



THE POWER OF INNOVATIVE FINANCING

Renovating buildings
for energy-efficient cities

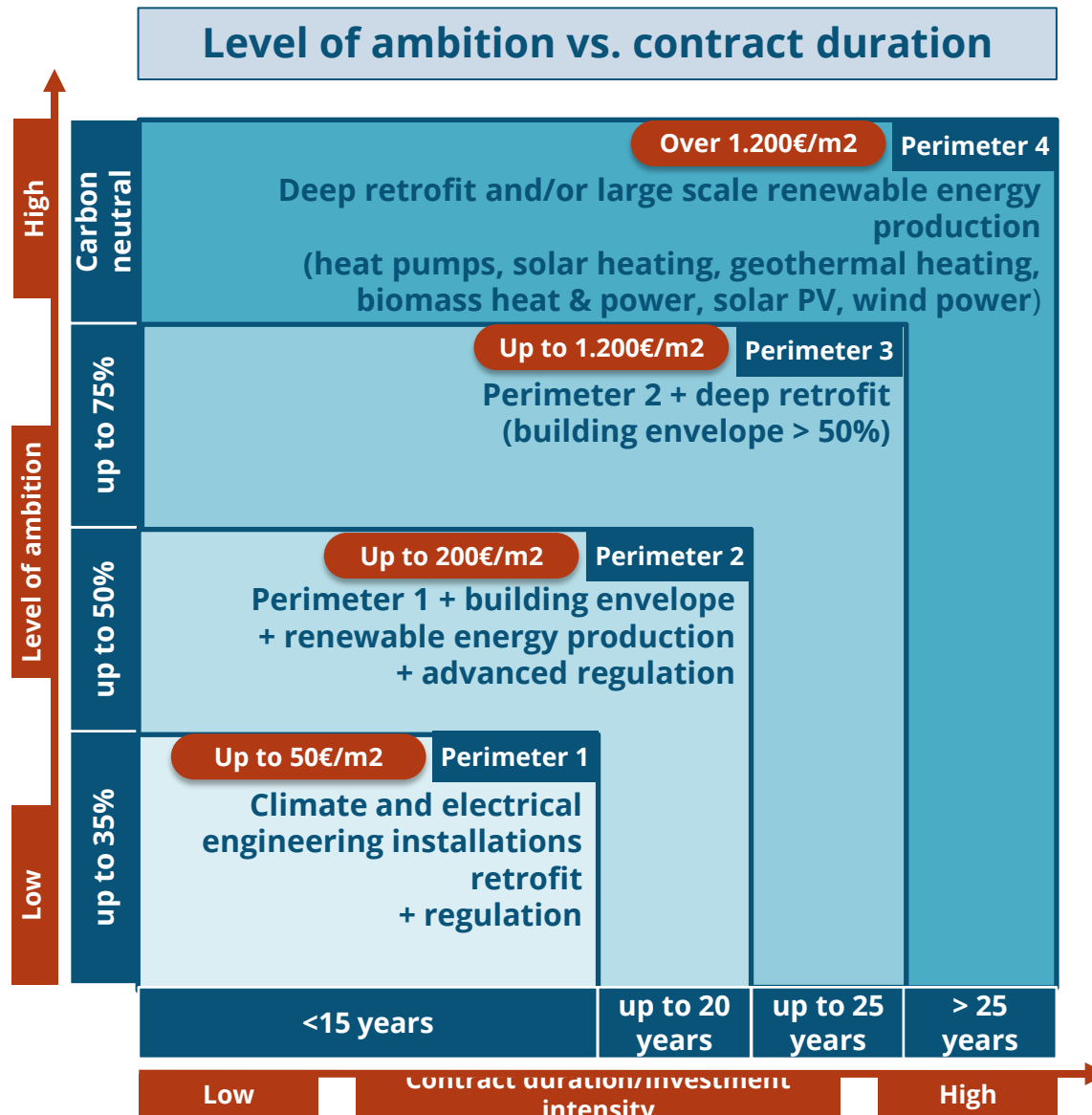
Introduction to the breakout sessions

CITYinvest Final Conference, Brussels, December 4th & 5th, 2017

Miguel A. Casas

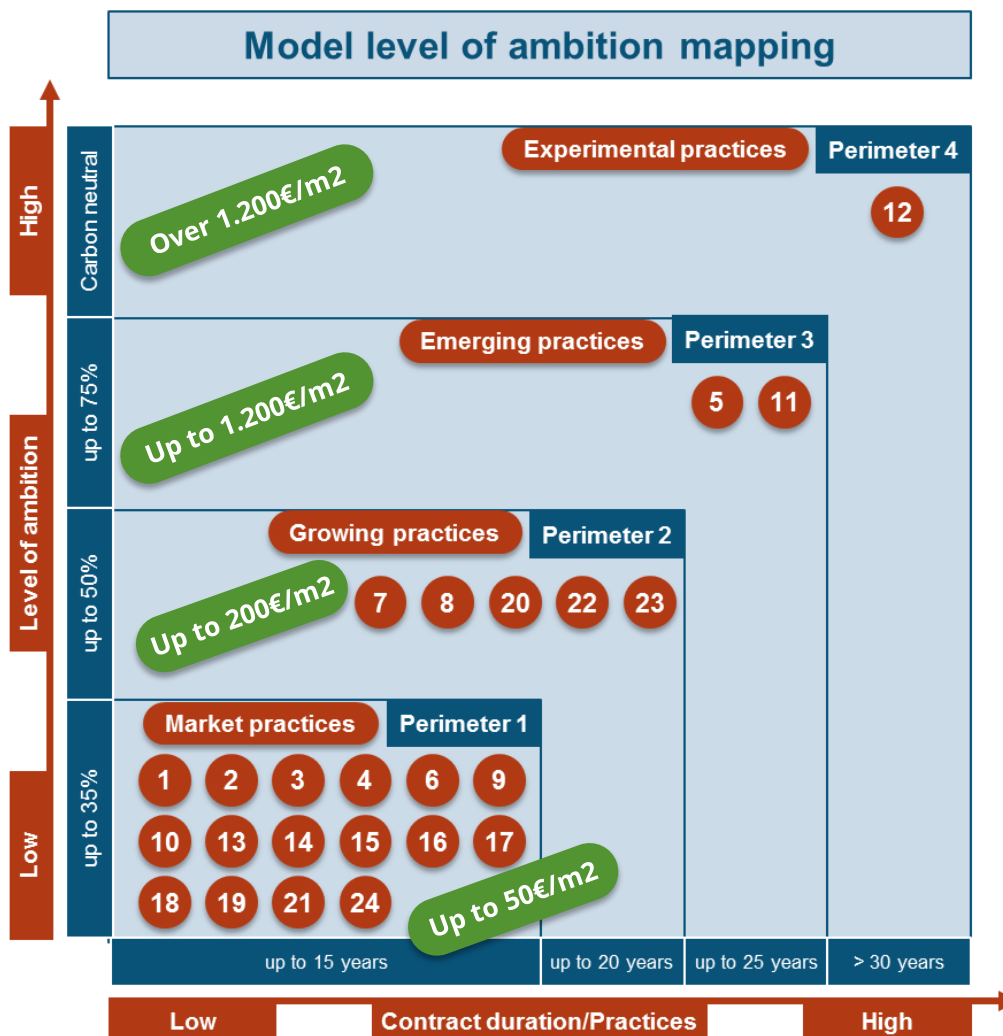
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Level of Ambition: The great majority of the models target Perimeter 1 or “standard market practice”, though factor 2 (50% savings) models gain in attention, factor 4 (75% savings) remain marginal.

Models			
1	REDIBA	2	Berlin Energy Saving Partnership
3	RE:FIT	4	Vlaams Energiebedrijf
5	OSER	6	Fedesco
7	Eandis EDLB	8	ESCOLimburg 2020
9	Eco'Energies	10	Energy Fund Den Haag
11	Energies POSIT'IF	12	Climate Community Saerbeck
13	Cambridgeshire MLEI	14	Ox Futures
15	Rotterdam Green Building	16	Energy Efficiency Milan
17	ENSAMB	18	Brixton Energy Co-op
19	EERFS	20	SUNSHINE
21	Warm Up North	22	SPEE Picardie
23	KredEx	24	PadovaFIT!





