



# Understanding energy-efficiency services

Examples and practical tools  
for scaling up investment



**SUSTAINABLE  
ENERGY WEEK**

An initiative  
of the



European  
Commission

# FPS general presentation

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**FPS**

Federal Pensions Service

=



**NPO**

National Pensions Office  
*Civil servants*

+



**PSPS**

Public Sector Pensions Service  
*Contract workers*

## First pillar organisation

with a modest role as insurance company in the 2nd pillar

Has a **Management Agreement** with the Belgian federal government

## 4 Missions

1. To inform and to give advise on (future) pension
2. To determine and to allocate pension rights
3. To ensure pension payment
4. To support decision makers

## Value-driven organisation

1. FPS wants to prove his power to dare with his productivity, innovation, creativity and dynamism
2. FPS acts customer focused
3. FPS acts people focused (customers, collaborators)
4. FPS wants to improve quality and efficiency

# FPS general presentation

1 434  
women



1 005  
men

853 coworkers  
don't telework



1 586 coworkers  
are teleworking

392

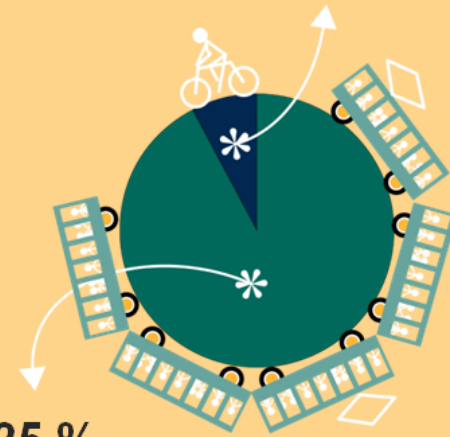
work in regional offices



2 047

work in  
the South Tower

7.75 %  
comes on foot  
or by bike  
or car.



92.25 %  
uses public transport  
(train, bus, tram, metro)

# FPS challenges with energy-efficiency

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Taking care of  
public money

Long-term view  
on energy and asset  
management to  
avoid unexpected  
costs

Exemplary  
building

Reduced carbon  
emissions, fossil fuel  
dependency and  
water consumption

Highest tower  
in Belgium

Popularity and public  
attention, reputation  
can be  
at stake

Measurable  
results

Need for  
transparency and  
traceability  
for all stake holders

# Veolia Belgium and Luxembourg

## Business lines



### Management of the global water cycle

from production and distribution of drinking water to the collection, treatment and recycling of wastewater



### Energy efficiency, efficient management

of heating and cooling networks, green energy production, all unique expertise for a sustainable world



### Liquid and solid non-hazardous and hazardous waste management

covering the entire waste life cycle from collection to recycling, leading to the final recovery of waste as materials or energy

## Market and customers

- 1 Energy-efficiency in buildings
- 2 Industrial utilities
- 3 Heat and cold networks



