

IPEEC Buildings Energy Efficiency Taskgroup
Building Energy Rating Workshop
Paris, May 29, 2013

Key Findings

1. Importance of establishing a “common language”

- Many terms used differently in different jurisdictions, making cross-jurisdictional discussions and comparisons challenging
- Terms that could use an explicit definition include:
 - Tool (Rating vs policy)
 - Scheme
 - Rating
 - Label
 - Certificate
 - Certification
 - Mandatory vs voluntary

2. Diversity of Building Rating Schemes

- Overview:
 - IMT report studied 60 building rating schemes in 41 countries
 - Schemes have numerous dimensions making them difficult to compare to one another
 - Even within countries, schemes are not consistent (example of UK EPD vs DEC ratings)
 - Next round of EPBD regulation will result in a little more consistency and convergence as there will be specific requirements about quality control, training, what to do with certificates, etc.
- Rationale for building rating schemes:
 - Information for investors and consumers as well as to enable policymakers to collect information in building stock
 - Must be considered within broader energy efficiency policy framework (codes, incentives, etc.) (Tunisia example where code and rating system developed at the same time enables increased consistency)
 - Ratings are infrastructure to encourage action
- Asset and operational ratings: how they relate?
 - Asset and operational ratings are not opposites and both are needed. Different indices are useful to different categories of people. Need to get the indices better integrated into other policy and business needs; operational ratings can be helpful toward understanding relative levels of energy services and operations & maintenance efficiency

- Phase of building development (design, construction, operation) important in determining which kind of rating most appropriate, but if using different rating tools, they need to relate to one another
- Asset ratings work best for new buildings/buildings under design
- China is integrating asset and operational ratings along phases of building development, with an asset rating used during construction and an operational rating used once the building has been in operation for at least 1 year and is at least 30% occupied
- Asset ratings are also important because they take tenant use out of the picture, though operational ratings are better for CEOs
- Asset values are good, but from a valuation perspective, you absolutely need output data/operational ratings
- Comparison to sustainability rating programs
 - Broader sustainability rating programs gaining a lot of momentum
 - Need to ensure that energy performance is part of that and that the building energy ratings feed directly into the sustainability rating (i.e. in China, green building rating uses building energy rating score directly)
 - The trend is toward assessing overall sustainability. The different sustainability issues are interlinked and it is better to assess them in a coordinated manner
 - Tenants often have a “tick the box” mentality – just looking for a sustainability label and don’t want to know or do anything after that
 - Having different labels is expensive and confusing. Customers are pushing to use one overall sustainability assessment
 - EPBD2 started to go down the path of broader sustainability metrics but ultimately the commission shied away from it. However EPBD3, which is likely to be issued within about 3 years, is likely to include it
- Need for harmonization?
 - Real estate owners say no: real estate is inherently a local business and they need to be knowledgeable about a host of local tax, permitting and regulatory issues. Understanding the nuances of local rating methodologies is not a big deal
 - International ISO standards exist on topics related to building ratings. There may be ways to easily harmonize at least a little by leveraging certain terms and issues already agreed to in consensus standards
- Ratings for whole buildings vs. tenant/landlord split
 - UK was trying to do this but lost steam. Now looking at Australia’s NABERS rating as a model
 - Big interest in the US in getting tenant specific ratings
 - Australian market works a little better for the tenant/landlord split because there are more homogeneous landlord services arrangements there
 - Commercial buildings have the biggest potential for dealing with this landlord/tenant split
 - In Denmark, tenants leasing a minimum size space have to disclose their energy information

- Replicability:
 - need to focus on both the methodology that assessors use as well as spot checking assessors
 - Australia uses discrete label categories as they think these improve replicability of ratings
- Information sources: IEA BEEP database (though be mindful of potential quality issues)

