

# II Jornada BioEconomic® Alt Penedès 2014

"Eficiencia Energética,  
Rehabilitación Sostenible y el  
Vehículo Eléctrico "

Alt Penedès  
Sede del Consejo Comarcal del Alt Penedès  
15 de octubre de 2014

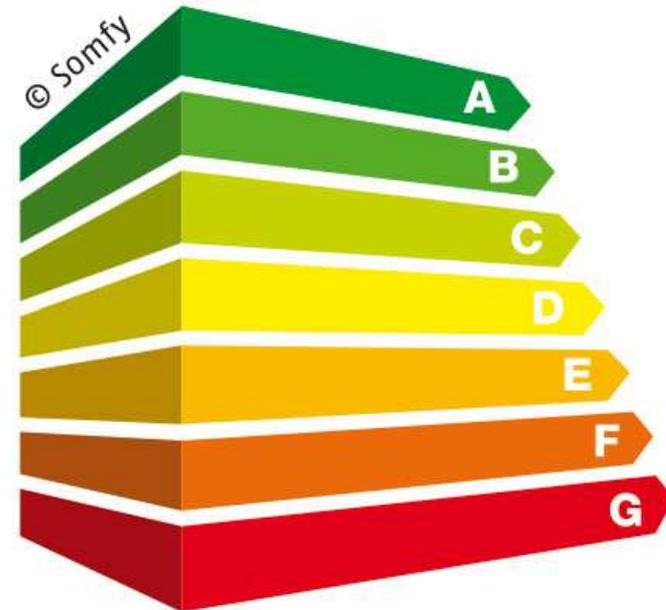
*Economía Verde*

Camino hacia la economía sostenible  
y la soberanía energética



# FACHADA DINÁMICA SOMFY

El primer control energético del edificio





40% de consumo de energía en Hogares, Edificios

52% de la energía en Calefacción, Aire Acondicionado e Iluminación