147

Tertiary buildings



91

Healthcare sites



9

Heat and cold networks



20

CHPs



61

Industrial sites



800

Municipal customers



# Veolia's understanding of the challenges

**Enhancing attractiveness**  
to customers  
and tenants

**Reducing costs**  
without compromising  
quality and comfort

**Increasing property value**  
while promoting  
sustainability

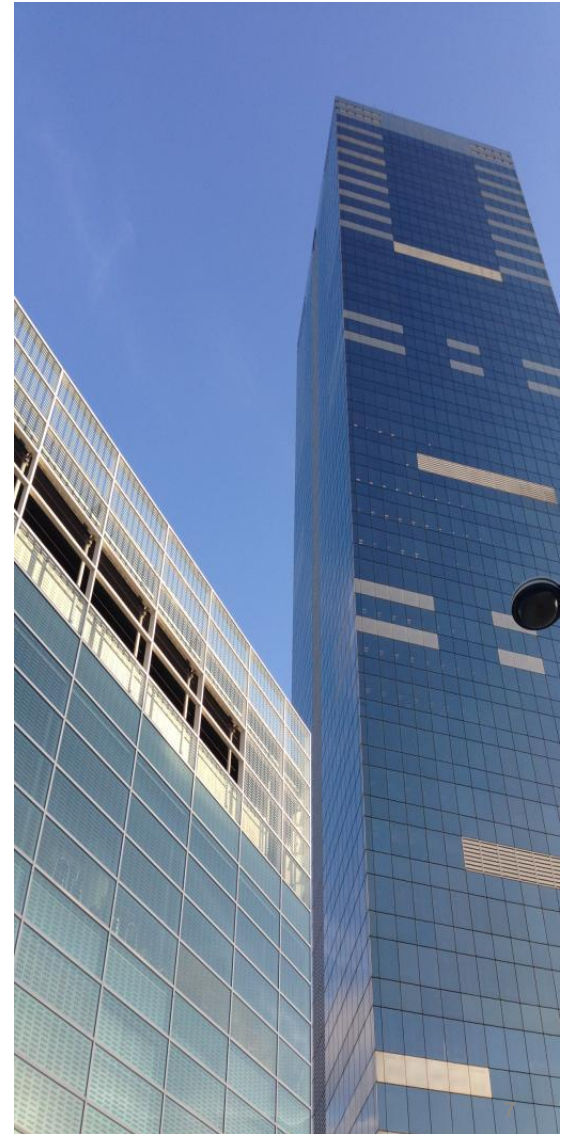
## How ?

- ① Bring behavior change
- ② Increase systems efficiency
- ③ Optimize essential services
- + Continuous monitoring