Breakout sessions

- ▶ Three breakout sessions running in parallel around 3 different energy savings ambition levels (up to 35%, 50% and 75%)
- ▶ 10' presentation of case studies
 - Vlaams Energiebedrijf (35%)
 - SUNShINE (50%)
 - Energie POSITIF' (75%)
- ▶ 20' discussion/debate around themes like:
 - Time to market (to realise 1st project)
 - Sustainability of program or PDU structure
 - Funding of PDU and financing of projects
 - ...

Thank You

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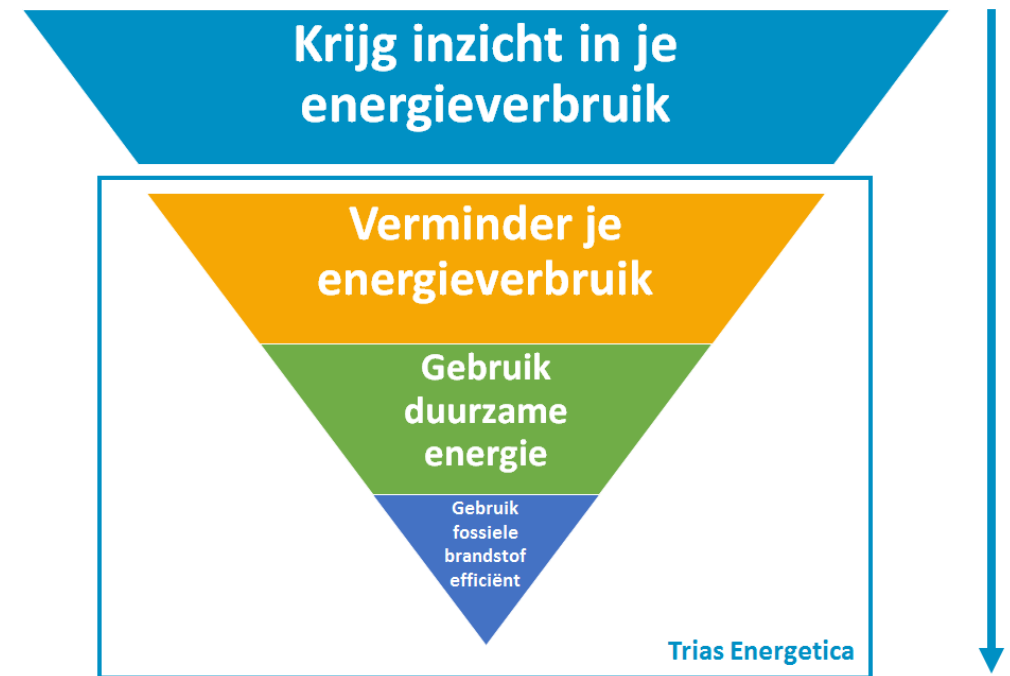
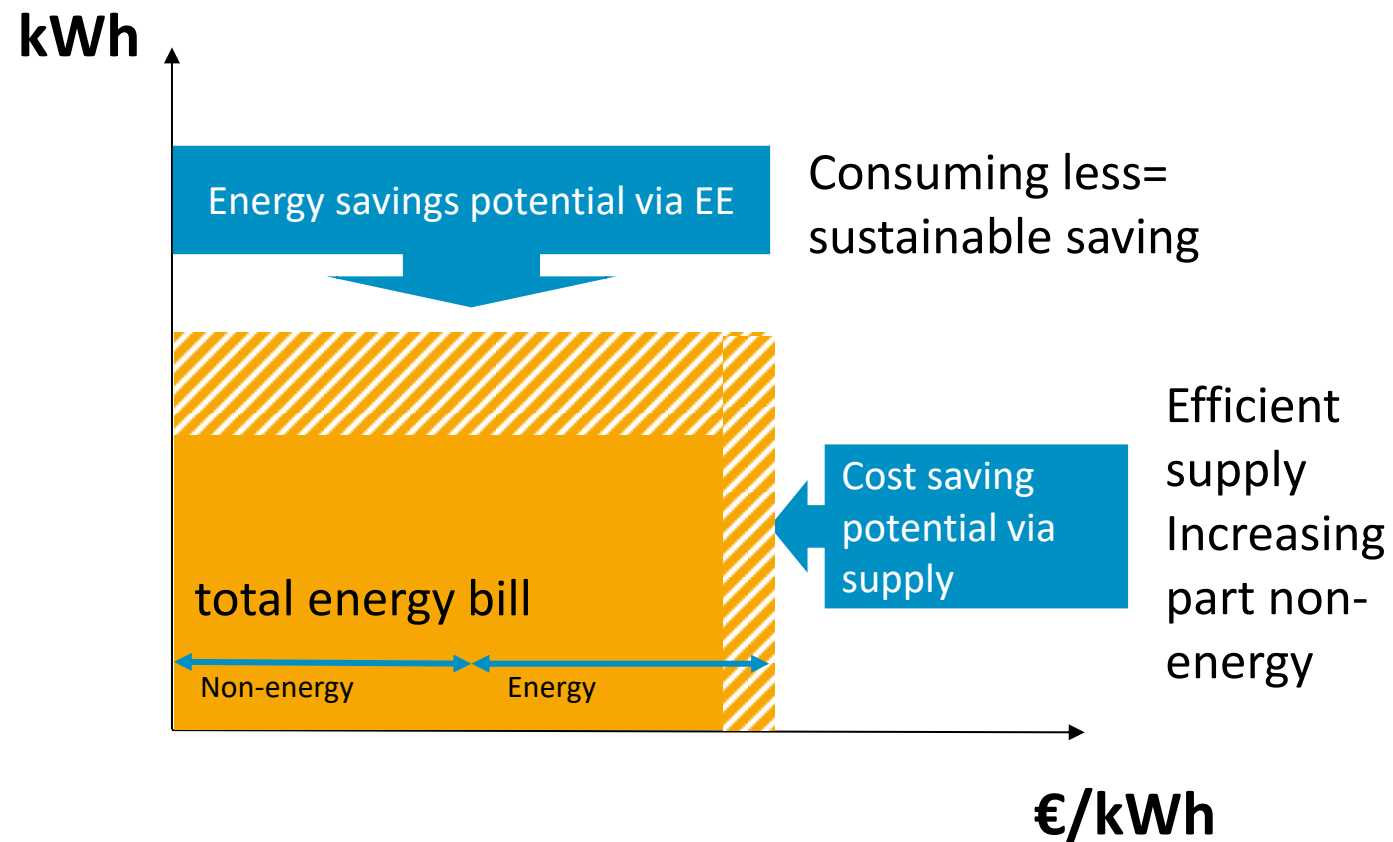