Somfy, for bioclimatic façades



40% de consumo de energía en Hogares, Edificios

52% de la energía en Calefacción, Aire Acondicionado e Iluminación



Potenciar Uso  
Energías  
Renovables



Reducir  
Demanda  
Energética

Eficiencia

40% de consumo de energía en Hogares, Edificios

52% de la energía en Calefacción, Aire Acondicionado e Iluminación



## BASADO EN EL CONSUMO

Potenciar Uso  
Energías  
Renovables



Eficiencia

40% de consumo de energía en Hogares, Edificios

52% de la energía en Calefacción, Aire Acondicionado e Iluminación



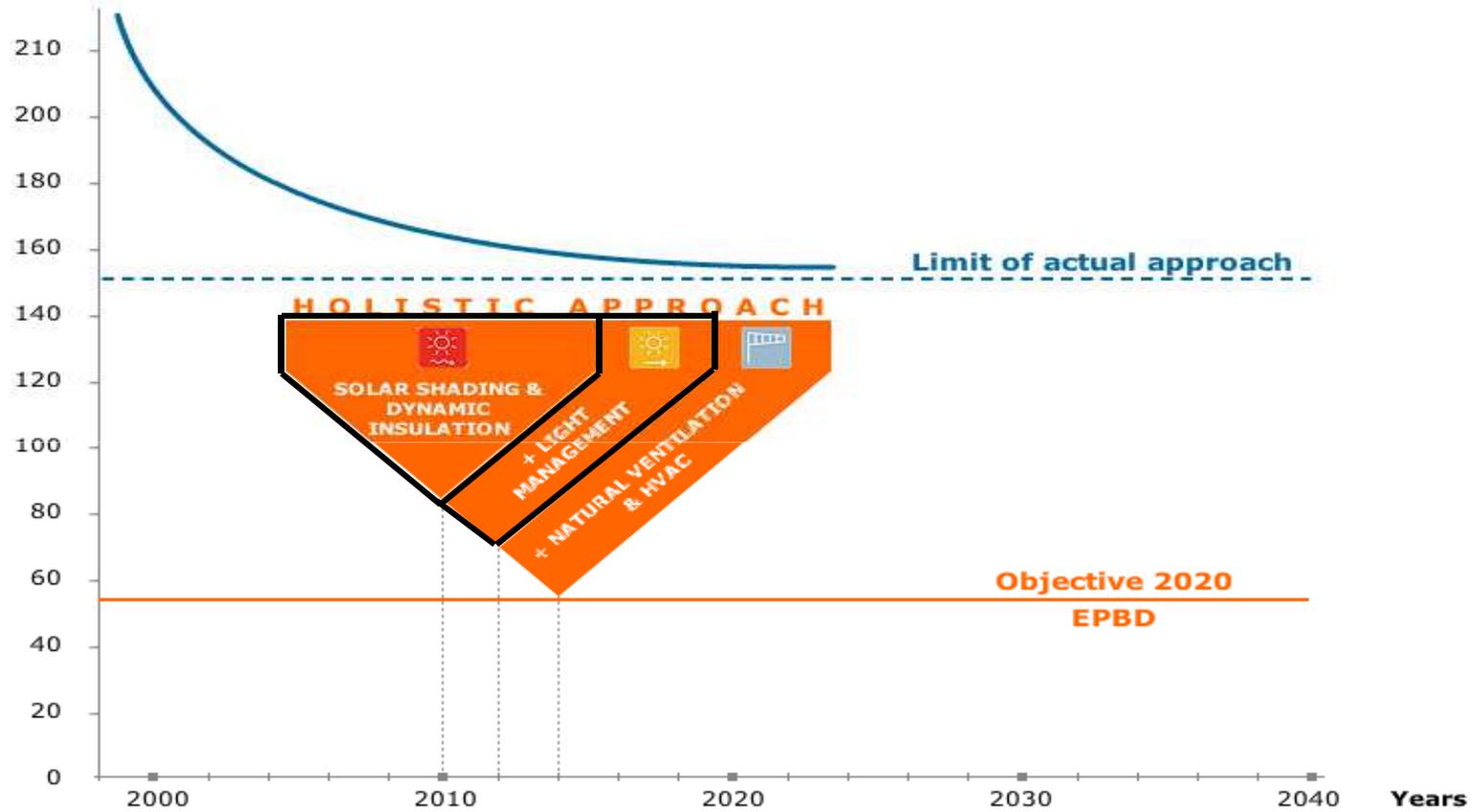
Reducir  
Demanda  
Energética



**Contribución de SOMFY**



**Energy consumption**  
(kWh/m<sup>2</sup>/yr)



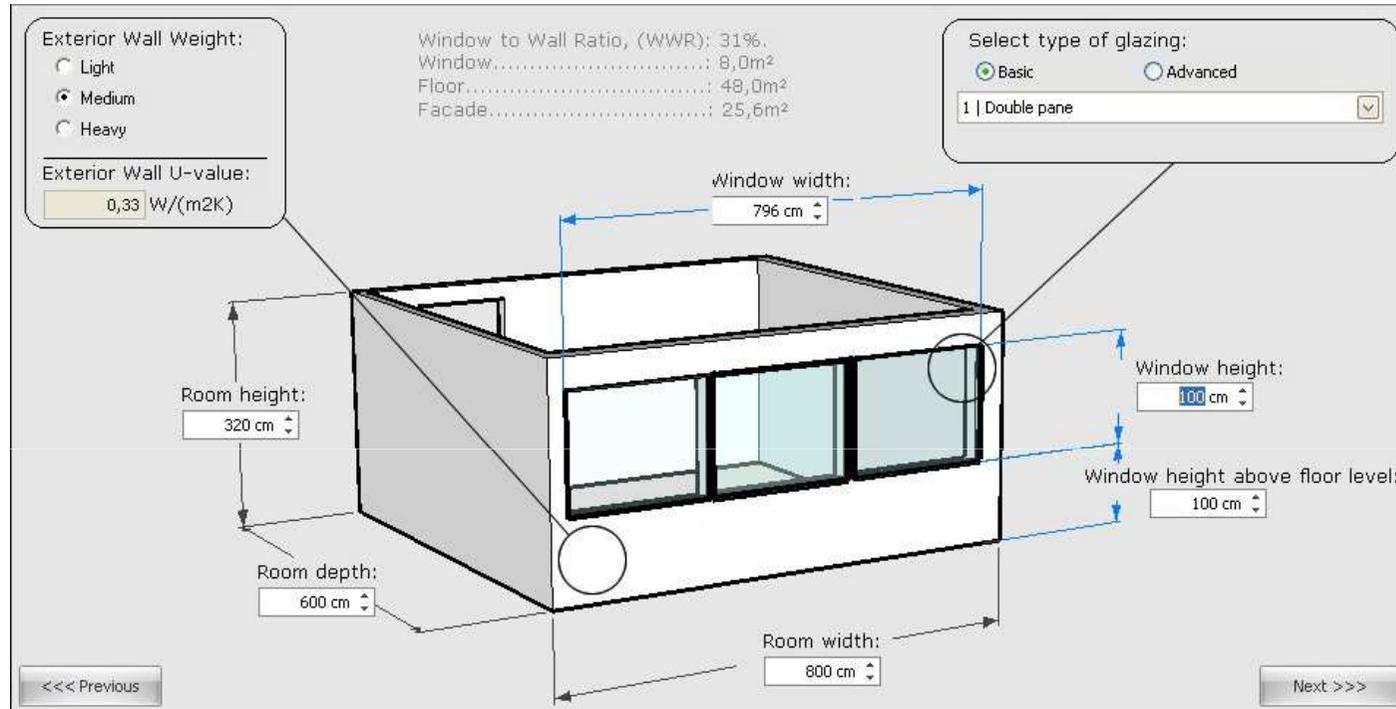
**Contribución de SOMFY**



**Por sólo, entre el 1% y el 2% del coste de la inversión hasta el 40% de ahorro en energía**



## Estudio de Ahorro Energético



La superficie de la Habitación a estudio de la Planta 1ª es acristalada al 32 %, con unas dimensiones de 8 X 6 X 3,1 m. (48 m<sup>2</sup>).