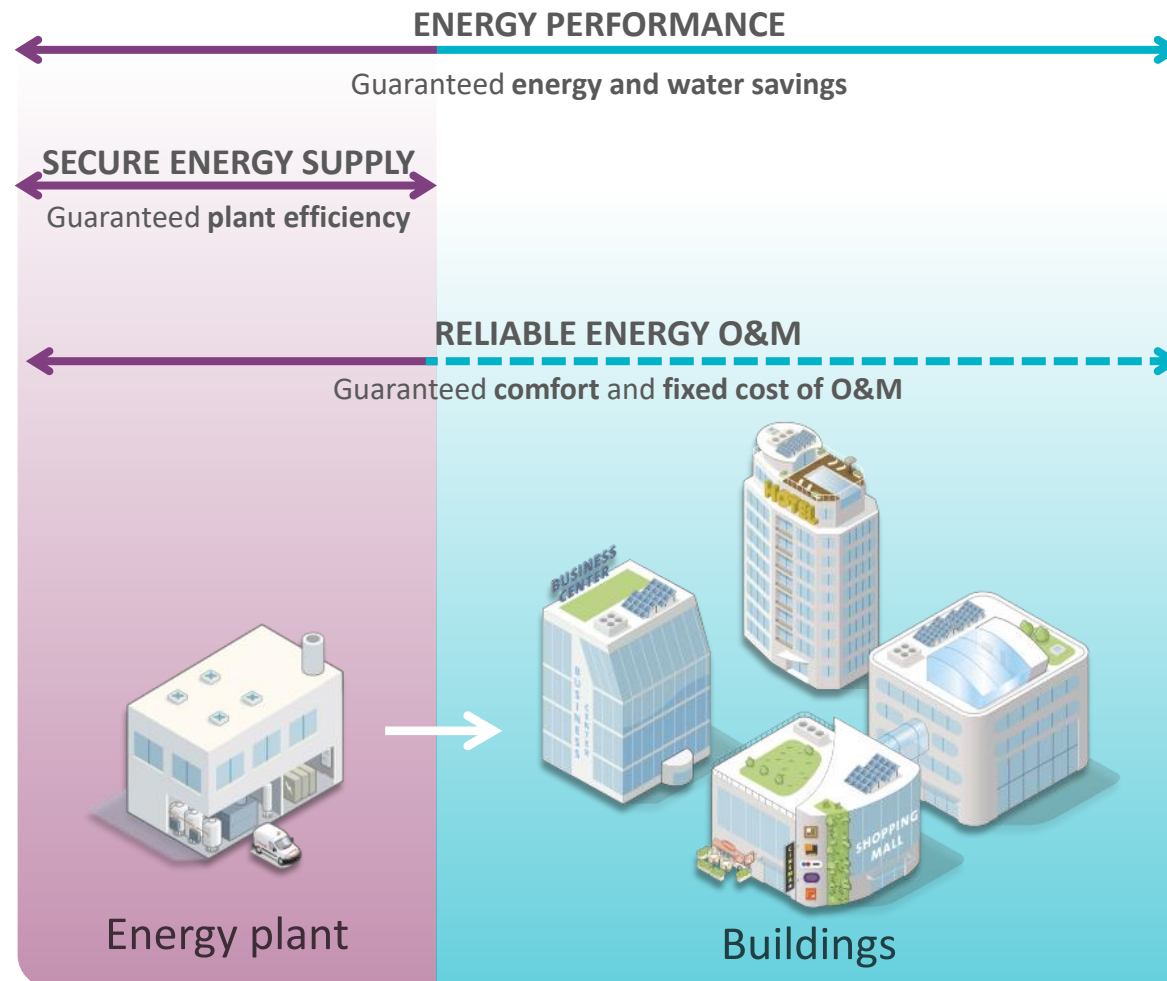


# Concrete case – Brussels South Tower

- General data
  - 38-storey, 148 m skyscraper
  - Built between 1962 and 1967
  - Intended for the **FPS**
- Operation and maintenance
  - Supplied by **Veolia** since the end of the construction
    - 1968 1<sup>st</sup> contract
    - 1990 2<sup>nd</sup> contract *Energy-efficiency guarantees*
    - 2002 3<sup>rd</sup> contract
    - 2008 – 2012 *Energy-efficiency works*
    - 2015 4<sup>th</sup> contract



## Performance guarantees





## Performance guarantees

### Reliable Energy O&M

- 24/7 Energy supply
- Quality of utilities
- Fixed cost of O&M
- Comfort: Temperatures, Lighting, Indoor Air Quality

### Secure Energy Supply

- Cost of utilities
- Efficiency of energy systems

### Energy Performance

- Energy, water and cost savings
- CO2 emission reduction

# Veolia's expertise

## Services delivery

- Single Point of Contact for all energy, water and waste management challenges
  - HelpDesk 24/7
  - CMMS/CAFM system
  - Mobilization plan
- Performance monitoring, analysis and reporting



## ENERGY

- **Energy Performance Contracting (EPC)**
- **Design, Build, Operation and Maintenance**
  - HVAC systems and networks
  - Electrical facilities and BMS
  - Building Energy Management Systems (BEMS) and metering solutions
- **Emergency and back-up generation**
- **Combined Heat and Power (CHP)**
- **Engineering and installation works**
- **Electrical efficiency**
  - High frequency electricity monitoring
  - Demand response / Flexibility
- **Renewable energy solutions**
  - Solar
  - Biomass
  - Geothermal



