A Danish Practitioner’s View of the Most Effective Drivers of Sustainable Development in the Decision Making Process.

By

Dr. Hanne Tine Ring Hansen, Søren Jensen Consultants
Professor Emeritus, Mary-Ann Knudstrup, Aalborg University Denmark
Political drivers for the Danish building industry

- 1987 Brundtland Report
- 1999 UN Global Compact
- 2004 Directive on the energy performance of buildings (EPBD)
- 2007 4th climate report from IPCC
- 2012 EU Energy Efficiency Directive
- 2014 EU Non-financial Reporting Directive
Voluntary drivers for construction clients

- CSR / CR
  Corporate Social Responsibility (44%)

- Planetary considerations (65%)

- Life Cycle Costs (61% 48%) & 'Total value' (51%)

- Branding (54%)

- Low retention rates (61% 24%)

- Future legislation (32% 37%) & Improved market value (20%) & In demand (20%)

- 3rd party verification (17%)

- Innovation (41%)

- Fewer mistakes at hand over (27%)

References: The Danish Association of Construction Clients and Dansk Green Building Council
The importance of market scope

- **National market scope** – e.g. Multi-family housing, Public buildings
- **Global market scope** – Manufacturers, Developers, Hedge funds
- **Multi-national market scope** - Scandinavia and Europe
- **Housing and Pre-schools**
- **Model House 2020**: Residential, Pre-schools, Office buildings
- **Housing, Office buildings and Schools**
The importance of culture

Trustbased documentation vs. certification

Voluntary building certification becomes a motivational driver when the construction client or tenant:

1. wishes to brand his/her property via third party certification or
2. wishes to change business as usual and challenge his/her organisation, consultants and contractors to improve their performance towards a more sustainable development.
The importance of planning perspective

**PLANNING PERSPECTIVE**

- Short
- Long

**MOTIVATIONAL DRIVERS**

- Construction Costs
- Life Cycle Costs
- User Comfort
- Increase in Delivered Quality
- Leaner Construction Process
- Sustainable Facility Management
- Corporate Social Responsibility
- Energy Efficiency
- Low Impact Materials
- Healthy Materials
- Robust Materials
- Design for Disassembly

**PLANNING PERSPECTIVE**

- Short
- Long

**MOTIVATIONAL DRIVERS**

- Social Meeting Spaces
- High Usability and Quality of Exterior Spaces
- Biodiversity
- Surface Water Management
- Location Near Public Transportation
- Responsible Sourcing of Materials
- Environmentally and Socially Conscious Contractor
- Innovation
- Increase Future Market Value
- Low Turnover on Tenants
- 3rd Party Certification

**LEGEND**

- Dark grey: High motivation
- Light grey: Low motivation
The importance of tender
Reflection

• Drivers for sustainable development must be identified and prioritised in the initial ideation stage of all projects and an implementation strategy must be developed for the selected project organisation and the type of tender.

• Contractor motivation must be considered to ensure that the Construction Client’s drivers for sustainability also motivates the contractor (e.g. by early engagement of the contractor or financial incentives to perform better).

• A lot of clients are not conscious of EU or UN enforced drivers. They do however influence the Danish building regulations which the market analyses from 2015 and 2016 have verified that construction clients are very much aware of.
Reflection

• Political and voluntary drivers together ensure a market demand that in turn engage construction clients and tenants to implement voluntary schemes in their projects.

• Energy efficiency of buildings has more or less become a standard requirement in all building projects which motivates construction clients to differentiate themselves on the social and economic drivers.

• Education of construction clients is necessary due to the importance of early identification and implementation planning of motivational drivers.