

Green and Sustainable:

How are these Terms Reflected in the Context of Facilities Management?

Dave Collins
Antje Junghans
Tore Haugen

The Centre for Real Estate and Facilities Management NTNU, Trondheim

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MY Ph.D Project:

Green Leasing: A Theoretical Approach and Practical Implimentations with a Focus on Norway and the United Kingdom

14th EuroFM Research Symposium

EuroFM Research Papers 2015

The Users Impact on Buildings' Sustainability - A Qualitative Approach

Dave Collins Centre for Real Estate and Facilities Management Norwegian University of Science and Technology (NTNU) david.collins@ntnu.no +47 73595039

Dr. Antie Junghans Centre for Real Estate and Facilities Management Norwegian University of Science and Technology (NTNU) antje.junghans@ntnu.no +47 91897746

Green leasing in theory and practice: A study focusing on the drivers and barriers for owners and tenants of commercial offices

Dave Collins.

Centre for Real Estate and Facilities Management Norwegian University of Science and Technology david.collins@ntnu.no

Antje Junghans,

Centre for Real Estate and Facilities Management Norwegian University of Science and Technology antje.junghans@ntnu.no

Tore Haugen. Centre for Real Estate and Facilities Management Norwegian University of Science and Technology tore.haugen@ntnu.no



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DEVELOPMENT OF FM

Green and Sustainable - How are These Terms Reflected in the Context of Facilities Management?

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Economics and Finance

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Technical University of Denmark

Sustainability Issues in FM – Why should we care?

- 40% of C02 Emissions in Europe come from the built environment (EC report)
- Academia FM a fully fledged academic discipline
- Practise more than 60% of customers demand it from FM service providers (BIFM 2015)
- Global focus on sustainable development

Research Questions

- This paper addresses the following research questions:
 - How are the terms 'Green' and 'Sustainable' understood and utilised in existing FM relevant literature from journals and practice literature?
 - To what extent is there a common understanding of the use of "Green" and "Sustainable"?
 - How can the findings contribute to a deeper understanding of FM relevant terminology like "green leasing"?
 - Does literature from journals and practice lead to a better understanding of where sustainable decisions are being made within an organisation?

Research Design

- Literature review
- Focus on Academia, Practice and Environmental Certifications i.e. BREEAM, LEED
- Academia Books, journals and reports
- Practice Reports, commercial and technical documention (advertising, sustainable certification manuals), internet research
- More generally Google search results, internet presence

Organisation Management 'OM' Levels

- Strategic Level "is largely about setting the direction for the organisation and ensuring that the means for achieving its objectives are in place"
- **Tactical Level** is the "organisations broad intentions to be turned into workable plans, and might call for new processes and procedures as well as changes to those that exist".
- Operational Level aims to "perform work according to laiddown procedures and not to deviate"

(Atkin and Brooks, 2015, pp.46-47)

Analytical Approach



Strategic

E.g. Sustainability policy

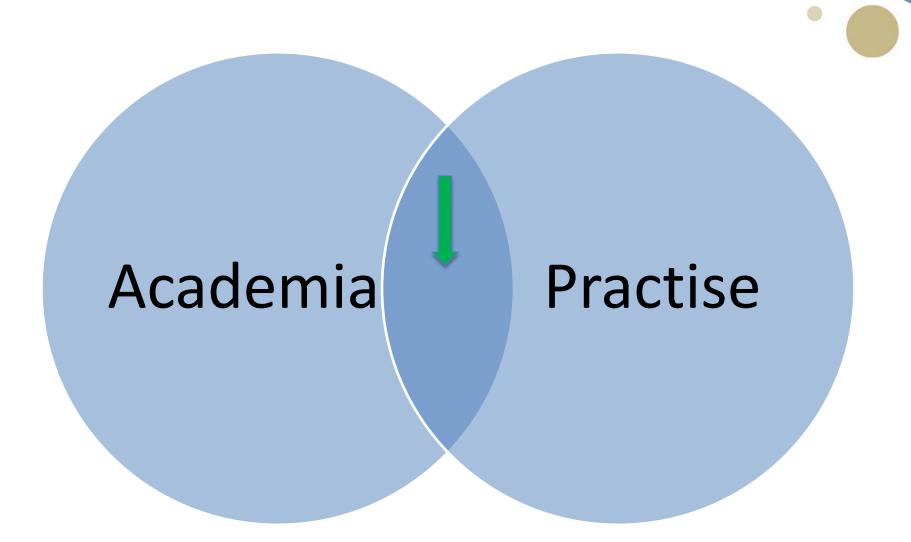
Tactical

E.g. Sustainable procurement and logistics

Operational

E.g. FM's at Work

Where we need to be....



