

# Exemplary buildings program:

achieving exceptional  
energy performance  
(prelude to site visits)

# REDay2016

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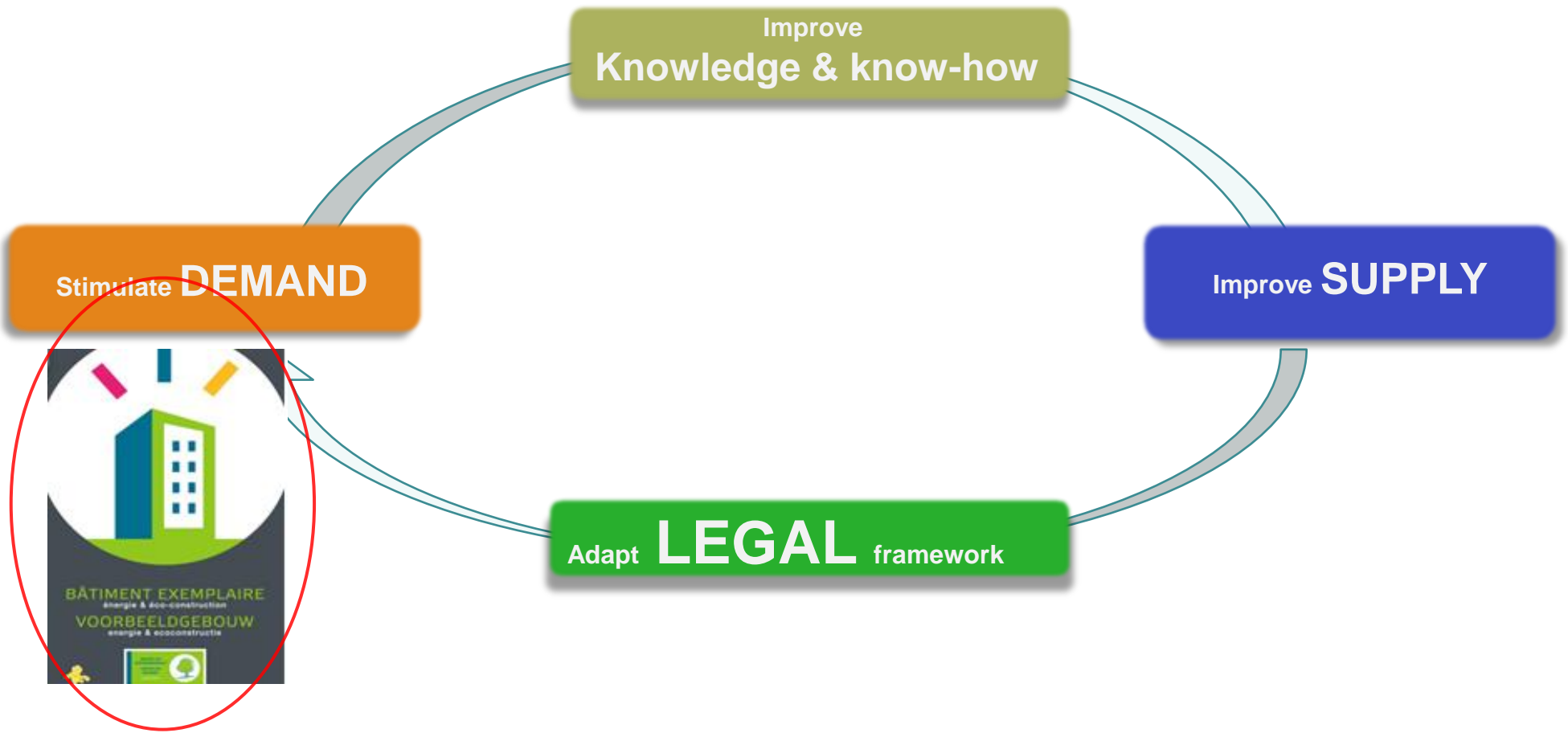


**BRUXELLES ENVIRONNEMENT**

IBGE - INSTITUT BRUXELLOIS POUR LA GESTION DE L'ENVIRONNEMENT

# BRUSSELS POLICY FOR HIGH ENERGY PERFORMANCE BUILDINGS

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# Proof of feasibility of ambitious targets with the exemplary buildings

Call for projects to stimulate construction, refurbishment and extension of “sustainable” buildings in Brussels

6 editions : 2007, 2008, 2009, 2011, 2012, 2013

243 buildings– 620.000 m<sup>2</sup> - all building types

- 56% are Passive House buildings
- 39% in refurbishment
- 205.000 ft<sup>2</sup> solar pannels- 194 green roofs
- 41% of Exemplary Buildings from public authorities



