



INVESTOR PERSPECTIVE ON ENERGY EFFICIENCY IN THE COMMERCIAL BUILDING SECTOR

Sustainable Energy Investment Forum: Regional Conference on
Financing Energy Efficiency in Nordic Countries

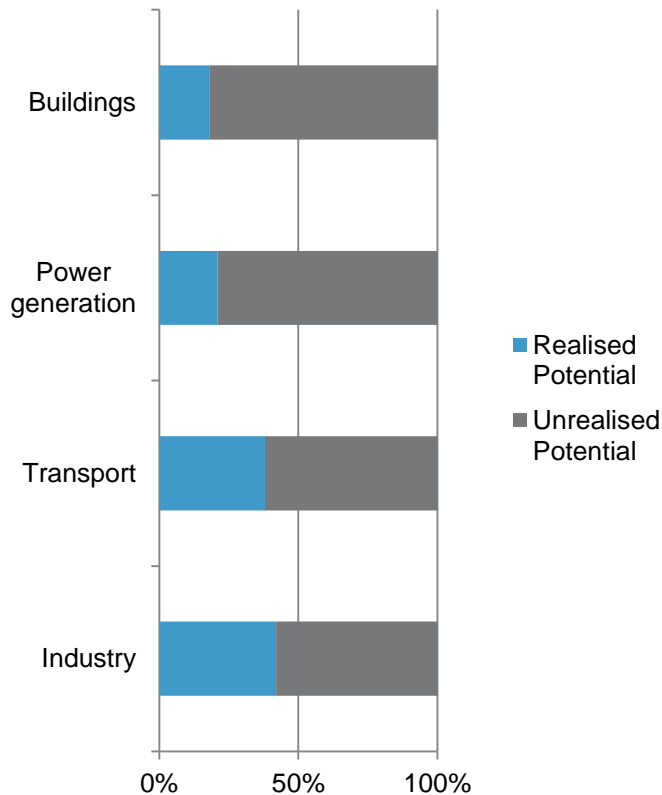
Martin Schoenberg – Energy Efficiency Finance Consultant
Copenhagen, 19th of May 2017

There are several drivers of for energy efficiency action by investors; BAU would leave significant potential untapped

