

# Renovation strategies for complex public and private building portfolios, based on Energy Performance Contracting: Challenges and lessons learned

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A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are set against a clear blue sky. The perspective creates a sense of height and architectural scale. The glass reflects the sky and surrounding environment.

energinvest – smart building performance

# | Our Activities



## Smart Energy Performance Contracting

smartEPC, an innovative model for energy, comfort, maintenance, building value and third party building certification performance contracting

[Read more...](#)

smartepc



## Smart Building Performance Management

Consulting services providing our customers with a cost-optimal and performance-based energy, maintenance, comfort, building value and certification management system.

smartbpm



## Smart Innovative Financing Program

smartIFP, an integrated approach to (re)think operational and financing solutions for the implementation of ambitious sustainable energy efficiency plans

smartifp

# I Complex building portfolios: Our definition

« A portfolio with multiple and significant *Inherent, Architectural, Strategic, Technical, Legal* and/or *Financial* complexities »

Type	Complexity criteria
Inherent	Number of buildings Size of portfolio (000's of m <sup>2</sup> ) Organisation
Architectural	Historical buildings Urban localisation Density
Strategic	Ambition level Specific comfort requirements Diverse building typologies Usage constraints (e.g. air quality in schools) Non-energy related requirements (e.g. security) Level of occupant involvement practices (e.g. with social housing deep energy renovation)
Technical	Specific or unusual existing (or expected techniques)
Legal	Owner/tenant split
Financial	Off-balance requirements (customers (ESR neutrality) and ESCOs) Size of envisaged investment program Portfolio asset types (transferable, securitizable/fungible)

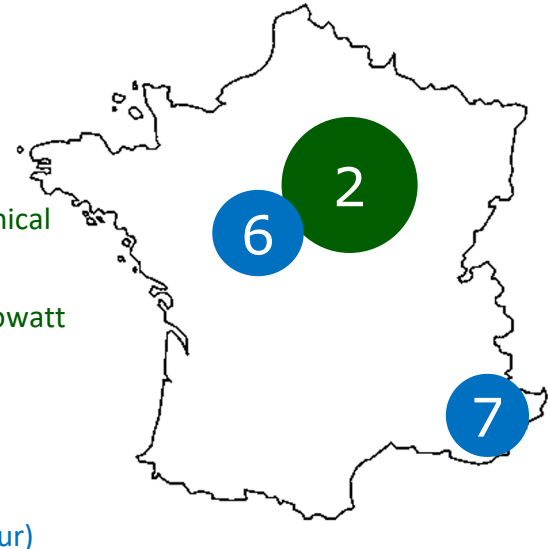
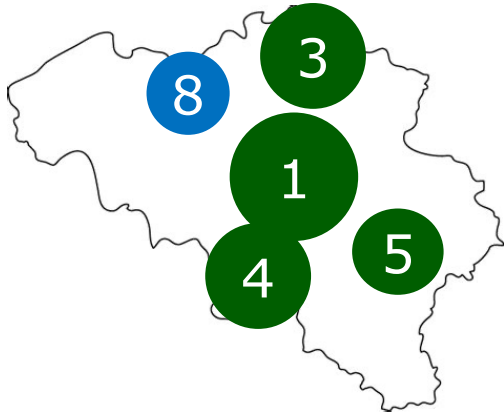
# I Some examples of complex portfolio's we have dealt with

## I Public sector

1. Federal public buildings (Fedesco/DRFM) (> 6 000 buildings)
2. State bank-financed public national building portfolio (CDC)
3. Flemish public regional and local buildings (VEB)
4. Brussels/Wallonia Regional secondary and technical schools (FWB) (> 3 000 buildings)
5. Wallonia-based public municipal buildings (Renowatt)

## I Private sector

6. Hotels and elderly homes (Green Yellow/Casino group)
7. Tertiary and industrial SMEs (CCI Nice Côte d'Azur)
8. Flanders-based Industrial SMEs (VLAIO)



# I Challenges

1. Define, clarify and communicate LT and ST objectives
2. Strategic stakeholder management
3. Capacity to design innovative financing solutions (incl. ESR neutrality)
4. Capacity and resources to aggregate, facilitate and implement a large and divers program of EPC/EPPP projects (that allow for ESR neutrality)
5. Timely, reliable and sufficient data collection
6. Increased risk management
7. Capacity to show flexibility in a rapidly changing energy environment

# I Project example (ongoing)

## I Summary

- Large complex public building portfolio (> 6 million m<sup>2</sup>)
- Climate neutral renovation target by 2040
- Maximum off-balance financing, in line with Eurostat rules to collect long term private financing

