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What the Future Holds? 
A Study on the Environmental Pressure Affecting the Real Estate Market

30 June 2017 ERES 2017, Delft
“The best way to predict the future is to invent it” – Alan Kay
Outline

Background: previous study

Study design: futures wheels and interviews

Findings: (un)realized pathways

Key take-aways
Globalization
Optimizing operations
Differentiation
Technology as an enabler
Urbanization
Ageing of the population
Safety
Search of meaning
Environmental pressure

Toivonen 2011; Toivonen & Viitanen 2015
Revisiting ‘environmental pressure’ and the four ways it presents itself in the RE market

- Enhanced ‘eco-image’
- Stricter regulation and voluntary action
- Occupant behavior
- Eco-consumerism

Toivonen 2011
Enhanced eco-image

- New rating systems
- Showcasing physical artifacts
- Holistic approach
- Developing new green buildings
- Demand for green buildings
- Market segregation
- Encourages actual green action
- Green buildings lose credibility
- Greenwashing
- New elements of eco-performance
- New ecological solutions
- New rating systems
- Green retrofitting
- More green buildings
- Expertise
- Less demand for regular buildings
- No demand for old buildings
- Demand for green buildings
- Less demand for regular buildings
- No demand for old buildings
- More green buildings
- Expertise
- Less demand for regular buildings
- No demand for old buildings
- Enhanced eco-performance

Toivonen 2011
Stricter regulation and voluntary action

- More green buildings
- Less demand for regular buildings
- New ecological solutions
- New construction not lucrative
- Simplification
- Market segregation
- Space demand
- Expertise
- Increased demand for green buildings
- Less of an image factor
- Demand for old facilities
- Retrofitting is not lucrative
- Ageing building stock
- No demand for older facilities
- Poor condition of the building stock
- Lower demand for quality
- ‘Greener than green’ buildings

Toivonen 2011
Near production
Near products
Logistics centers
Simplification
Lower technical requirements
Energy-efficiency
Remote work
Space-efficiency
Less demand for space
Less demand for regular buildings
Market segregation
New technical solutions
Demand for green buildings
Other ecological considerations
Need to monitor
Monitoring
Walking & Bicycling
Sustainable commuting
Public transport
Location within existing infrastructure
Near employees and customers
Diverse urban centers
Expertise
Digitalization
Toivonen 2011

Occupant behavior

Demand for regular buildings
Less demand for space
Lower technical requirements
Simplification
Remote work
Space-efficiency

Monitoring
Location within existing infrastructure
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Toivonen 2011
Ecological consumerism

- Less consumption
- Less retail space
- Demand for green products
- Specialized green business models
- Market segregation
- Demand for green retail buildings
- New services in retail space
- Shift from goods to services
- New space demands
- Dense and diverse neighborhoods
- Location near the customer
- Ecological ways to consume
- Public transport
- Walking & Bicycling
- eCommerce
- Less retail space

Toivonen 2011
Showcasing physical artifacts
- Green roofs and walls, solar panels, certificates

Green retrofitting
- Energy retrofits

Going beyond energy-efficiency
- Water consumption will be a major environmental indicator in the future (even in Finland)
Green buildings have not lost credibility, have not become the "new normal" either.

Technical requirements have not been lowered, facilities have not been simplified - quite the opposite!
Market segregation, division into “good” and “poor” facilities
• Location, condition

Changes in retail spaces
• Digitalization, ecommerce

Space-efficiency
• Cost-efficiency, Activity-based working

Realized, but not due to environmental considerations
IS THIS GREENWASHING!?
Key takeaways

Low risk, economically viable pathways realized

Ecological motives often secondary (but does it matter?)

Future studies methods can and *should* be used in real estate research
Thank you and stay in touch!

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