Major drivers of investor action on energy efficiency

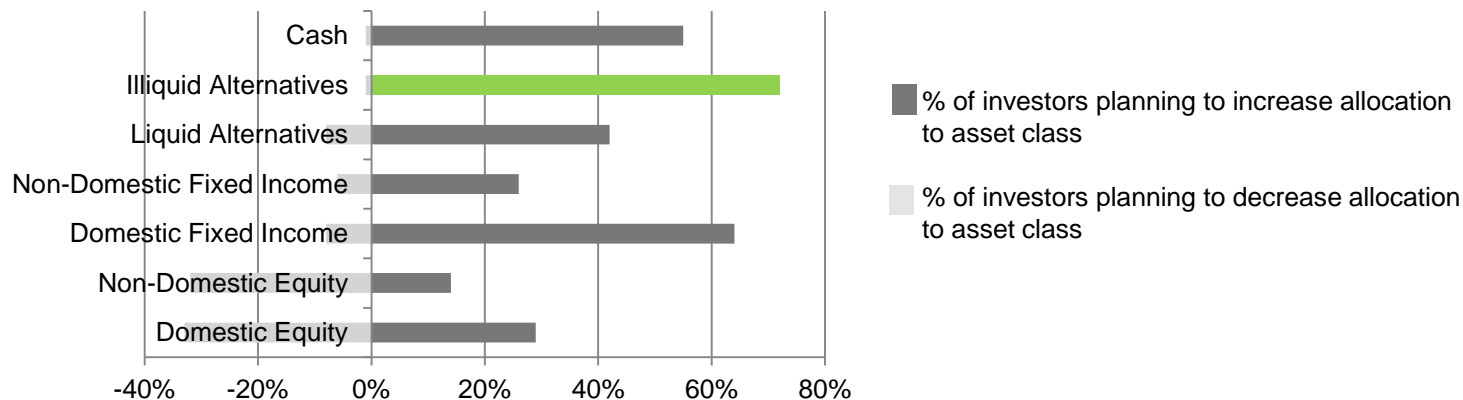


BAU until 2035 would leave most EE efficiency potential untapped



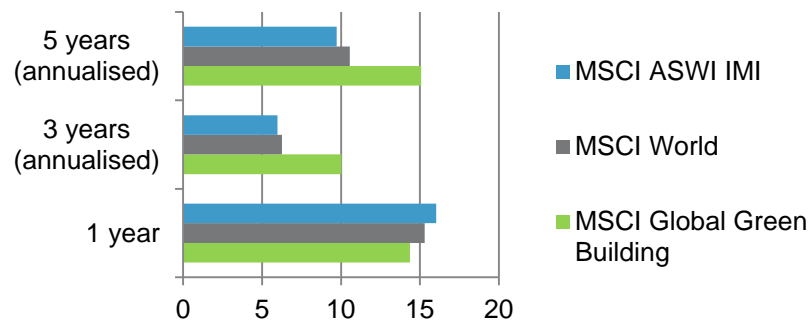
Investors are continuing to increase their investment into alternatives; there is a clear business case for energy efficiency improvement

Planned changes in asset allocation of world's major investors (2016)



Business case for energy efficiency improvements from an investor perspective

MSCI Global Green Building Index Performance



Building retrofit business case

28.6% 10-year IRR

of 30% improvement in building efficiency according to a US study

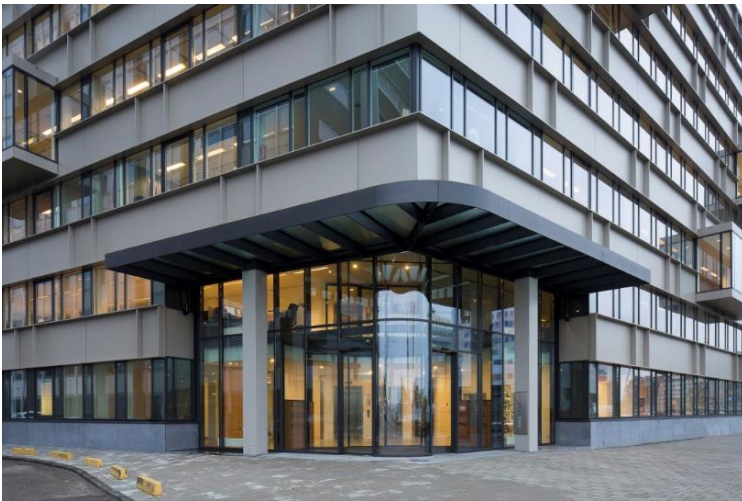
**3% rental premium,
13% sales premium**

for labelled green buildings



The deep refurbishment of Ruyterhuis Amsterdam, shows the positive impact of energy efficiency improvements on comfort levels (ACTIAM case study)

Ruyterhuis refurbishment improves energy performance rating significantly



ACTIAM approach to the Ruyterhuis refurbishment

- Large refurbishments
- Annual maintenance
- Sustainability measurement in agreement with tenants

ACTIAM direct property investment policy

- Working to create zero-energy buildings
- Capturing multiple benefits especially in terms of comfort levels and health
- All office holdings carbon-neutral by 2025
- Minimum “very good” energy performance rating of new property required



The Herresta School in Jarfalla, Sweden was funded as part of a portfolio of projects made possible by green bonds (1/2)

The Herresta School is built entirely from cross laminated timber, making the building nearly CO2-neutral

Swedish Kommuninvest Green Bonds approach based on green bond principles

Use of proceeds

Swedish local governments undertake investment projects for transition to low-carbon, resilient society