## WATER

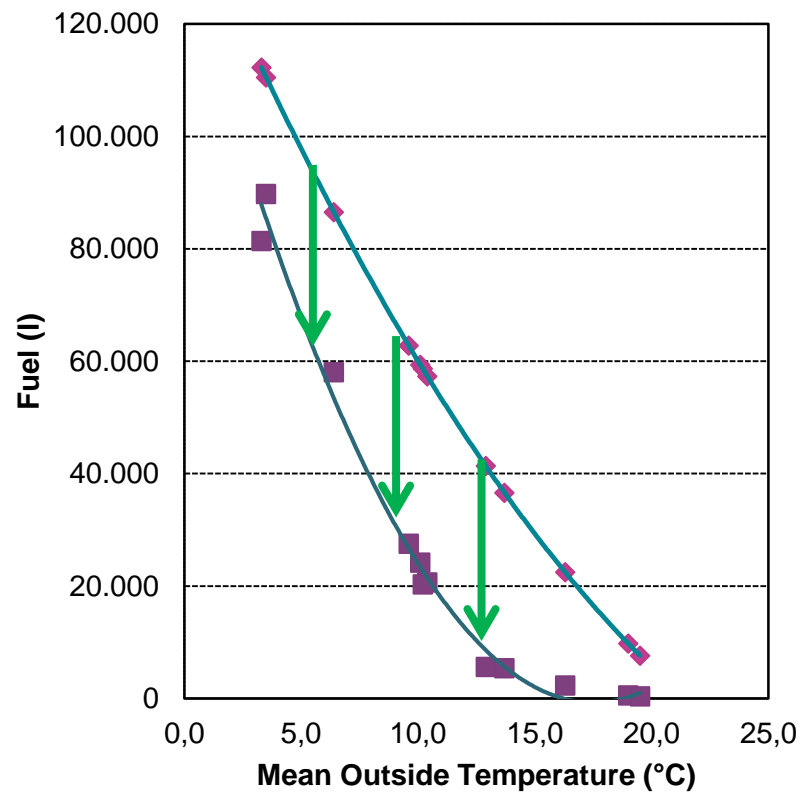
- Maintenance of the cooling towers
- Control of legionella and health related risks
- Water conservation programs
- Water and waste water treatment plants



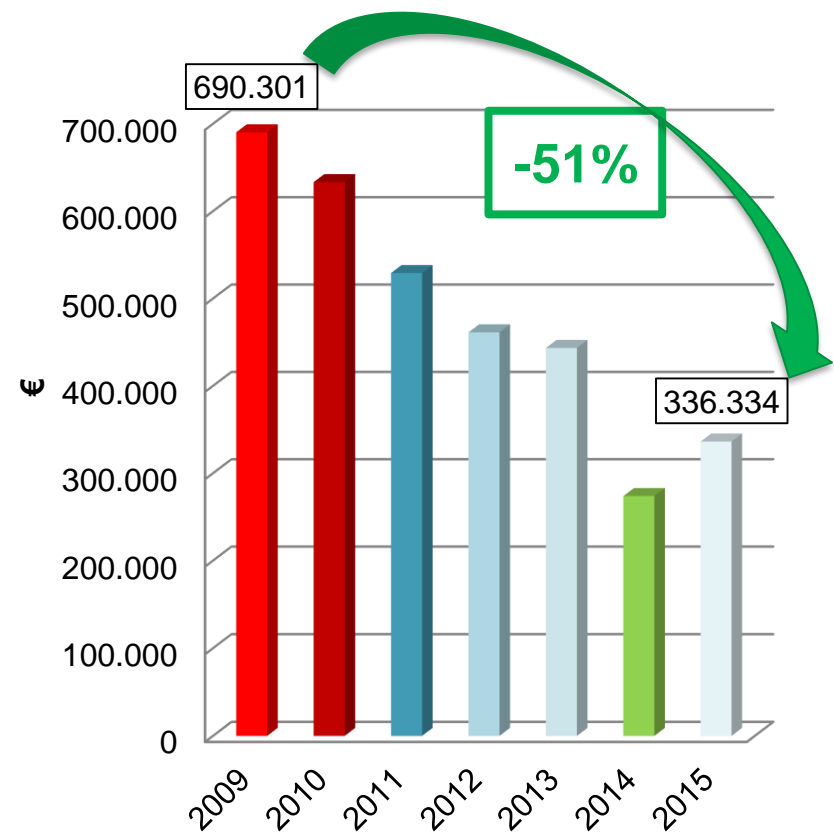
## WASTE

- Hazardous and non-hazardous waste management
- E-Waste disposal & recycling
- Biowaste solutions
- Integrated Facility Management

