

# Refurbishment strategy

Brussels Capital Region

Brussels, October 2015

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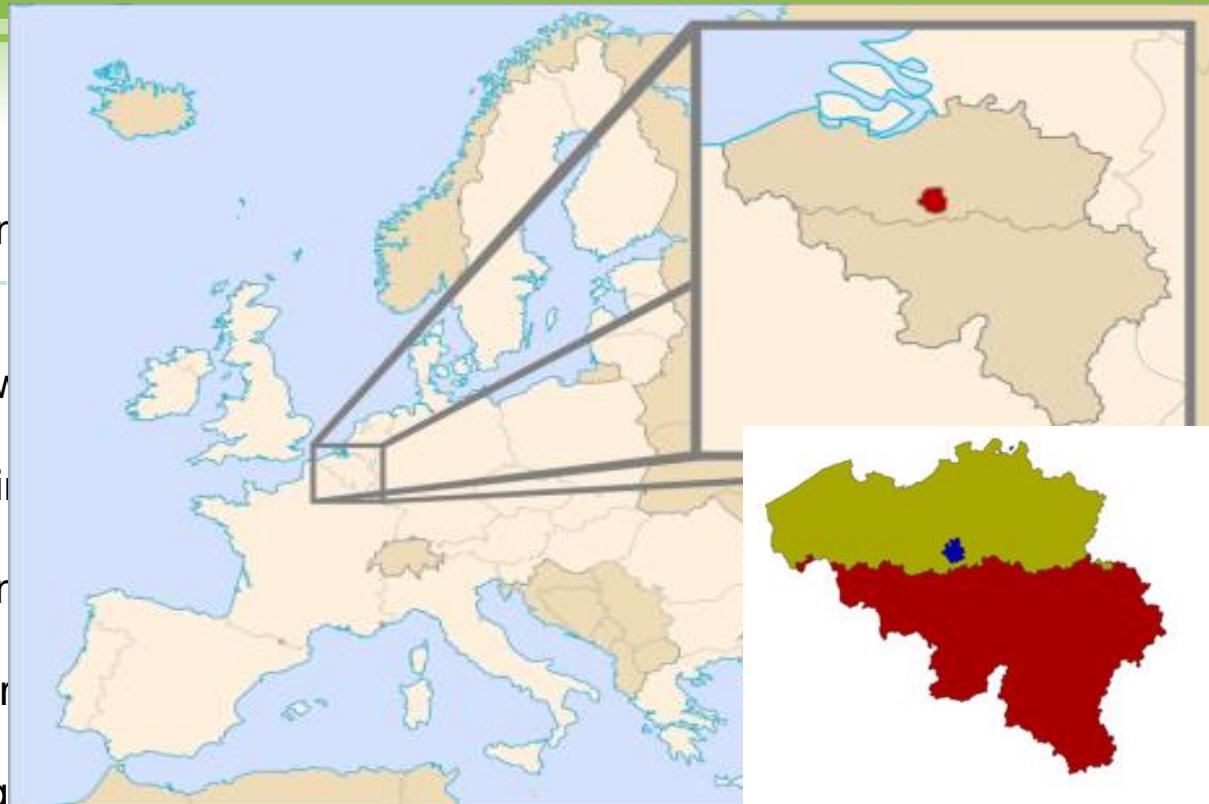


