's Chapter IV: "Sustainable Property Performance," assesses those sustainable features and strategies that have posed the greatest risk, and/or underperformed expectations, based on a survey of experienced consultants developers, investors, and corporate real estate practitioners, a review of case studies and literature, and other sources. A new framework for property performance assessment is presented outlining five key categories of performance — process, features, buildings, market, and financial — that need to be measured, and how each type of performance assessment contributes to the underwriting and assessment of risk. Key evidence of sustainable property performance for each key category will be presented and discussed.

Ten Principles of Sustainable Property Underwriting and Valuation

While each sustainable investment decision will differ based on the property type, type of investment (retrofit, new construction, tenant improvement, etc.), geographic market, and sustainable features and strategies employed, ten key principles of sustainable property underwriting and investment have emerged from our research that provide important insights to guide all underwriters and valuers in their work.

Principle 1: No Fundamental Change in Underwriting and Valuation Practice Necessary

Sustainable properties do not require fundamental changes in traditional underwriting or valuation practice. However, underwriters, acquisition analysts, valuers and others will need to collect new information, employ new analytic techniques, and adapt capital request presentations to properly address some of the special considerations of sustainable properties that affect financial performance and value.

Principle 2: No Single Definition of Sustainability is Sufficient

Existing green building certifications like LEED®, BREEAM, CASBEE, GreenStar, or Green Globes™ measure environmental outcomes,

not financial outcomes, and thus cannot be the sole basis for underwriting from a financial perspective. Practically, investors will also be confronted with underwriting properties with varying sustainable features, performance and green certifications.

Most importantly, from a financial perspective, to determine which certification and assessment systems are important for specific property, the underwriter/valuer must evaluate how regulators, users and investors utilize and rely upon different assessment systems or tools, and the specific sustainability thresholds to achieve benefits from each group.

Principle 3: A New Performance Framework is Necessary to Support Sustainable Property Investment Decision-making

Property performance must be measured and evaluated on multiple levels to better support financial analysis and valuation of sustainable property investment. Five types of performance are most important: process performance; feature performance; building performance; market performance, and financial performance.

This framework highlights the importance of separating the different elements of sustainable property performance in order to properly evaluate financial performance. Our research shows that process performance drives the success of sustainable features and systems, which, in turn, determine building

performance. To assess potential financial implications of a building with a specific level of sustainable performance, one must next measure the market response (regulators, space users and investors) to the building's sustainable performance. Keeping the data and types of performance separate helps to assess the fit and relative importance of information.

GBFC's Sustainable Property Performance Framework also provides a structure for underwriters to use in their efforts to mitigate risks. Since most significant sustainable property investment decisions will be based on forecasted building performance (energy use, occupant performance, development costs, etc.) underwriters are, or should be, focused on reducing uncertainty and risk related to the forecasted performance. As has been proven in our research, risk and uncertainty around building performance can be significantly mitigated through underwriting of sustainable processes and features/systems.

Principle 4: Sustainable Property Investment Can Create Significant Value

While operating cost savings achieved through reductions in energy, water, maintenance, waste, insurance and other costs get the most attention, it is the significantly increased demand by regulators, space users, and investors since 2007 that drives value.

Regulators across all levels of government and national boundaries have embraced the property sector as "low hanging fruit" in the battle against climate change. Incentives are increasing and regulations are becoming broader and deeper, moving toward mandates in many areas. Space users are increasingly influenced by sustainability. Government tenants, vendors to sustainability leaders, companies with direct ties to the sustainability industry, and companies now able to capitalize on the enterprise value benefits of their sustainable real estate investment are leading the movement toward sustainable space. Institutional investors are leading the industry, with most new development being built at sustainable levels and significant work being done to assess and upgrade existing portfolios.

Increased demand by regulators, space users and investors positively influences revenues (rents, occupancies, tenant retention, regulatory incentives, etc.) and risks (capitalization and discount rates). These positive revenue and risk benefits, in combination with operating cost savings, outweigh enhanced risks and costs, many of which can be mitigated through improved contracts, integrated design, commissioning and other processes and practices.

Principle 5: Determining "If" Sustainable **Investment will Enhance Value at Property Level Requires Micro-Level Analysis**

Simply put, a valuation or due diligence analyst must determine whether the strong "general" arguments (outlined in Principle 2 above) supporting enhanced value for sustainable property investment apply to a particular property given planned sustainable features and strategies, the property type, the geographic region, expected occupants, market conditions, etc. The process is inherently qualitative, with the valuer conducting numerous quantitative "sub-analyses" to generate support for the qualitative selection of key financial inputs like rents, occupancy, absorption rates, tenant retention, sales prices, expenses, etc.

Fortunately, as stated in Principle 1, fundamental valuation and due diligence practice is up to the challenge. The industry will be well served to embrace the qualitative nature of real estate analysis and do it better, rather than holding out for the "killer" statistical study that will, once and for all, prove the enhanced value of sustainable property investment. Over the last tree years, statistics-based academic studies, cost-benefit studies, and business-case analyses have laid the foundation for why sustainable properties can be more valuable, but now the industry needs to invest in the data and analytic techniques necessary to support property-specific decisions.

Principle 6: Cost-Based Decisions are Inherently Flawed

Financial models and decision-making practices that generate results based primarily on initial development and operating costs, like the most commonly used Simple Pay-Back or Simple Return on Investment (ROI) models, are inherently flawed because they fail to consider revenue or risk. The limitations in these models have always existed but due to the dramatic increases in regulator, user and investor demand for sustainable properties during the last few years, failure to consider revenue and risk implications has become more critical.

