



**IoT Week Bilbao 2018**

4-7 JUNE 2018, BILBAO (SPAIN)

EUSKALDUNA CONFERENCE CENTRE

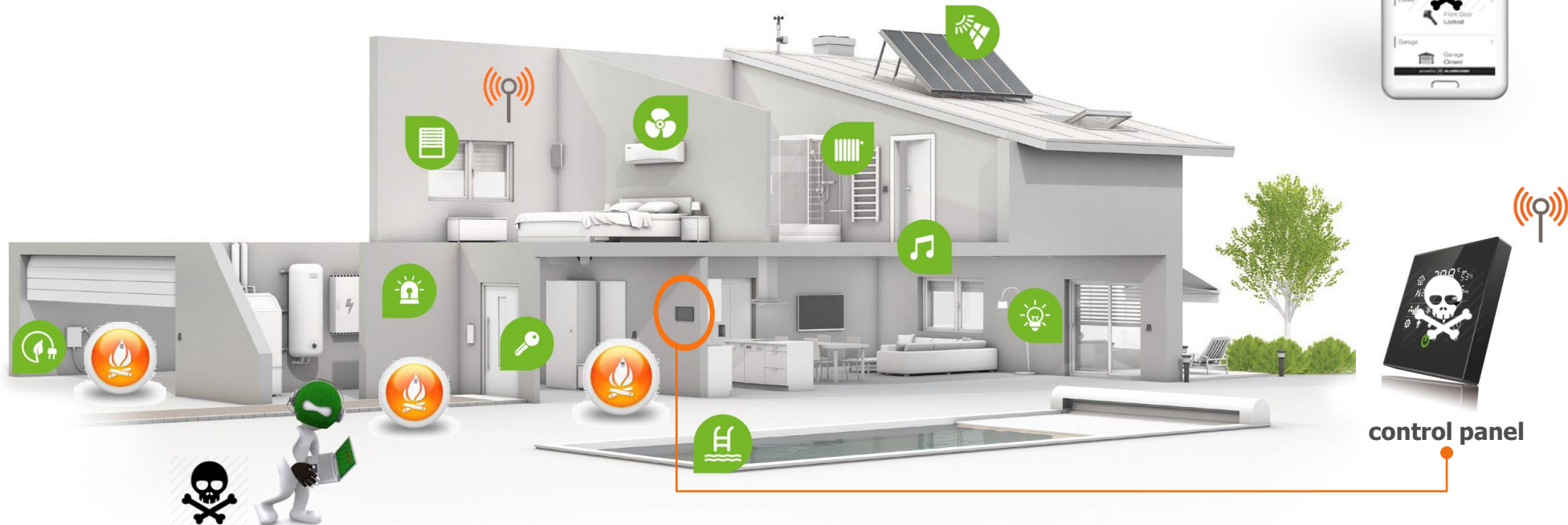
# IoT Security challenges in vertical sectors: Smart Cities





# Cybersecurity for a connected world – The scenario

modern Buildings promise **comfort** and **safety** by using  
IoT connected devices and domotic systems...  
but **are IoT systems secure** 🤔



definitely NO, cybersecurity threats could lead to serious incidents...

and shocking consequences for the safety 😬



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# Cybersecurity for a connected world – **The answer**

what you should do to secure your domotic systems is identify the vulnerabilities by performing **security audits** and **penetration testings**



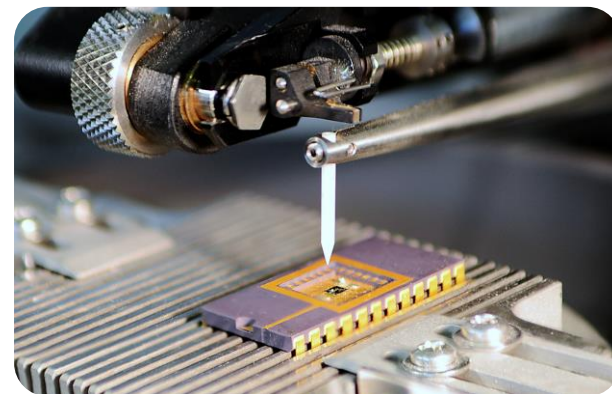
...cybersecurity threats could be addressed to  
**drastically reduce the risks of incidents** and improve your safety!



# Cybersecurity for a connected world – How to do it

## Security auditing

- **Penetration testing and vulnerability analysis**, including:
  - White box/Black box evaluations, including **source code reviews**.
  - **Logical** (software) and **physical** (hardware) attacks, including all the available **communication networks, both wired and wireless**.
  - Both standalone products and integrated product suites, ranging several products.
  - Internal development tools review and auditing.
- **Prototype reviewing** and feedback
  - A robust design will be more resilient



# Cybersecurity for a connected world – The IoT Lab



## Our proposal

The Applus+ **IoT Lab** will allow manufacturers and developers to **verify the reliability and security of their IoT solutions** and provide end users with a quality guarantee by means of the **IoT Certified** mark.



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## IoT Certified Mark (labeling)

- Within the IoT Lab, the technology evaluators will propose a testing program adapted to each project's requirements to ensure the **regulatory compliance and IoT Functional testing** of the different products and devices of the IoT solution.
- After completing the testing program, manufacturers will be able to access the **IoT Certified voluntary certification mark**, which provides end-clients technical guarantees as to the quality of the IoT solution.
- Based on internally defined meta-schemes, **Cybersecurity labeling** will be product-oriented in order to grant the costs of the certification is suitable for different customer profiles.





**Applus<sup>+</sup>**  
laboratories

`mirror_mod.use_x = True
 mirror_mod.use_y = False
 mirror_mod.use_z = False
 operation == "MIRROR_Y":
 mirror_mod.use_x = False
 mirror_mod.use_y = True
 mirror_mod.use_z = False
 operation == "MIRROR_Z":
 mirror_mod.use_x = False
 mirror_mod.use_y = False
 mirror_mod.use_z = True`

Selection at the end -add back the deselected  
`obj.select= 1
 obj.select=1
 obj.scene.objects.active = modifier_obj
 "selected" + str(modifier_obj) # modifier object
 obj.select = 0
 next.selected_objects[0]
 one.name].select = 1`

Please select exactly two objects, the

OPERATOR CLASSES -----