Het Vlaams EnergieBedrijf

Towards a more sustainable and efficient energy management of the
Flemish public sector



Purpose VEB



VEB's activities



energielevering

Wij zorgen dat uw factuur daalt



energie-efficiëntie

Wij helpen uw verbruik verminderen



energiedata

Wij analyseren uw energiedata

- Efficient supply of energy
- Gas and 100% green electricity

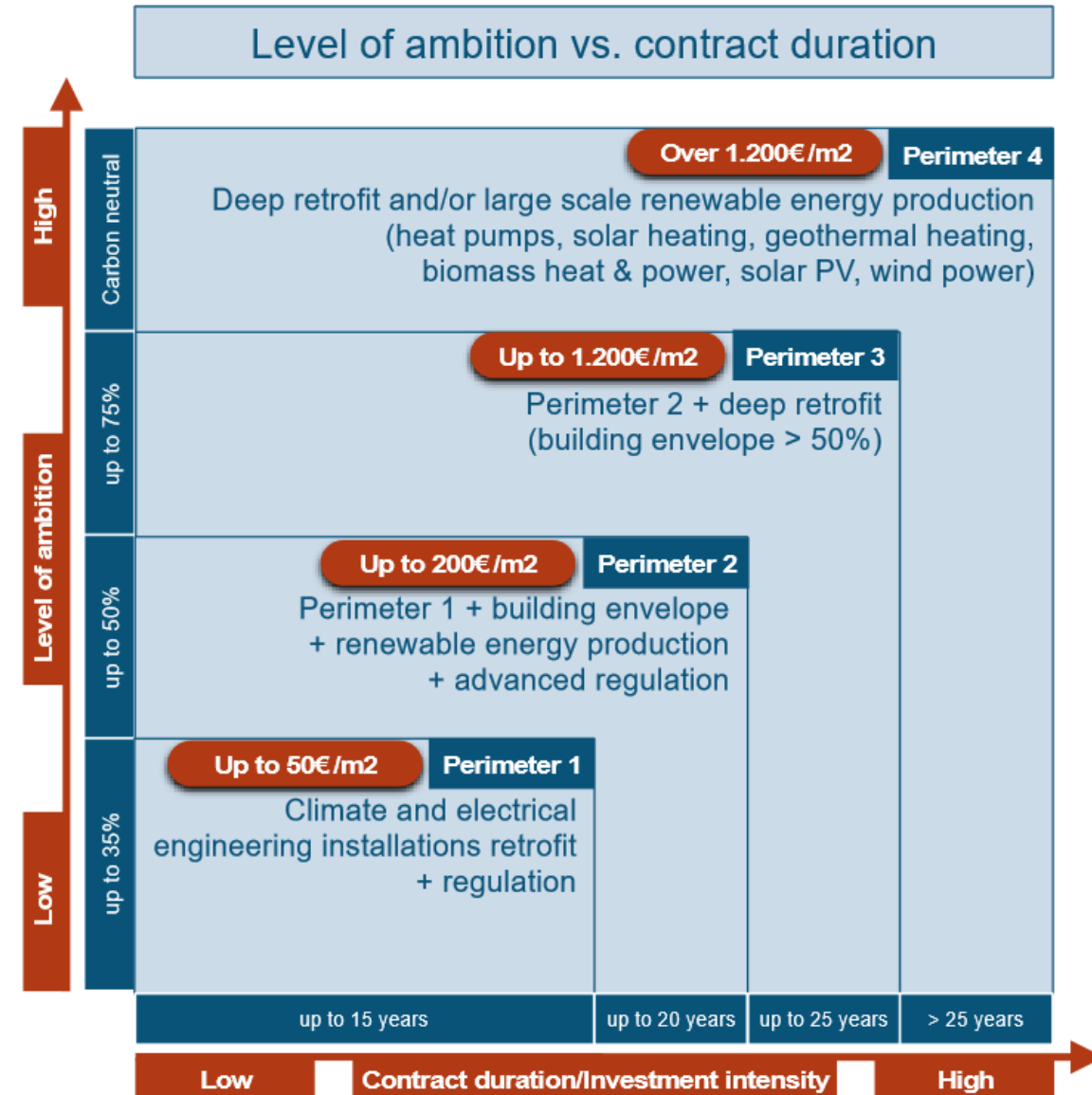
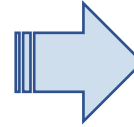
- Energy efficiency: building envelope and technical installations
- Central purchasing agency and procurement agency for EE services. Project management and acting as one-stop-shop for public entities.

- Centralising and standardising energy related data for the building stock in Flanders.
- Benchmarking and reporting

How do we do this?