3. Better understanding how rating schemes fit into asset valuations

- Context:
 - Asset valuations occur at every phase of property life cycle
 - Valuers have to use existing (historical) data
 - Lots of guides exist for integrating sustainability information into asset valuations
 - But there is a “Label Tower of Babel” due to 1) energy reporting requirements, 2) voluntary sustainability reporting requirements, and 3) different industry groups pushing additional (and not always consistent) reporting. Reporting requirements are not harmonized and challenging for owners
- Data problem:
 - Valuers do not care about the label or rating: it’s the underlying data that is used for the label/rating that they need
 - Data not stored centrally
 - No standardized format in which to collect and store data, which would facilitate analysis
 - Performance data not linked to transactional data
 - Local property valuation experts often not involved with data “definition” work
 - Can policy makers make incorporating sustainability criteria compulsory for asset valuations?
- Investor needs
 - Investment community looks at things on a quarterly basis and in a quantitative manner? How can rating system feed into that?
 - Investor focus is cost savings but rating systems are usually based on energy savings and do not link to costs (or other financial decision making information), giving investors an incomplete picture
 - Investors generally place more value in operational ratings than asset ratings: Nils Kok research indicates that structural rating only accounts for 34% of total energy consumption in commercial buildings
 - Data needs to travel from the “boiler room to the board room” to be effective
 - Entities like Deutsche Bank being asked for a lot of data. Trying to do that in a more efficient and internally consistent manner
 - Metrics for building rating systems differ, which makes integration into asset valuations more challenging
- Owner perspective

- Energy ratings are not currently having an impact on asset acquisitions or valuations
- Energy is still too cheap and improving energy efficiency ultimately has very little impact on real estate economics. (Ex., service charge is EUR 7; by doing lots of EE they can reduce that by EUR 0.50, but there are lots of easier ways to accomplish that same amount of operating cost reduction)
- Less of a green premium, more of a brown discount (Minergie example in Switzerland). Class A building owners are all doing most of these things because they have to.
- Trusting energy certificates is a problem: manipulation of data is easy and common (“How honest can we be with our data if others are packaging it differently?”)
- Data frequency – length of validity of EPC renders it useless once it is more than a few years old. They discount it entirely. And, building technologies evolve a lot over 10 years. With smart meters coming online, it won’t be that long before more real-time assessments are normal
- Linkage is missing between needs of tenants, investors, and property managers. Tenants asking for sustainability labels as a way to get and retain great employees. Investors want carbon mitigation, but it’s totally disconnected from tenant focus. Owner is trying to lower operating costs.
- Very hard to assess both efficiency and sustainability metrics at portfolio level
- Owner/investors present expressed preference for the German sliding scale because data on it is useful for owners, though an evaluation found that residential consumers rated it the lowest of all EU labels!
- Many management level staff at real estate holding companies mainly think about energy efficiency in terms of risk management or “future-proofing” the asset
- Analysis on linkage between building energy ratings and asset valuations
 - Many studies in the US (better data set)
 - Mainly national in focus
 - Little work on local markets because not sufficient data
 - IPD data is a little different due to specifics in Australia market (ability to segregate “base building” from tenant building and large number of commercial office buildings that are rated)
 - IPD Australia findings: higher rated properties have higher returns. Average green performance of commercial buildings is steadily improving (was 3 stars, now 4.5 stars)

4. Developing an approach to assessing building rating schemes

- Proposed framework included:
 - Robustness of rating tool
 - Effectiveness of implementation scheme
 - Demonstrated impact of implementation
- Most people liked proposed framework, though some suggested to weigh stakeholder/policy angle more heavily.

- Importance of defining objective of scheme:
 - Need to build rating scheme for a specific purpose and ensures that it achieves that but political realities make that difficult (example: market building energy rating program because it will help improve asset valuations rather than reducing energy demand and GHG emissions)
 - Be aware that rating is not the end game: improving building stock is the ultimate objective. What is your plan to get there?
- Quality control:
 - Assessor should use a rigorous process so that they obtain the same ratings
 - Need to find mechanisms where assessors could be punished or financially liable for consistently inaccurate ratings
 - Some of these issues are now being addressed in latest recast of EU Directive (ie, spot checks, more training requirements, quality assessment)
- Miscellaneous comments:
 - May want to think about ways to combine carrots and sticks: very good labels could be made valid longer than average or poor ones; property taxes could be decreased for very good building rating performance
 - May need to assess scale explicitly (ie, if you just do best, good, all the rest, you don't offer encouragement to the worst buildings)
 - If broader sustainability metrics are likely to be incorporated in the future, need to ensure that the scheme is developed in a way that it can withstand expansion.
 - There is likely to be a movement to cap costs of certification, at least for residential properties. Can process be standardized to reduce costs?
 - Need an advisory committee from different relevant stakeholders to give feedback on overall rating scheme implementation plan
 - Trade-off between “easy” tools, such as Portfolio Manager, and quality (level of verification)
 - Neither the public or private sector can achieve improved efficiency on their own. The public sector is not good at continuous improvement programs and the private sector is not good at putting things together for the greater public good. Broader infrastructure is needed to enable implementation along with an organizational structure to help pull it all together.