Simple Payback, Simple ROI, and related cost focused models can still provide useful information for decisions between different strategies or features (type of lighting systems or bulbs, material or product selection, etc.) and many sustainable decisions can be made utilizing these techniques, but as the level of investment and sustainable outcomes desired increases, analyses that do not factor in revenue and risk implications will result in inferior financial performance for properties.

Principle 7: Sound Sustainable Property Financial Analysis Requires Consideration of a Discounted Cash Flow Model

Fortunately, the most widely recognized financial model for evaluating real estate investments—discounted cash flow analysis (DCF), is well suited to address the financial implications of sustainability. Discounted cash flow analysis provides a conceptual framework and model that enables the user to integrate quantitative and qualitative analysis to measure sustainable property financial performance. Most importantly, it provides the means to translate the "intermediate" sustainable property cost and benefit outcomes like health or productivity benefits, expedited permitting, or lower operating costs into financial measures like rate of return or net present value traditionally used by real estate capital providers. Revenue and risk are integrally part of the approach.

The challenge is to assess the applicability of the general argument outlined above for a specific property. In this regard, even if the decision-maker does not execute a full DCF model, understanding the logic and linkages inherent in a DCF model to accurately articulate potential implications of sustainable property attributes on financial performance can significantly framework, it is easy to under- or over-estimate the magnitude and even the direction of potential financial performance implications.

Principle 8: Six Distinct Steps are Necessary to Sustainable Financial Analysis

Six distinct steps are necessary to properly implement sustainable property financial analysis:

- 1. Select financial model,
- 2. Evaluate subject property "sustainability,"
- 3. Assess costs/benefits of "sustainability,"
- 4. Evaluate the financial implications of costs/benefits,
- 5. Determine financial model inputs, and
- 6. Risk analysis and presentation. Failure to implement each step can result in leaving out key issues, misallocation of the importance of key issues, and other problems.

In selecting financial models, valuers must employ Sustainable Sub-Financial Analyses. Sustainability Sub-Financial Analyses are those analyses and models that provide quantitative insight/data that is typically combined with other information and analyses to aid valuers/financial analysts in their specification of key financial assumptions in a DCF analysis, or related Traditional Real Estate Financial Model.

The critical point in understanding Sustainability Sub-Financial Analyses is that in most cases these analyses do not result in specific data inputs that you can input directly into a DCF analysis. For example, in many cases, potential health cost savings as a result of sustainable property investment will accrue directly to an owneroccupant. However, for an investor owned building, the key issue in estimating the financial impacts of potential health cost savings is to look at how tenants value such potential benefits, and then how they value these benefits in the context of all the other benefits and factors that enter into their selection of space. Accordingly, any quantitative health cost "sub-financial" analysis is only a contributing factor to the development of financial inputs for a DCF, or related analyses. However, such analyses, if independently done and appropriately presented, can significantly influence the investment decisions and resulting property financial performance.

Clearly understanding costs and benefits resulting from sustainable property investment is critical, but cannot be the end of the analysis. Once these benefits are known, the next key step is to assess how the market (regulators, space users and investors) are likely to respond to these sustainable outcomes — resource use, occupant satisfaction, sustainable certification, etc.). The final step is to determine key financial inputs like rents, occupancies and capitalization rates factoring in all the sustainable and non-sustainable factors influencing the property's financial performance. It is important to understand that sustainability will always be one of many issues to consider and cannot be evaluated accurately in isolation.

Principle 9: Sustainable Properties Need to Improve their RAP

A more sophisticated analysis and presentation of risk (RAP) is particularly critical to sustainable property investment. This is due partially to the additional risk possible due to new processes, products, systems, construction techniques, contractors, and other service providers as well as the substantial positive risks related to reducing the potential for functional and economic obsolescence due to regulator, space user and investor change, among other factors.

While many detractors of sustainable property investment say tenant or investor demand, or other risk issues cannot be "quantified," valuers and underwriters cannot ignore wellrecognized and documented trends. For example, failures to address "outsourcing" and other market changing trends in the past led to many bad investments and failed valuations by industry professionals. Risk does matter and decision-makers need better organized and documented risk analysis to make proper decisions.

Principle 10: Sustainable Property Underwriting is More than just Financial Analysis and Valuation

Decisions on sustainable property investment are based on more than just financial pro-formas and valuation estimates. For lenders and investors, the borrowers and project sponsors need to be fully underwritten as to their experience, net worth, track record, and other factors. For new construction projects, construction risk must be analyzed and mitigated through insurance and various forms of surety. Construction and property management agreements, franchise agreements, leases, and other contracts need to be evaluated. Corporations need to evaluate occupancy costs, but also must assess the role and contribution of the real estate to their overall enterprise strategies. and insure flexibility to respond to future market change.

Conclusion

Underwriting and valuation of a specific sustainable property requires a disciplined approach to assess the applicability of the compelling general arguments supporting enhanced value from sustainable property investment. The methods and practices needed will vary based on the property type, geographic region, type of decision (retrofit, commercial interior, new construction, etc.) and type of decision-maker (lender, investor, corporation, etc.).

Fortunately, traditional real estate underwriting and valuation practices are well suited, with refinement, to this task. The ten principles discussed above, along with the more detailed work of the Green Building Finance Consortium (GreenbuildingFC.com) can assist in improving underwriting and valuation to enable private sector investors to maximize their financially supported sustainable property investment.

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