**BRUXELLES ENVIRONNEMENT**  
IBGE - INSTITUT BRUXELLOIS POUR LA GESTION DE L'ENVIRONNEMENT

# BRUSSELS SITUATION

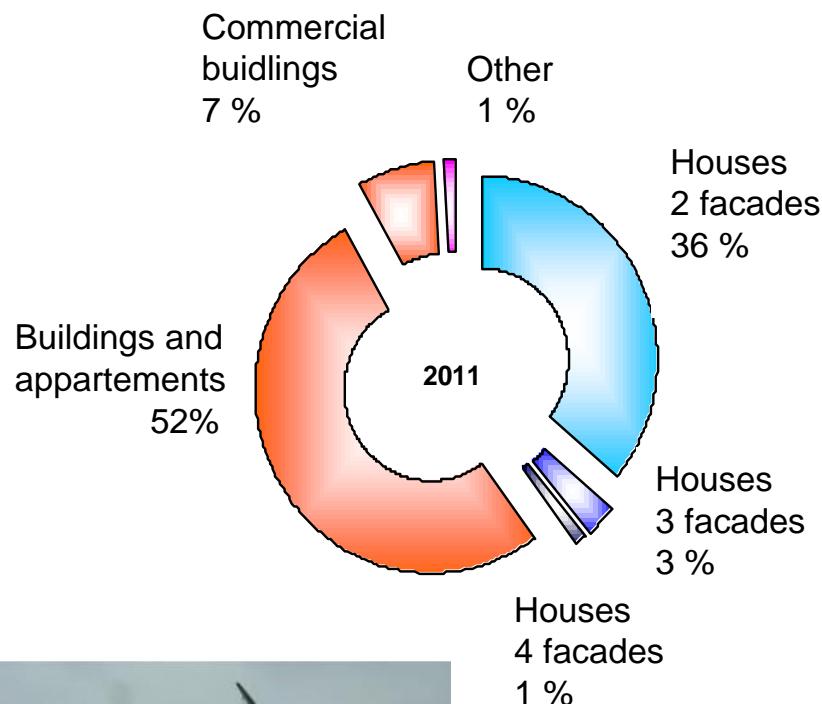


- 162 km<sup>2</sup>
  - 1,1 million expected +
  - 630.000 w
  - Old buildin
  - 75% of ener
  - Very low r
  - Large reg
- mobility, urbanism, housing, ...

