The experiences and best practices of Finnish professional building owners in overcoming split incentives in energy efficiency

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The Finnish Association
of Building Owners and
Construction Clients

RAKLI

RAKLI brings together property and construction professionals.

RAKLI´s members include Finland´s most prominent owners of residential and commercial properties and infrastructure, tenants of commercial facilities, property investors, building contractors and service providers.

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Together we will ensure that there is space for good life in Finland

The needs of the building users are changing

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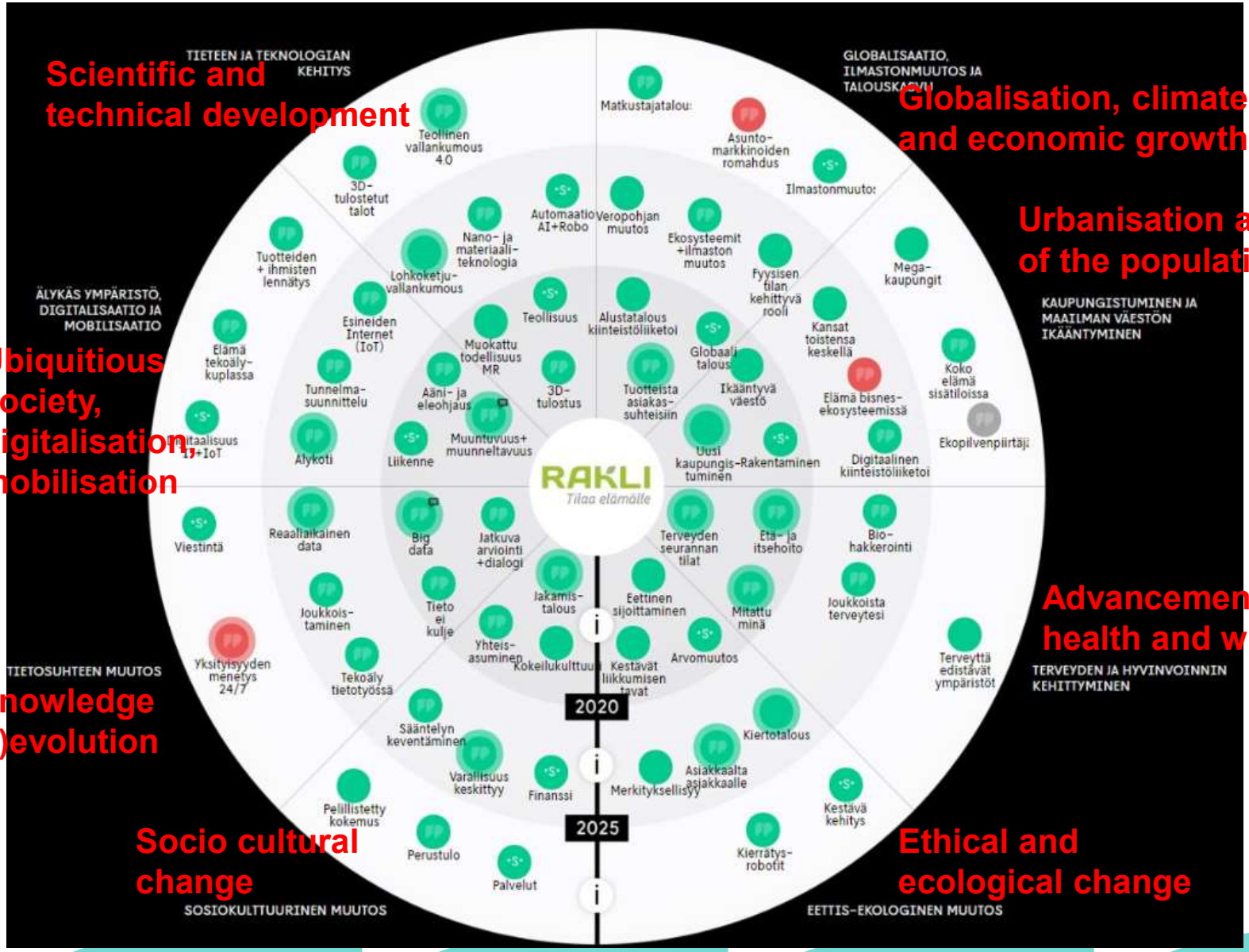