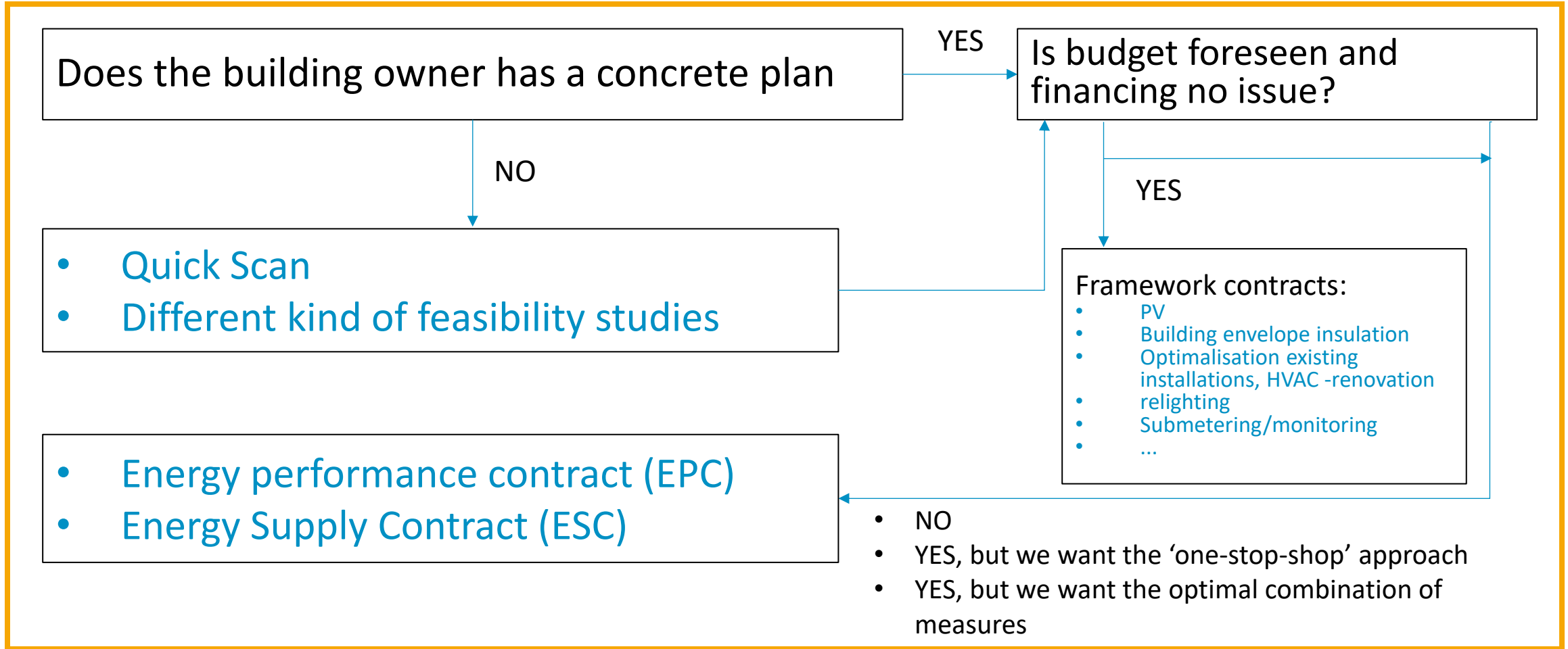
Our strategy consists of:

- Long term cooperation
- Holistic view on patrimonium
- Unique focal point



Source: [CITYnvest](#) report: Increasing capacities in cities for innovating financing in energy efficiency, 2015

Which strategy fits with which building owner?



Sectoral approach ⇒ 'Directing role' VEB (e.g. health care sector)

EPC projects

Psychiatric hospital in Rekem	University of Antwerp	City Geel	School group 16 (35 sites)	School group 15 (19 sites)
ESCO Financing	ESCO Financing	ESCO Financing	ESCO Financing	ESCO Financing
On-balance	On-balance	On-balance	On-balance	On-balance
Facilitation cost: mutual learning process	Facilitation cost: paid back by the energy savings over contract lifespan	Facilitation cost: paid immediately by the local government (once political decision is made...)	Facilitation cost: paid back by the energy savings over contract lifespan	Facilitation cost: paid back via the cost savings of the first three years
Contract of 9 years	Contract of 9 years	Contract of 12 years	Contract of 9 years	Contract of 9 years



To be expected: EPC in its varieties

Topics for discussion (invitation to help):

- Integration **Circular Economy** principles
- New **output** specifications: e.g. EPC's on indoor climate
- **Measure specific** EPC's: e.g. sanitary warm water
- Arguments to **cluster** building owners
- More insights **on/off balance**: Instructions Eurostat expected
- EPC's in **streetlight** (local governments / Flemish region competence)



Evolution as market facilitator

- Boosting trust in the EPC model: knowledge network
- Working on market failures: EPC standardisation, integration law public procurement, advise financing constructions
- Market-wide capacity building: also financing solutions for ESCO's needed (esp. Small ESCO's)
- EPC facilitator framework contract, when demand takes off.