Para una gestión mejorada

Equipos rentables e inversión cuantificable

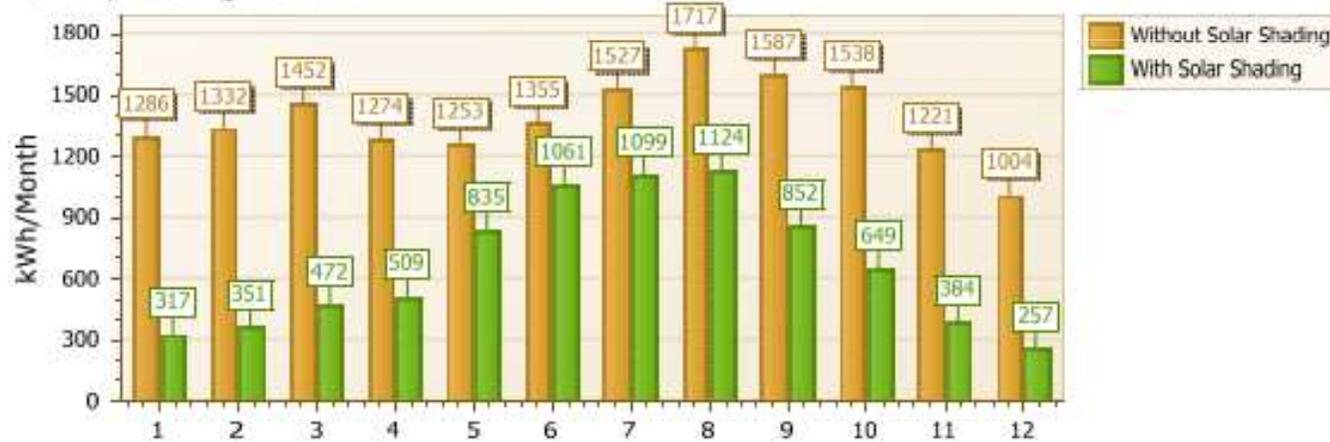


## Cooling results

Annual cooling demands and loads				
	Without solar shading	With solar shading	Saving in %	Saving
Cooling demand:	<b>16546 kWh</b>	<b>7909 kWh</b>	<b>52,2%</b>	<b>8637 kWh</b>
Cooling demand per m2:	<b>344 kWh</b>	<b>164 kWh</b>	<b>52,2%</b>	<b>180 kWh</b>
Cooling load:	<b>12577 W</b>	<b>5196 W</b>	<b>58,7%</b>	<b>7381 W</b>
Cooling load per m2:	<b>262 W</b>	<b>108 W</b>	<b>58,7%</b>	<b>154 W</b>

