

# Privacy Challenges for Residential Renovations

## **BIM (Building Information Modelling)**

creates a digital representation of buildings, allowing us to understand the physical and functional characteristics of the buildings. The data generated in this process helps us to design and construct energy-efficient buildings in a cost-effective way.

**However, there are some concerns when it comes to how certain data can be used.**

Increasingly, *BIM relies on data from different types of sensors and metres to register information about the buildings and its occupants.* While helpful in determining things like energy efficiency, information can potentially be used to produce a highly specific profile of the residences. These are protected by privacy regulations in Europe.

Currently, **BIM-SPEED consortium is working together to develop strong guidelines** to ensure the highest levels of privacy and data protection, while also making sure that developments in BIM can include crucial information needed to make residential renovations more sustainable.



What does building data tell about residents?



**Hot Water Use**  
can tell about resident's  
daily routine



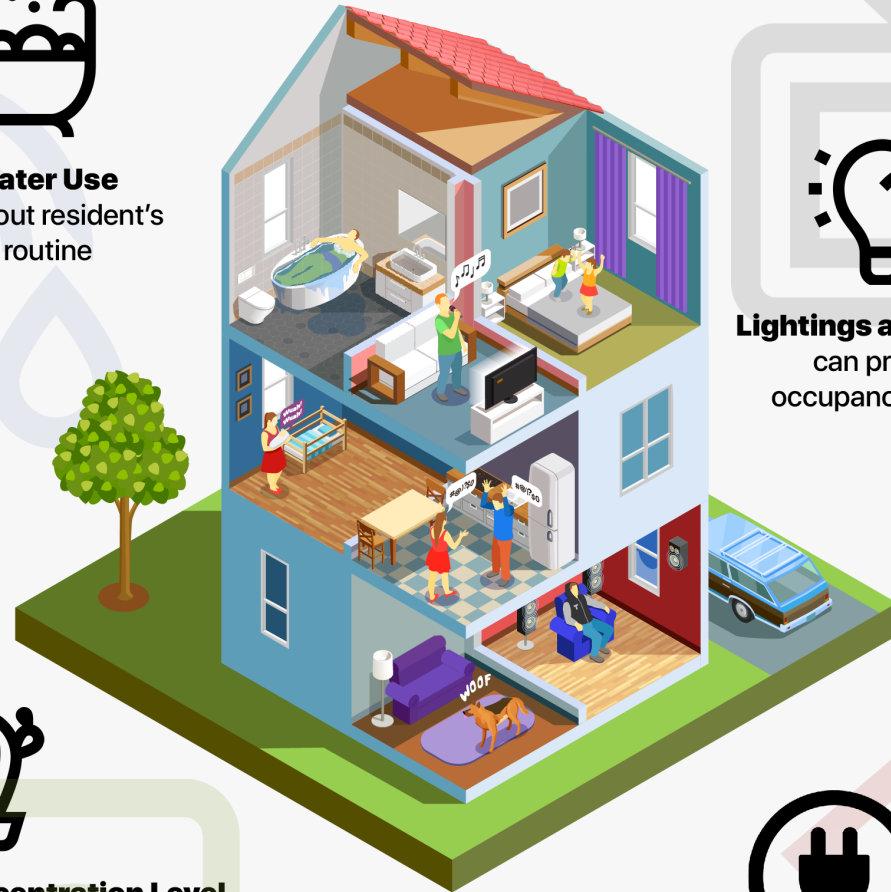
**Lightings and Sound**  
can predict  
occupancy status



**CO2 Concentration Level**  
indicates occupancy level



**Energy Consumption**  
in general can be used  
for resident profiling



CO2