### Most criteria for complexity checked ✓

Type	Complexity criteria
Inherent	Number of buildings ✓✓ Size of portfolio ✓✓ Organisation ✓✓
Architectural	Historical buildings ✓ Urban localisation ✓ Density
Strategic	Ambition level ✓ Specific comfort requirements Diverse building typologies ✓✓ Usage constraints Non-energy related requirements (e.g. security) ✓ Level of occupant involvement practices ✓
Technical	Specific or unusual existing (or expected techniques) ✓
Legal	Owner/tenant split ✓
Financial	Off-balance requirements (customers and ESCOs) ✓✓ Size of envisaged investment program ✓✓ Portfolio asset types (transferable, securitizable/fungible) ✓

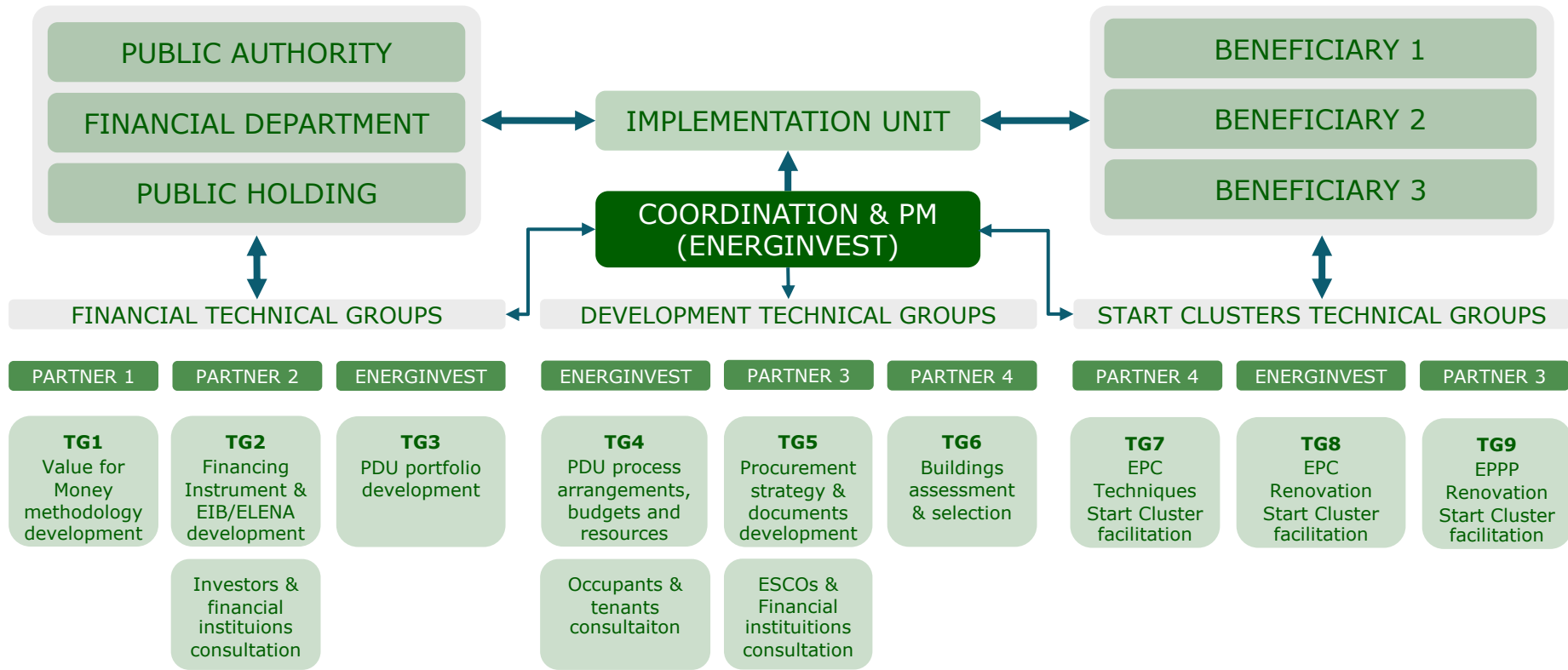
# I Key elements of our building renovation program mission

1. Develop a **Roadmap** for program design & implementation
2. Analyse, select and cluster the **building portfolio** and dimension the **investment program**
3. Design, implement and source a **Program Delivery Unit (PDU)**
4. Design, implement and source a **Financial Instrument (Investment fund)** that can attract private financing and allow for maximum **ESR neutrality**
5. Develop **standardized tendering documents and procedures** for EPC/EPPP, largely based on existing smart EPC templates
6. Implement **3 Start Clusters**

# I Methodology developed and being applied

DECISIONAL LEVEL

OPERATIONAL LEVEL





# I Lessons learned

Theme	Lessons learned
Political	Political or Senior Management engagement and stability is a key success factor
EE Market development	Competitive ESCO market is still lacking in many countries. Difficulties for new entrants (SME and LE), because of dominant incumbant market players
Strategic	Upstream collaboration with public customer to define objectives and roadmap
Organisation	Put in place an expert matrix organisation to tackle all key topics with respect to the program requirements
Financing	Design innovative financing instruments that satisfy both public AND private financing, accounting and fiscal constraints
Data	Digitalisation is key to improve data collection and management

## I Contact

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