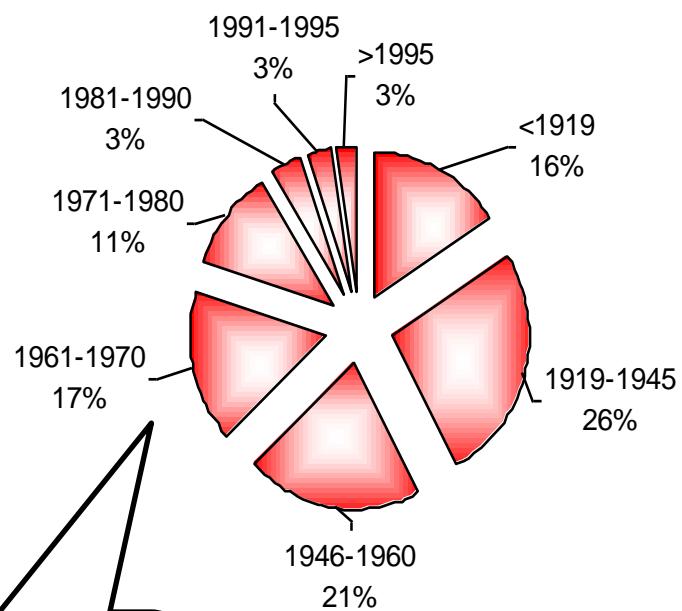


# BRUSSELS CONTEXT : BUILDING STOCK PARTICULARITIES

## Type



## Age

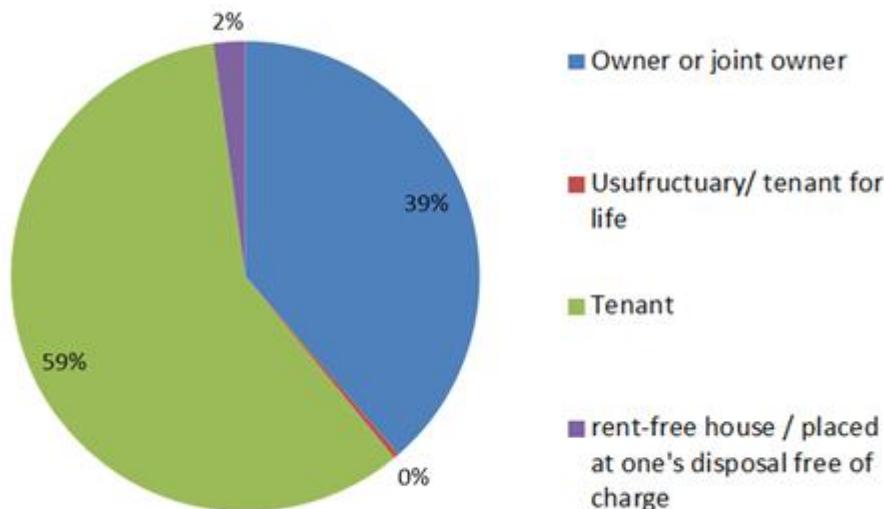


Mostly build between 1919 and 1970

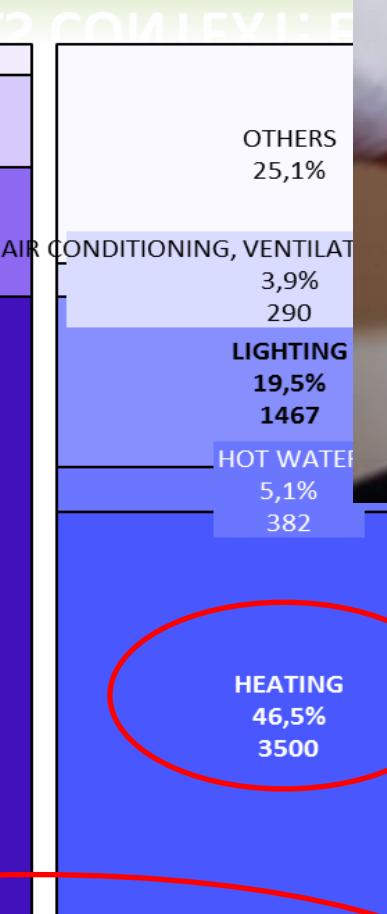
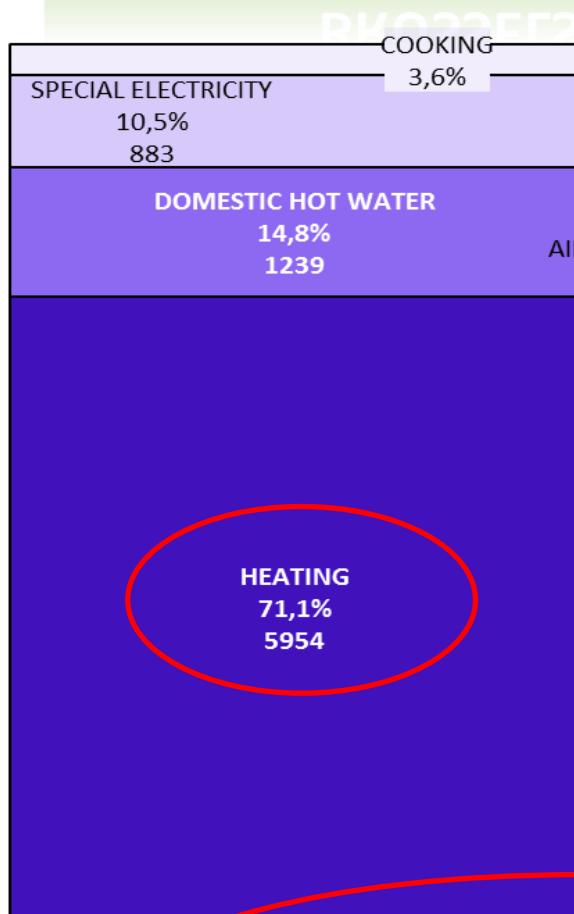