Scientific and technical development

Globalisation, climate change and economic growth

Urbanisation and ageing of the population

Ubiquitious society, digitalisation, mobilisation

Advancement of health and wellbeing

Knowledge (r)evolution

Socio cultural change

Ethical and ecological change

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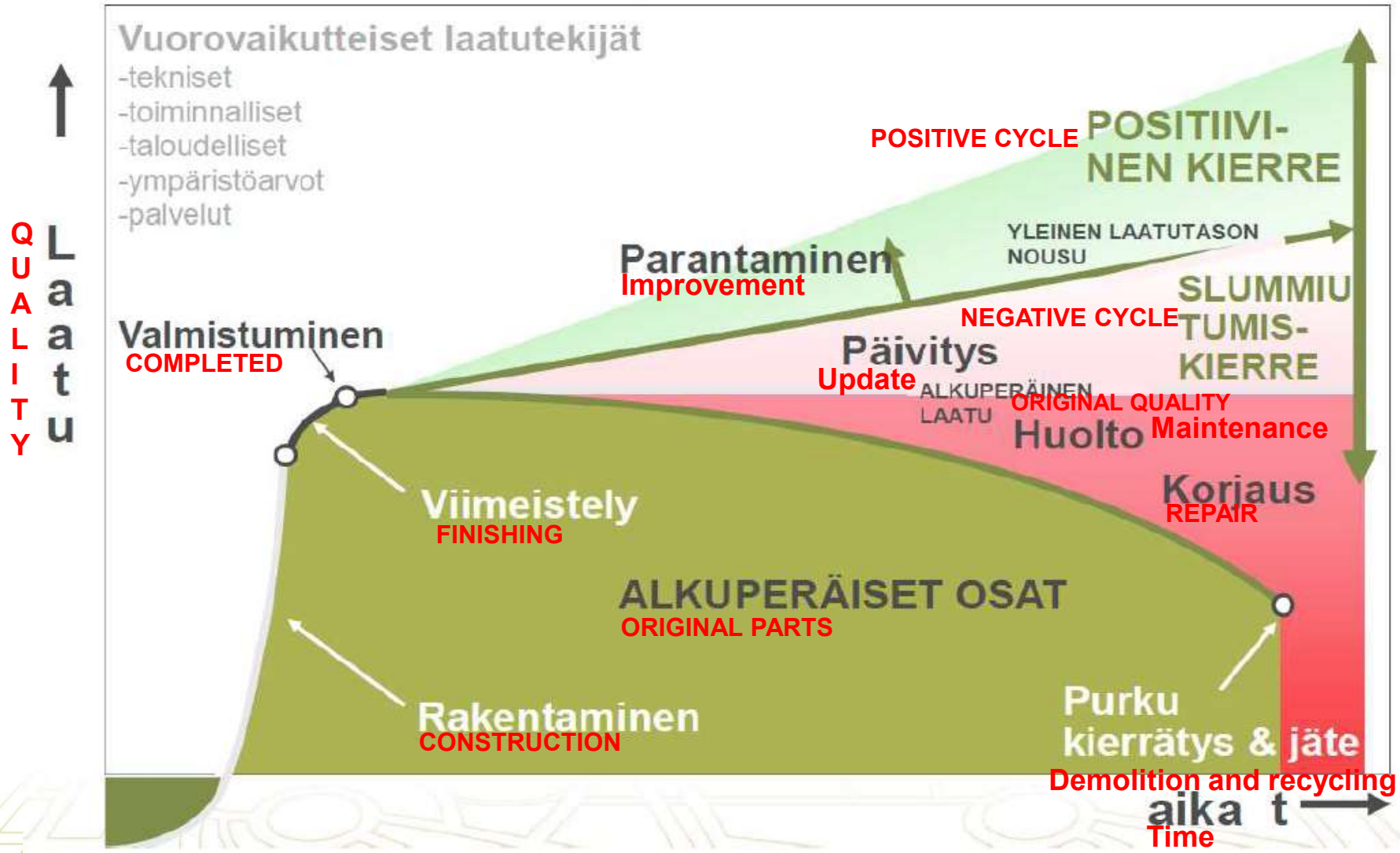
Challenge - Real estate lifecycle and quality control + rising maintenance costs



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Responsible Real Estate Management for building owners

- Reporting principles:
  - GRI, EPRA, INREV
- Reporting framework
  - GRESB – ESG bencmark of Real Estates
- Global Principles
  - UN PRI, UN Global Compact
- Sertifications
  - LEED, BREEAM
- **Voluntary energy saving contracts of finnish Real Estate industry – Finnish model for reaching EED – targets, Green Deal concepts**
  - TETS, VAETS – Based on energy saving actions done by owners
    - 2010-2016
    - 2017-2025

Overcoming split incentives in energy efficiency

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- Lookahead and professional asset management (data and knowledge driven) keys in overcoming split incentives
  - Book of maintenance, long term plans (technical, economical)
- Targets for professional building owners come from voluntary energy saving contracts
  - Targets set, actions can be divided according to individual building strategy
  - Investments to energy saving are at the heart of the voluntary contracts

- Role of rental contracts relates to building types: residential, commercial, office, logistic

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Energy efficiency work – long term renovation planning

- When the target is to enhance energy efficiency measures and indoor environment conditions during the building life cycle the important things are:
  - The knowledge gathered during normal building maintence
    - Active energy efficiency view to long term repair planning
    - The key is to find good ways to gather information during maintenance (maintenance personel, energy audits/inspection, monitoring buildings)
    - When there is sufficient information that can be compared to energy consumptions → plan activities and divide them for different years
  - Investors/Owners own know – important for the process