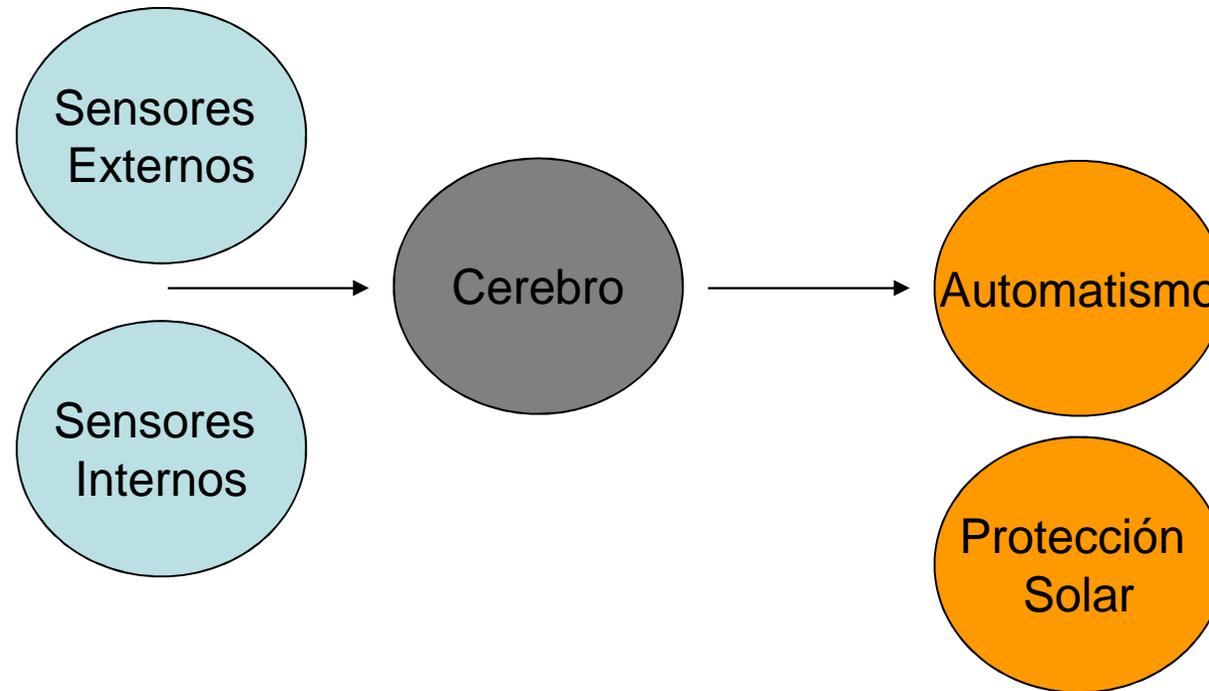
*For more information see appendix 1.*

## Monthly cooling demand



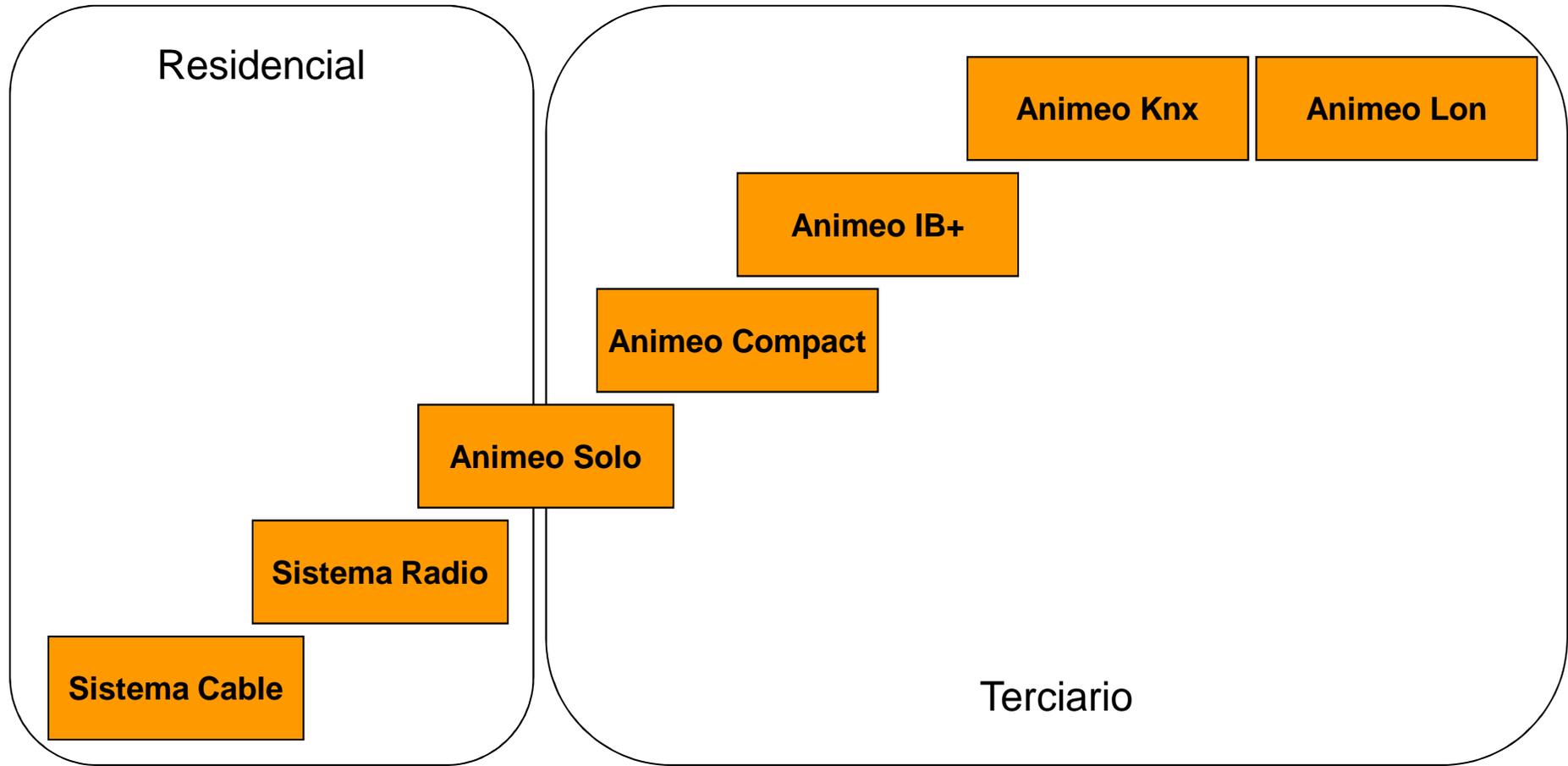
Para una gestión mejorada

Equipos rentables e inversión cuantificable