# BRUSSELS CONTEXT : BUILDING STOCK PARTICULARITIES

## % Owner – tenant



# BRUSSELS CONTEXT: ENERGY CONSUMPTION



INDUSTRIAL SECTORS

PAPER

**TOTAL  
(excluding non-energy)  
21.651 GWh**

METAL MANUFACTURING  
44,9%  
280

TRANSPORT  
5124 GWh  
23,7%

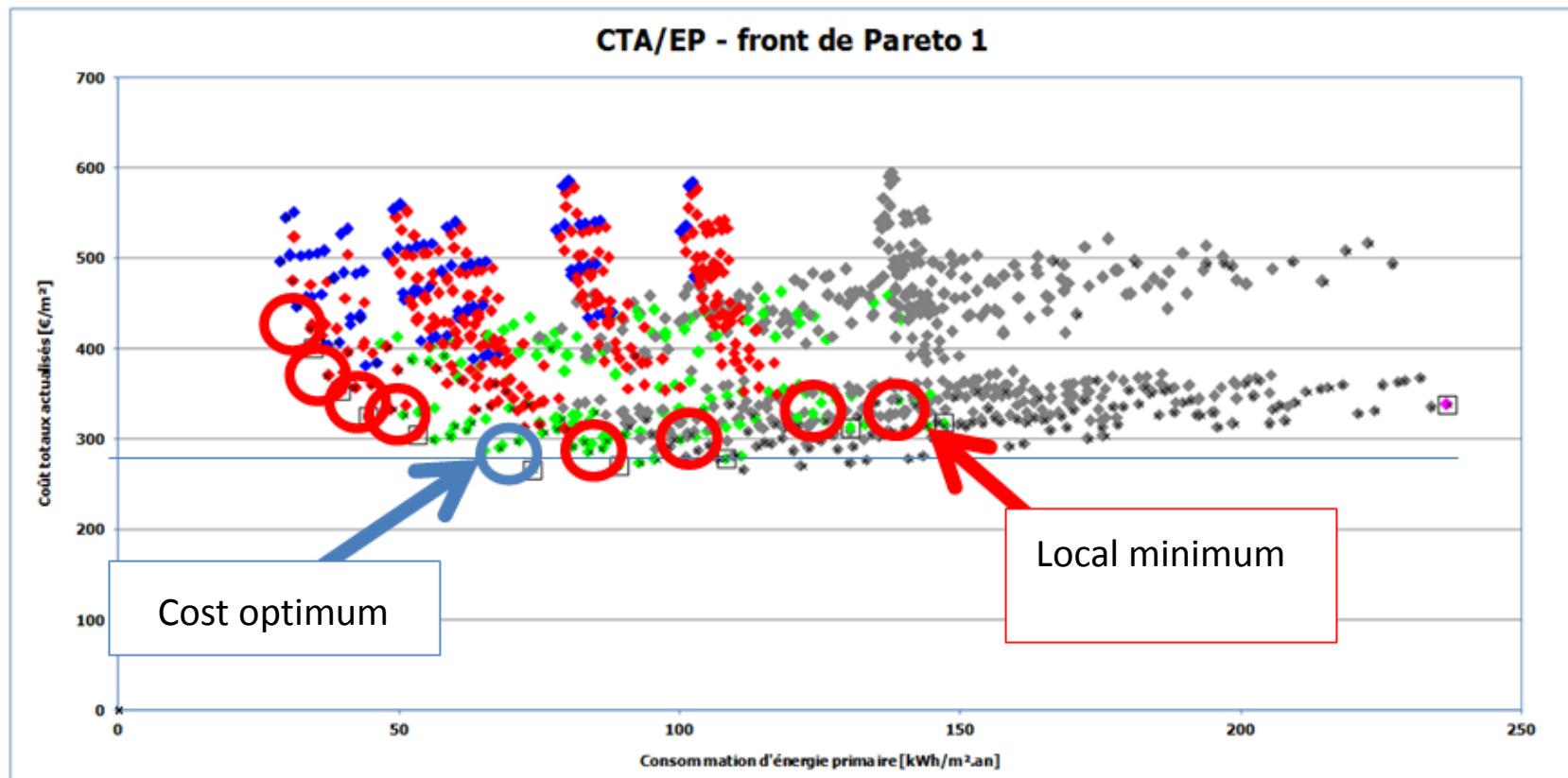