PTS tiedot (Excel)		8.5.2014	Granlund Manager						
Tunnus	Kiinteistö	Kohde	PTS-Tunnus	Nimi	Vaihe	Toimenpideluokka	Peruste	Aloitusajankohta	Lopetusajankohta
73750	KI OY XXX	73750 KI OY XXX	111	A-talon keittiön tavarahissin korjaus	PTo Päätetty toteuttaa	111 Aktivoitavat	Muut toimenpiteet	12.5.2014	30.6.2014
73750	KI OY XXX	73750 1 G1 Lämmitysjärj	14181	Pääsisäänkäynnin sulana	Har Harkitaan toteuttam	112 Ei aktivoitavat	Muut toimenpiteet	1.1.2014	31.12.2014
73750	KI OY XXX	73750 1 G1 Lämmitysjärj	14180	Patteriverkoston lämmöi	PTo Päätetty toteuttaa	112 Ei aktivoitavat	Energiansäästötoimenpi	1.1.2014	31.12.2014
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73750	KI OY XXX	73750 1 G1 Lämmitysjärj	etod	A-talon Yöaikaisten sisäli	Har Harkitaan toteuttam	112 Ei aktivoitavat	Energiansäästötoimenpi	1.1.2015	31.12.2015
73750	KI OY XXX	73750 1 F8 Siirtolaitteet		A- ja B-osien hissien mod	Har Harkitaan toteuttam	111 Aktivoitavat	Muut toimenpiteet	1.1.2016	31.12.2016
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73750	KI OY XXX	73750 MY5 Turva	1XXXX	Luolan VSS-tilan tiiveysko	Har Harkitaan toteuttam	112 Ei aktivoitavat	Muut toimenpiteet	1.1.2020	31.12.2020
73750	KI OY XXX	73750 1 G3 Ilmanvaihtoja	1XXXX	IV-koneiden kunnostus	Har Harkitaan toteuttam	111 Aktivoitavat	Muut toimenpiteet	10.8.2020	7.5.2021
73750	KI OY XXX	73750 2 G51 Paineilmave	1XXXX	Paineilmakompressorin	Har Harkitaan toteuttam	111 Aktivoitavat	Energiansäästötoimenpi	1.1.2021	31.12.2021
73750	KI OY XXX	73750 1 G1 Lämmitysjärj	1XXXX	Lämmitysjärjestelmän ku	Har Harkitaan toteuttam	111 Aktivoitavat	Muut toimenpiteet	1.1.2023	31.12.2023

Overcoming split incentives in energy efficiency

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- Green Lease Agreement model made by RAKLI back in 2011
- Green Lease model not in widespread use but rental models tend to back tenants energy savings (Tenants pay for energy consumption, capital rent + maintenance rent model common in non residential propertys)
  - Lot of interaction between landlords and tenants relating to energy consumption figures. Tenants interested about Energy Efficiency – dialog about possible actions
  - Environmental sertificates also key driving force from the tenants side

Overcoming split incentives in energy efficiency

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- Renewal of rental contract best opportunity to get energy efficiency measure with split incentives done
- Possible demands for environmental sertificates in addition to energy savings by the tenants during rental contract negotiations
- Rental contract cases with energy efficiency aspects can lead to WIN-WIN situations:
  - Lower costs, better indoor air quality and substance for environmentality for tenants
  - Extended maturity, higher capital rent and higher lewel of tenant commitment for the landlords
- Investments can be done also without renewing the rent contract for example through case by case calculated investment rent – multiple choices for financing the energy efficiency actions
- State financial subsidys relevant in some cases

Energy saving investments used in split incentive cases

- Investment used in split incentives situations are usually minimum risk energy efficiency investments to ensure the benefits will actualise for both parties – key is to understand the risks associated with different investment types
- The commitment of both parties essential – calculations and estimates can be ordered from multiple sources
  - Low risk investments: lighting, cooling system, solar panels, (heat pumps)..
  - High risk saving investments: building automation, ventilation systems..

Energy saving investments, WIN-WIN situations

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Owner's/ Landlord's calculation											
Net proceeds requirement	7,0 %										
Energy Investment	326 864										
Investment rent € / year, for ter	41 000	3417	€ / month								
Rental contract length	10										
Rise of expenses	0,0 %										
Total proceeds requirement	7,0 %										
Energy cost increase / year	2,0 %										
	30.6.2019	30.6.2020	30.6.2021	30.6.2022	30.6.2023	30.6.2024	30.6.2025	30.6.2026	30.6.2027	30.6.2028	30.6.2029
Years		1	2	3	4	5	6	7	8	9	10
Energy subsidy (20 %)			65372,8								
Cash Flow	-326 864	41 000	106 373	41 000	41 000	41 000	41 000	41 000	41 000	41 000	41 000
Cash Flow Current value		39 636	96 107	34 620	32 355	30 238	28 260	26 411	24 683	23 069	21 559
IRR	**8,31 %**										
Cash flow current value total	356 939										
NPV	30 075										

Tenant's calculation										
	Year	1	2	3	4	5	6	7	8	9	10
Energy savings / year, €		58899	60076,98	61278,52	62504,09	63754,17	65029,26	66329,84	67656,437	69009,57	70389,76
Energy savings - additional rent		17 899	19 077	20 279	21 504	22 754	24 029	25 330	26 656	28 010	29 390
Total savings for tenant	**234 928 €**										


Thank you!
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