Results – Green



Academia

- 924,000 hits on Google Scholar for 'Green Facilities Management'
- Numerous relevant articles exist, however not all directly relate to FM
- Limited separation between 'Green' and 'Sustainable'
- Operational level' most commonly cited

Practice

- Combination of reports and commercial documentation
- Uses broad and rarely seperated from 'Sustainable'
- Most references at the 'Tactical Level'

Environmental Certifications

Green certifications saw focus on all 3 OM levels

Overall

No Consistancy

Results – Sustainable



Academia

- 592,000 Google Scholar hits for 'Sustainable Facilities Management'
- 'Sustainable' and 'Sustainability' must be considered
- Limited seperation between 'Green' and 'Sustainable'
- 'Strategic level' most commonly cited

Practice

- Use of 'Sustainable Facilities Management' and 'SFM' almost non-existant
- Occasional 'Operational Level' uses found

Environmental Certifications

Green certifications saw focus on all 3 OM levels

Overall

No consistancy

Summary of Results

OM Level	G-A	G-P	G-C	S-A	S-P	S-C	OM Level G Total	OM Level S Total	G + S Total
Strategic	1	1	1	3	2	4	3	9	12
Tactical	2	3	4	0	2	5	9	7	16
Operational	3	1	2	1	2	2	6	5	11

Key:

G = Green

S = Sustainable

A = Academia

P = Practise

C = Environmental Certifications

Total Green: 18	Total Sustainability: 21

Discussion



Academia

- 'Green' more 'Operational'. 'Sustainable' more 'Strategic'

Practice

- 'Green' more 'Tactical'. 'Sustainable' spread over all three OM levels

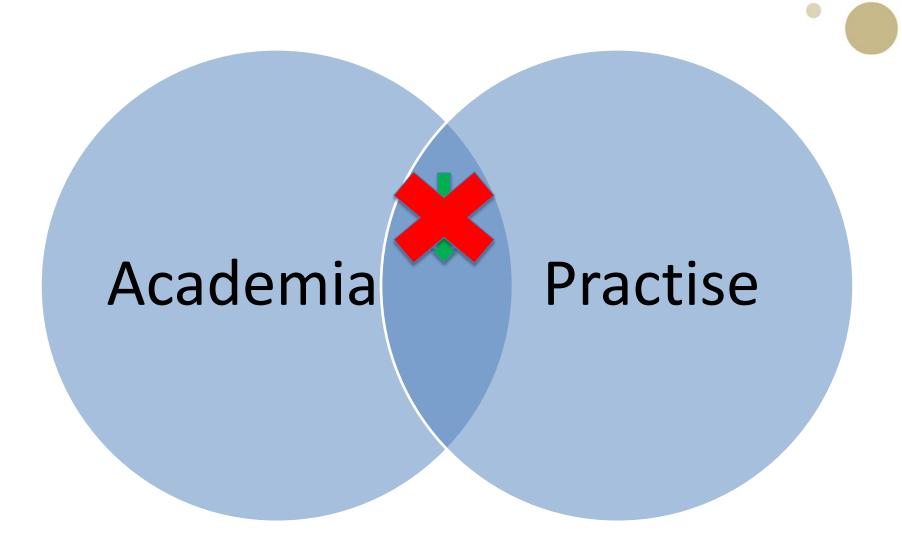
Environmental Certifications

- 'Green' and 'Sustainable' more 'Tactical'

Overall

- 'Green' used the least, but the most malleably
- 'Sustainable' more widely used, closer the OM levels of 'Strategic' and 'Operational'

Where we need to be....



Concluding Thoughts

- Important to consider sister fields i.e. 'sustainable built environment'
- Consider a consistant terminological approach i.e. 'Sustainable FM' vs 'Green FM'
- Academia more consistant than practice, but still have work to do
- Recognise the impact on sustainable decision making in organisations

Further Work

- Further empirical research into how green and sustainable issues are dealt with in sustainable commercial offices
- Increased focus on the user perspective
- Develop a greater understanding into the barriers and drivers for sustainable development in corporate real estate at all levels of the OM pyramid

Thank you for listening