INDUSTRY  
623 GWh  
2,9%

RESIDENTIAL  
8375 GWh  
38,7%

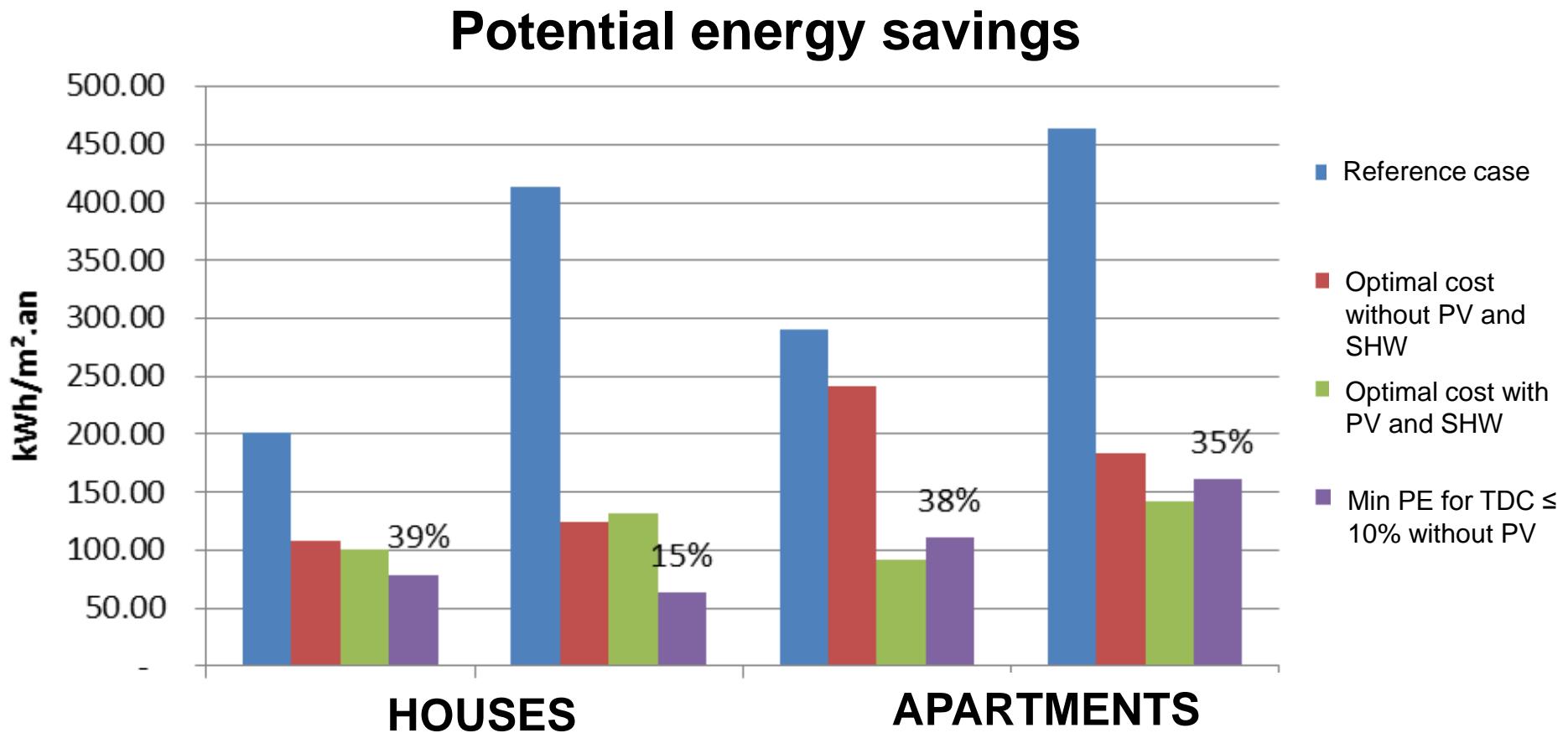
TERTIARY  
7529 GWh  
34,8%

# COST-EFFECTIVE APPROACH FOR BUILDING REFURBISHMENT

Types of buildings studied : houses, apartments and offices  
Analyse of architectural and technical alternatives