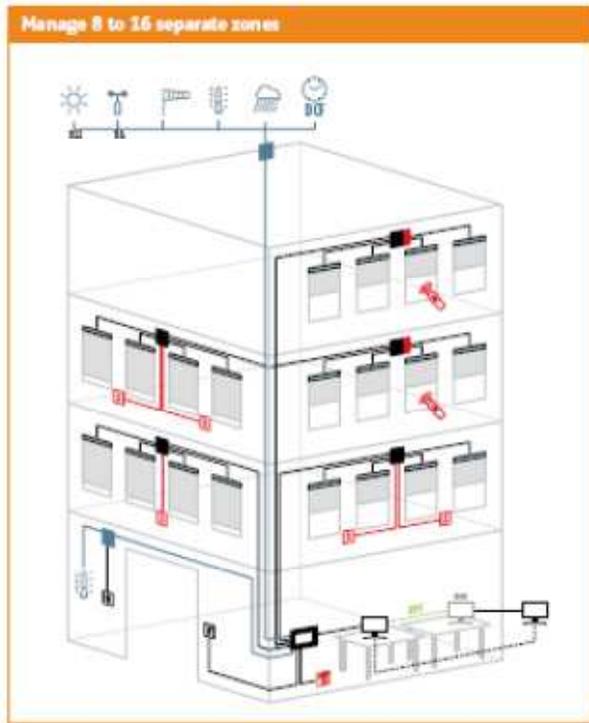


**ACTIVAR** la envolvente para permitir que el edificio se **ADAPTE** a las variaciones climáticas reduciendo el impacto medioambiental, potenciando el confort tanto para los usuarios como para los gestores.