Management of proceeds

Earmarking, lending proceeds green bond issuance

Reporting

Annual investor impact report, annual sustainability reporting

Project evaluation and selection

Assurance

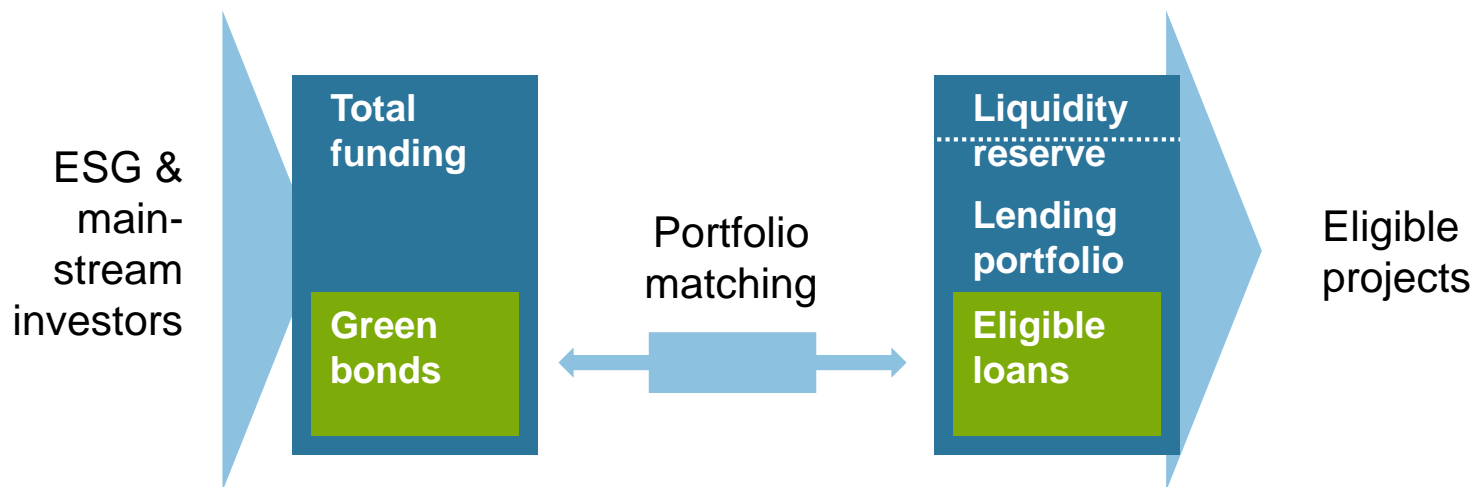


Second opinion from independent evaluator
Assurance report by auditors



The Herresta School in Jarfalla, Sweden was funded as part of a portfolio of projects made possible by green bonds (2/2)

Management of proceeds



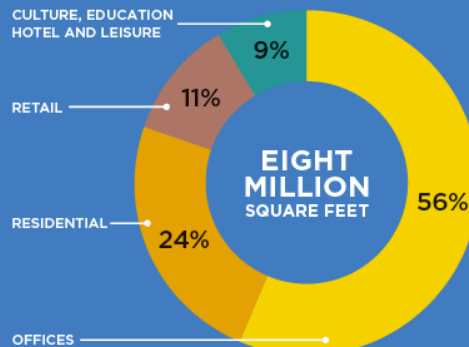
Key findings from the Kommuninvest case study

- Volume of committed green loans should always exceed total green bond issuance
- 44 energy efficiency projects funded worth SEK 6.8 bn
- No duration matching – funding to be shorter than lending



The Kings Cross case study shows the positive impact of urban regeneration (Hermes case study)

A former railway land has been transformed into an attractive new neighborhood



There are multiple financial, societal and environmental benefits

Financial returns

- **21% return pa over 5 years** – the whole is more valuable than the sum of the parts

Societal benefits

- Local job creation, 1900 new homes (35% affordable), and new educational facilities