## Brussels goes High Energy Performant in 2015 !

# Exemplary buildings – Evaluation criteria

## \*ENERGY

High performances  
= minimum energy demand  
Near Zero Energy Buildings

## \*ECO CONSTRUCTION

Minimum environmental negative impact

## \*PROFITABILITY & REPRODUCIBILITY

Reasonable solutions

## \*ARCHITECTURAL QUALITY

Patrimonial respect  
Visibility



## Regional Grants and support:

- \* FINANCIAL SUPPORT  
100€/m<sup>2</sup>



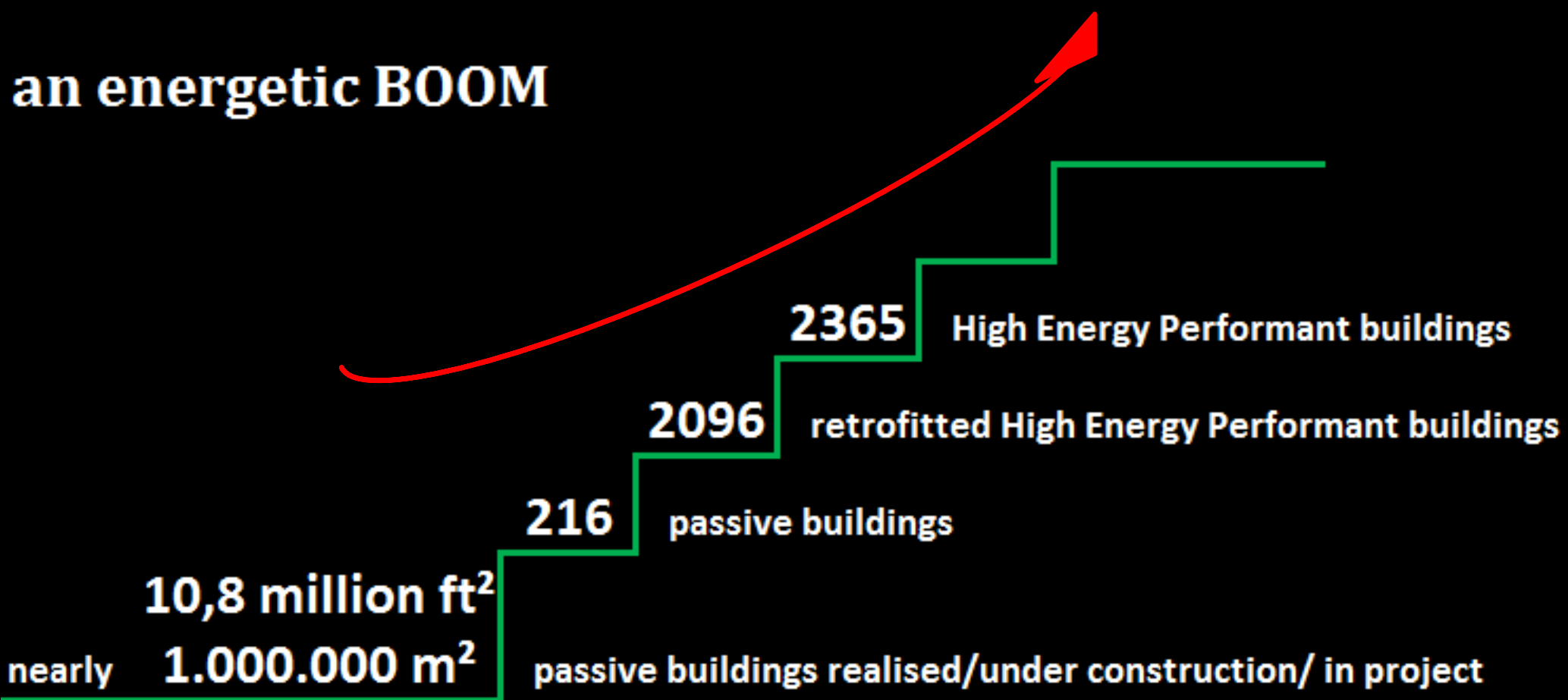
- \* TECHNICAL SUPPORT  
quality control

- \* PROMOTION  
publications, website, ...



33 Mio € grants over 6 years impacting a total investment budget of 815 Mio €

# an energetic BOOM



source: HEP buildings'inventory 2013

# “Passive” is mandatory for housing, offices, schools since 1<sup>st</sup> of Januari 2015

## housing

Specific space heating demand	$\leq 15 \text{ kWh}/(\text{m}^2\text{a})$
Airtightnes (from 2018)	0,6 Volume/h under 50 Pa
primary energy demand (heating, cooling, hot water, auxiliary)	45 kWh/m <sup>2</sup> .Year
overheating	maximum 5% of time > 25°C

## offices + schools

Specific space heating demand	$\leq 15 \text{ kWh}/(\text{m}^2\text{a})$
cooling demand	$\leq 15 \text{ kWh}/(\text{m}^2\text{a})$
Airtightness (from 2018)	0,6 Volume/h under 50 Pa
primary energy demand (heating, cooling, hot water, auxiliary)	95 – 2,5 x Compactness (max 4) kWh/m <sup>2</sup> .year
Overheating	maximum 5% of time > 25°C

**Overriding rule**, if bad compactness or orientation

**Heavy refurbishment:** > 75% of loss surfaces and all installations are replaced

→ same requirements x 1,2 (except overheating)



Calculated with  
belgian method

This afternoon ...

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14:00    **Meeting in front of the EuroACE's office** (*Rond-point Schuman*)

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**Visit of Exemplary Building Luther**

14:20    Transformation of a traditional Brussels house into 4 passive apartments

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**Visit of Exemplary Building Quai du Hainaut**

15:30    Retrofitting and transformation of the old Belle-Vue breweries into a hotel and  
facilities

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16:40    **Arrival at the EuroACE's office** (*Rond-point Schuman*)  
**End of the visit**

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# Rue Luther



# Quai du Hainaut



# Thank you



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More informations: [www.bruxellesenvironnement.be/batimentsexemplaires](http://www.bruxellesenvironnement.be/batimentsexemplaires)