

---

---

# Smart buildings

SMPE

---

# What is a Smart Building?

## Smart Technologies:

- Sensors
- IoT

Optimizing



## Operations:

- Energy
- Comfort
- Security

## Problems addressed:

- Reducing energy consumption.
- Improving operational efficiency and occupant comfort.
- Enhancing security and reducing management costs.



## Analysis of the Articles and Identified Problems

### → Can a Building Have Empathy?

- Collection + Analysis of behavioral data ✓
- empathic design ✓
- Complexity of prediction ✗
- Empathy in shared spaces ✗

# Evaluation of Impacts

## Advantages

- Reduction of CO<sub>2</sub> emissions through energy efficiency.
- Enhanced quality of life (comfort, personalization).
- Optimized resource management (water, energy).

# Evaluation of Impacts

## Disadvantages

- Increased technological dependency.
- Risks to privacy and data security.
- High initial installation and maintenance costs.

# Unlocking New Usages with Smart Buildings ?



Possible Usage:

Integration with  
smart cities

# Unlocking New Problems with Smart Buildings ?



## Newly Emerged Problems:

Increased need for training  
building managers.

Growing dependency on  
technology providers




## ADEME Scenarios and Smart Buildings

- Sufficiency
- Green Technologies



---

# Conclusion & Perspectives

- 
- Enhancing AI technologies
  - Developing robust cybersecurity standards



**Thank you for  
your attention**