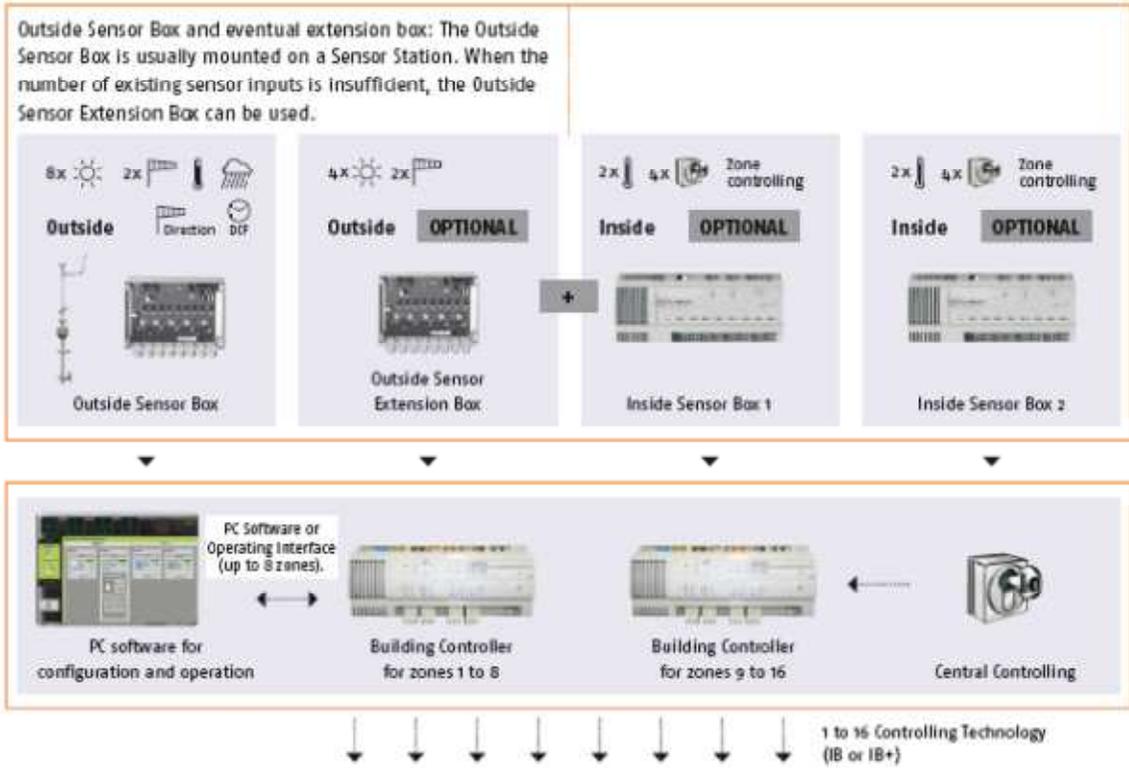
**Sistemas de Gestión**



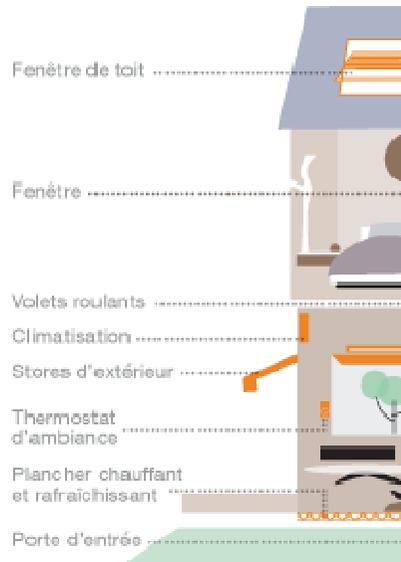
# Sistemas de Gestión



animeo IB+ Premium OPC Software



# Sistemas de Gestión- Edificios



Membros

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# Sistemas de Gestión - Vivienda



## Somfy pueden contribuir en 19 puntos para la obtención de la certificación LEED

### INDOOR ENVIRONMENTAL QUALITY: 15 Pts

#### Credit 2 (1 Pt)

##### Increase ventilation:

To provide additional outdoor air ventilation to improve indoor air quality (IAQ) and promote occupant comfort, well-being and productivity.

#### Credit 6.1 (1 Pt)

##### Controllability of systems-lighting:

To provide a high level of lighting system control by individual occupants or groups in multi-occupant spaces (e.g., classrooms and conference areas) and promote their productivity, comfort and well-being.

#### Credit 6.2 (1 Pt)

##### Controllability of systems-thermal comfort:

To provide a high level of thermal comfort system control by individual occupants or groups

### SUSTAINABLE SITES: 26 Pts

#### Credit 8 (1 Pt)

##### Light pollution reduction:

To minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction and reduce development impact from lighting on nocturnal environments.  
**> Somfy to contribute towards 1 Pt.**

### WATER EFFICIENCY: 10 Pts

### ENERGY & ATMOSPHERE: 35 Pts

#### Credit 1 (1 to 19 Pts)

##### Optimize energy performance:

To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.  
**> Somfy to contribute towards 4 to 11 Pts.**

### MATERIAL & RESOURCES: 14 Pts

### LEED Facts

REGIONAL PRIORITY: 4 Pts

### LEED Facts

WATER EFFICIENCY: 10 Pts

### LEED Facts

MATERIAL & RESOURCES: 14 Pts

### LEED Facts

SUSTAINABLE SITES: 26 Pts



#### Credit 8 (1 Pt)

##### Light pollution reduction:

Somfy To Contribute Towards 1 point by blocking light to go out using automated blinds along with lighting system.

### TOTAL PROJECT:

100 base POINTS. 6 possible Innovation in design and 4 regional Priority points Somfy to contribute towards 12 to 19 points (10,9% to 17,7%) & allowing higher classification ranking.

### LEED Facts

INNOVATION & DESIGN: 6 Pts



#### Credit 1.1 (1 to 5 Pts)

##### Innovation in design:

Somfy To Contribute Towards 1 point by educating the project team members about green building design and construction, the LEED requirements and application process early in the life of the project.