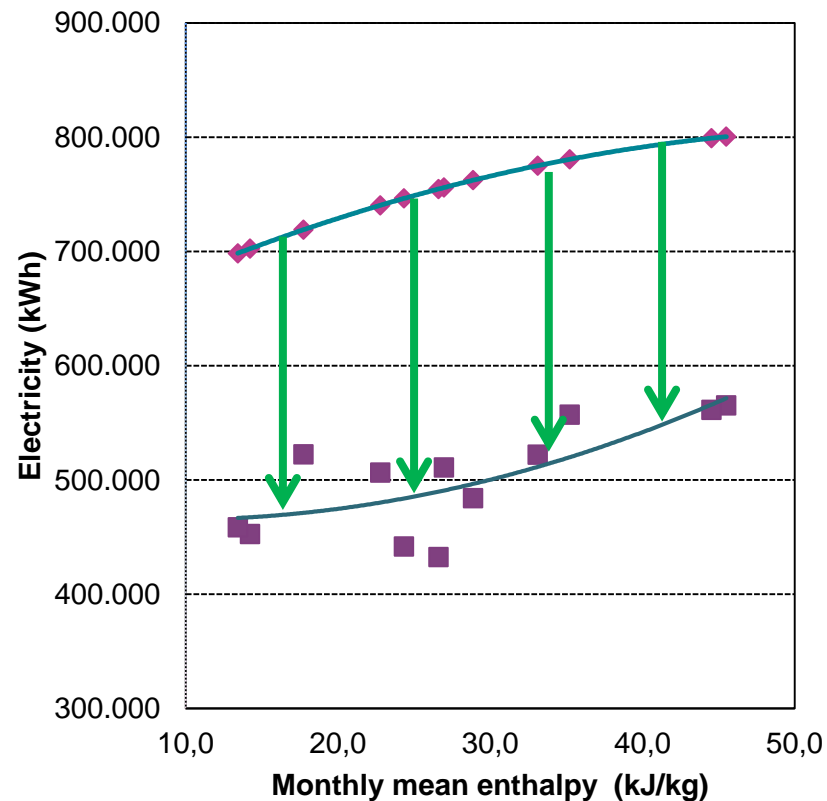
## Fuel – 2009 vs 2015



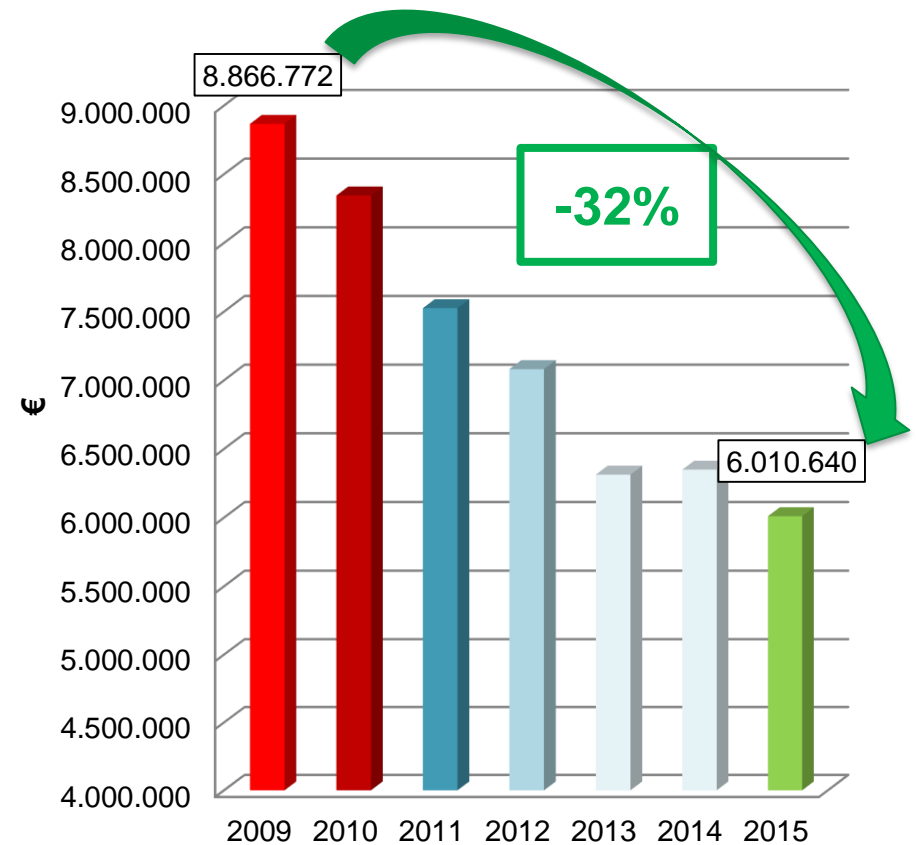
## Fuel bills



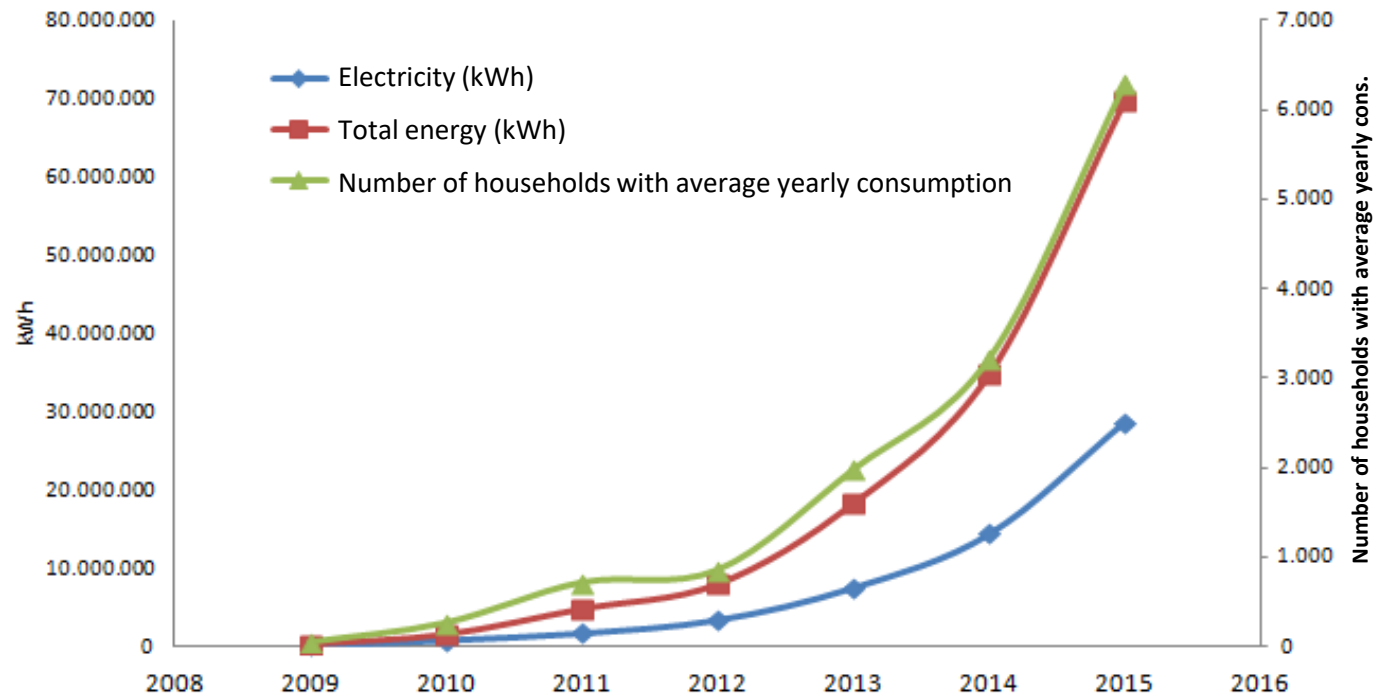
## Electricity – 2009 vs 2015



## Electricity bills



## Cumulated savings



**More than  
70.000 GWh  
spared**





## Energy Efficiency Services



Smart and green solutions for all challenges of private and public customers