Template for Evidence
UI GreenMetric Questionnaire

University : Universitat Internacional de Catalunya (UIC)
Country : Spain
Web Address : www.uic.es/en

[2] Energy and Climate Change (EC)

[2.1] Energy Efficient Appliances Usage

Figure 1. LED lighting

Figure 2. Motion sensor bathroom lights

Figure 3. Twilight sensors on Passeig de la Fontana, calle Iradier (Barcelona campus)

Figure 4. Air conditioning units with VRV technology

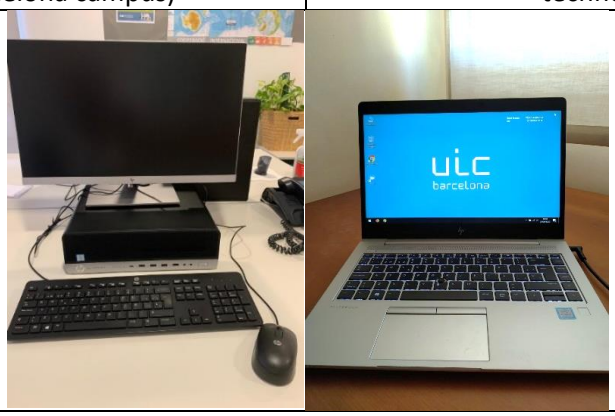

Figura 5. Desktop and laptop computers with hibernation and energy-saving functions.

Example of energy efficient appliances usage: replacing conventional appliances (Universitat Internacional de Catalunya, Spain).

Description:

Between 2016 and 2018, the Universitat Internacional de Catalunya (UIC) carried out a project to replace all conventional light bulbs on its Barcelona campus with LED bulbs. On Sant Cugat campus, LED bulbs make up 95% of all lighting installations.

The lighting on the Barcelona campus is made up of 100% LED bulbs (*Figure 1*) and motion sensor lighting in the carpark and bathrooms (*Figure 2*), which account for 5.2% and 1.40% respectively of the total surface area of the Iradier and Terré Buildings. On Passeig de la Fontana, located between the Alfa and Beta Buildings on the same campus, there are also twilight sensors that light up depending on the level of natural light (*Figure 3*). They are all completely energy efficient.

In addition, the Barcelona campus has 28 VRV technology air conditioning units (*Figure 4*), spread proportionally throughout the buildings on calle Iradier and calle Terré. It should be noted that 100% of the air conditioning units in the buildings on calle Terré also have a management module that allows the machines to be automatically switched on and off.

In terms of the energy efficient devices on the Sant Cugat campus, there are 1678 LED bulbs (95%) installed, motion sensor lightings in the faculty bathrooms (1.85%), automatic doors, clocks installed in the electrical panels and management software for maintaining the SCADA equipment.

Finally, it should also be noted that the university has 1500 computers, both desktops (HP Elitedesk 800 G5) and laptops (HP Elitebook 840 G5) with hibernation and energy saving functions (*Figure 5*)

The university's Strategic Sustainability Plan envisages to increase the use of efficient electrical appliances and implement new measures to make the university even more efficient.

Appliance	Building	Total number	Total number energy efficient appliances	Percentage	**Average percentage**
LED lighting	*Alfa and Beta, calle Iradier*	2683	2683	100%	98,33%
	Delta y Gamma, calle Terré	375	375	100%	
	Sant Cugat	1766	1678	95%	
Motion sensor lights	*Alfa and Beta, calle Iradier*	-	-	100%	100%
	Delta y Gamma, calle Terré	-	-	100%	
	Sant Cugat	-	-	100%	
Air conditioning units (VRV technology)	*Alfa and Beta, calle Iradier*	30	28	93.33%	64,44%
	Delta y Gamma, calle Terré	22	22	100%	
	Sant Cugat	0	0	0	
Computers with hibernation and energy-saving functions	*Across UIC Barcelona*	1500	1500	100%	100%
			Average percentage		**90,69%**

Additional evidence links:

1. UIC Barcelona. (n.d.). *Energy management*. Retrieved January 21, 2019, from https://www.uic.es/en/https%3A//www.uic.es/en/sustainability/sustainable-campus/energy-management