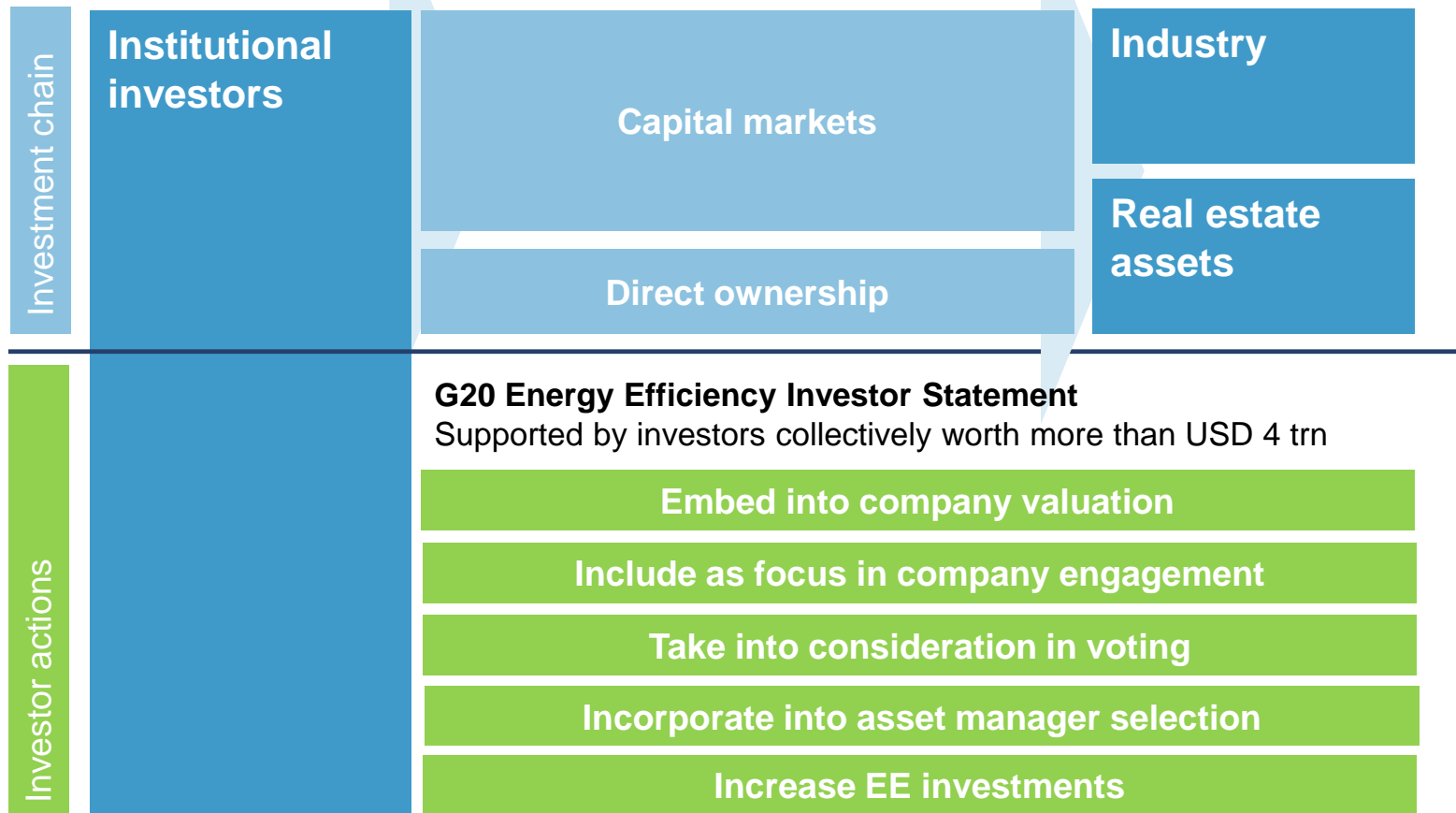
Environmental benefits

- 26 acres of new parks and open spaces, 79% of power demand off-set, 9000 sqm of green roofs



Investors are driving energy efficiency improvements through multiple channels; they can have a significant impact with 5 key actions

Investors are significant providers of capital to European industry and themselves major real estate owners



In overcoming barriers to increased energy efficiency investment, demand and supply need to be jointly advanced

Demand for investment

It's primarily the role of policy-makers to create **demand for investment** through regulation (stick) and project development assistance, technical assistance and other incentives (carrot)

This hybrid **stick and carrot approach** is the most promising

Supply of investment

- **Managing uncertainty** (particularly regarding the uncertainty of actual energy performance as a combination of design and operational efficiency)
- **Distribution and aggregation**
- **Blending grants and loans**
- **Accounting treatment**, particularly of off-balance sheet approaches
- **Investment horizon and optimal scope**
- **Regulatory issues**



Main messages



- There is a strong business case for the further integration of energy efficiency into investment practices. This delivers multiple benefits and produces attractive risk-adjusted financial returns
- Despite the growing awareness of investors of energy efficiency opportunities, much of the energy efficiency potential is at risk of remaining untapped
- Further dialogue between stewards of capital and regulators is needed in order to drive the demand for energy efficiency investment solutions, as well as the supply of energy efficiency investment opportunities



THANK YOU VERY MUCH.