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Level of 75% energy savings: Introduction to OSER & Energie POSIT'IF

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Jean-François Marchand

Energinvest – CITYnvest

Level of 75% energy savings: the emerging trends!

	Facilitation model		Integration model		Financing only model
	Without aggregation	With aggregation	Without aggregation	With aggregation	
FI financing (*)	REDIBA Eco'Energies EERFS	Berlin ESP RE:FIT Vlaams energiebedrijf ENSAMB Energie POSIT'IF	Warm Up North	-	N/A
ESCO financing	REDIBA Eco'Energies EERFS	Berlin ESP RE:FIT Vlaams energiebedrijf Rotterdam GB EE Milan PadovaFIT!	-	-	N/A
PDU financing (**)	OSER	Fedesco Ox Futures	OSER	Fedesco Energie POSIT'IF Eandis EDLB EscoLimburg 2020 SPEE Picardie	N/A
Investment fund	EERFS SUNSHINE	-	-	EscoLimburg 2020 Cambridgeshire MLEI	Energy Fund Den Haag KredEx
Citizens financing	-	OxFutures Brixton Energy Co-op	-	-	Saerbeck

- ▶ Only 2 models on 24 target level of 75% energy savings: OSER and Energies POSIT'IF.
- ▶ Integration and PDU financing are their main common points.
- ▶ Business models based on 3 innovations:
 - One-stop-shop for energy renovation
 - Guarantee on energy performance
 - Third-party financing
- ▶ They bear all risks:
 - Operational & technical risks as they act as the contracting authority.
 - Financial risks as they finance totally (OSER) or partially (Energie POSIT'IF) the projects.

Short comparison of both models

	SPL OSER	SEM Energies POSIT'IF
Program Authority	Region of Rhône Alpes - France	Region Ile de France - France
Program Delivery Unit	Local Public Company (Public Regional Energy Services Company)	Mixed Company (public-private partnership)
Beneficiaries	Shareholders (regional public authorities)	Condominiums and social housing
Projects financed	Energy Efficiency (building retrofits)	Energy Efficiency (building retrofits) Renewable Energy
Implementation model	Energy Performance Contracting (EPC)	Separate Based Contracting (SBC) Energy Performance Contracting (EPC)
Operating Services	Marketing Integration Financial advice Financing	Marketing Facilitation Integration Financial advice Financing
Funding Vehicles	Public ESCO Financial Institutions	Financial Institutions Property Owners Investment funds
Financial instruments	EPC Financing Loans Grants	Equity/Own funds Loans Grants Utility incentives (white certificates)



Key elements for discussion: the case of Energies POSIT'IF

- ▶ Results at date:
 - 34 projects signed, corresponding to 5.000 apartments and more than € 110 million in works value.
 - 78% reach the “low energy building” label performance (BBC Renovation)
- ▶ Example Condominium Lançon-Rungis, Paris 13ème:
 - 36 apartments build in 1960 with a current consumption of 239 kWhpé/m2/year
 - € 1.043 million of works (HVAC, insulation & architectural improvements)
 - After-works consumption of 98 kWhpé/m2/year (64% energy savings)
- ▶ Objectives 2016-2020:
 - 70-80 condos renovated (2.000 to 10.000 dwellings)
 - 250 million € in works value (100 million € line of credit by the EID to support the growth)
- ▶ A long (and sustainable?) way to go:
 - More than 2 years to operationalize the services due to capacity building and legal national framework constraints
 - 5 years of project life-cycle (3 years of studies, 2 years of works)!
 - The fee-for-service model is not yet self-sufficient (almost 2/3 of the equity is already burned)

Thank You

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