# COST-EFFECTIVE APPROACH FOR BUILDING REFURBISHMENT



PV = Photovoltaic

SHW = Sanitary Hot Water

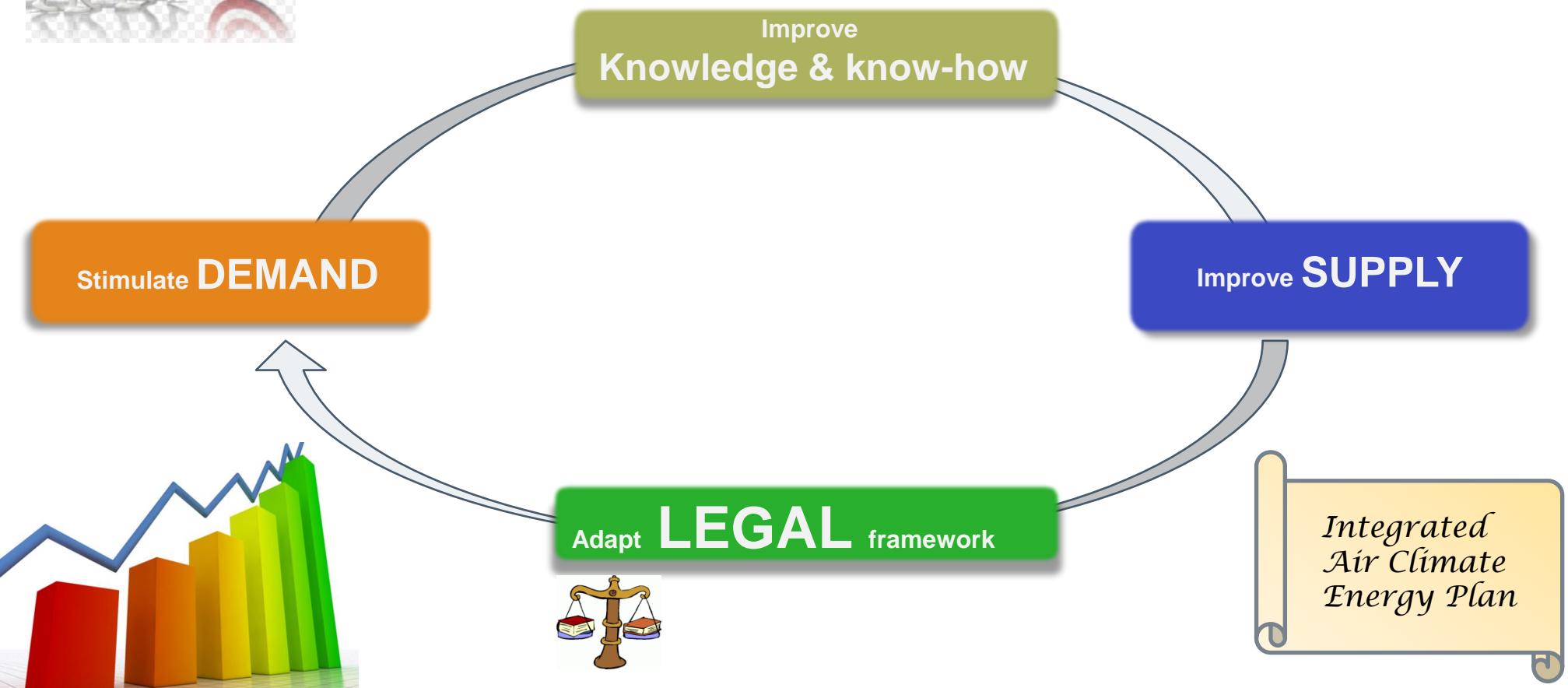
PE = Primary Energy

TDC = Total Discounted Cost

# BRUSSELS POLICY FOR HIGH ENERGY PERFORMANCE BUILDINGS



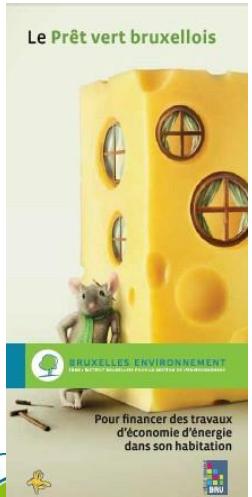
Brussels objective : -30% GHG in 2025



# BRUSSELS POLICY

Stimulate  
**DEMAND**

## Financial instruments



*Occupancy  
Cost*

SENSIBILISATION AND ADVICE

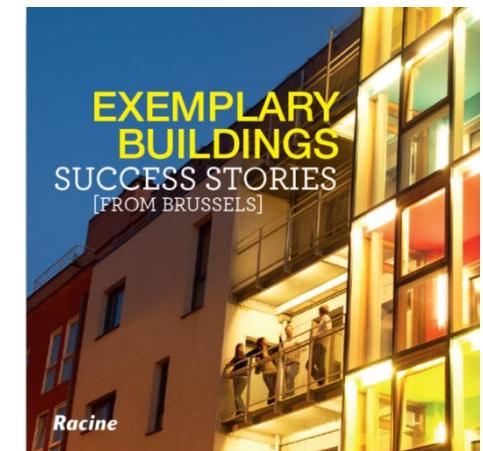
## Sensibilisation and advice



## Exemplarity



Commitment of public authorities



# BRUSSELS POLICY

Improve  
Knowledge &  
know-how

Sustainable building certification system

Sustainable building guide



Sustainable building trainings



Reference Construction Center



# BRUSSELS POLICY

## Improve SUPPLY

Incubator

Brussels Greenbizz, incubateur vert à Laeken

←Accueil  
d'entreprises



Rue de Molenbeek,  
198  
Laeken

2013-06-07 - Le site de Brussels Greenbizz s'étale sur un îlot de 160 x 60 mètres, **tout près du canal**. Sur le territoire de

## ECOBUILD

Cluster Ecobuild



never stop asking



# BRUSSELS POLICY

Adapt **LEGAL**  
framework

ПОЛИТИКА  
**COBRACE** ← → AIR CLIMAT ENERGY PLAN

A single legislation, a single vision, a single plan

Merge several environmental regulations & transposes new directives



Local Plan for Energy Management



# CONCLUSIONS

## CONCLUSION?

- \* The Brussels-Capital Region has paved the way for greater restraint in energy use without compromising its economic viability
- \* The COBRACE and the Air-Climate-Energy Plan are existing tools contributing to the refurbishment strategy
- \* Reflection is still running on how to improve the refurbishment rate in RBC



memegenerator.net



**THANK YOU FOR YOUR ATTENTION !**

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