### LEED Facts

ENERGY & ATMOSPHERE: 35 Pts



#### Credit 1 (1 to 19 Pts)

##### Optimize energy performance:

Somfy To Contribute Towards 11 points by affecting energy saving of 32% of whole building (ASHRAE).

### LEED Facts

INDOOR ENVIRONMENTAL QUALITY: 15 Pts



#### Credit 2 (1 Pt)

##### Increase ventilation:

Somfy To Contribute Towards 1 point by allowing natural ventilation (operable windows) during cool day and/or by night cooling.

#### Credit 6.1 (1 Pt)

##### Controllability of systems-lighting:

Somfy To Contribute Towards 1 point thru the management of scenes between light and solar protection systems.

#### Credit 6.2 (1 Pt)

##### Controllability of systems-thermal comfort:

Somfy To Contribute Towards 1 point by managing buildings dynamic insulation with Cooling/heating systems.

#### Credit 7.1 (1 Pt)

##### Thermal comfort-design:

Somfy To Contribute Towards 1 point by helping creating design in the building envelope for thermal comfort.

#### Credit 8.1 (1 Pt)

##### Daylight & views-Daylight: Views for 75% of the space:

Somfy To Contribute Towards 1 point by increasing the luminosity while controlling glare and contrast.

#### Credit 8.2 (1 Pt)

##### Daylight & views-Daylight: Views for 90% of the space:

Somfy To Contribute Towards 1 point by increasing the luminosity while controlling glare and contrast. View to outside thru motorized blinds perforated, roller with special fabric, etc.

> Somfy to contribute towards 6 Pts.



Para una gestión mejorada  
 Contribución al desarrollo



**AHORRO**



**CONFORT**



**PROTECCIÓN**



**Contribución de SOMFY**

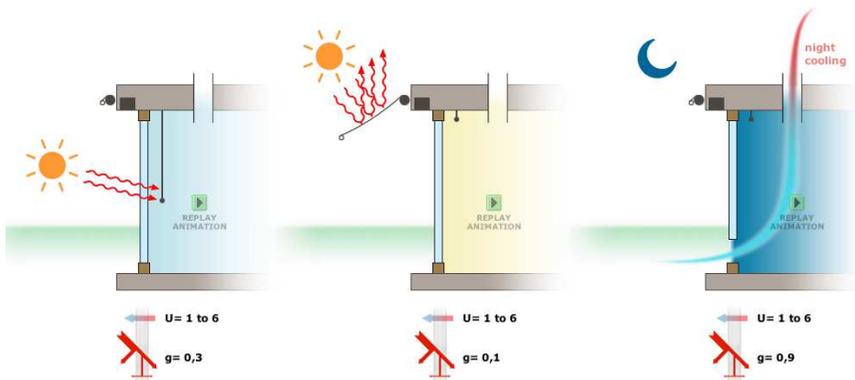


## AHORRO

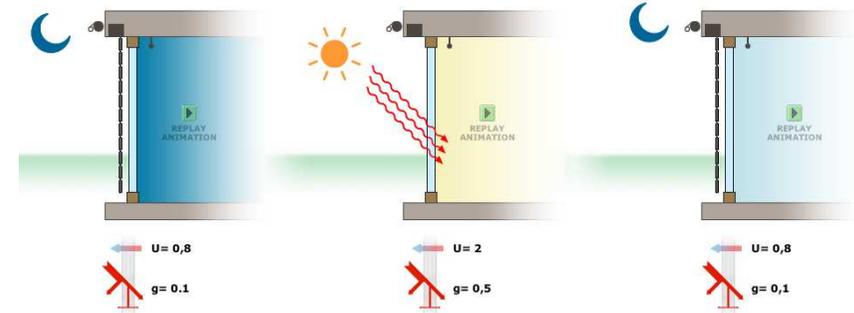


El escenario ahorro se activa cuando la habitación está desocupada. El objetivo es que ésta se autogestione buscando el mínimo consumo de energía en clima.

### VERANO



### INVIERNO



# Escenario Ahorro

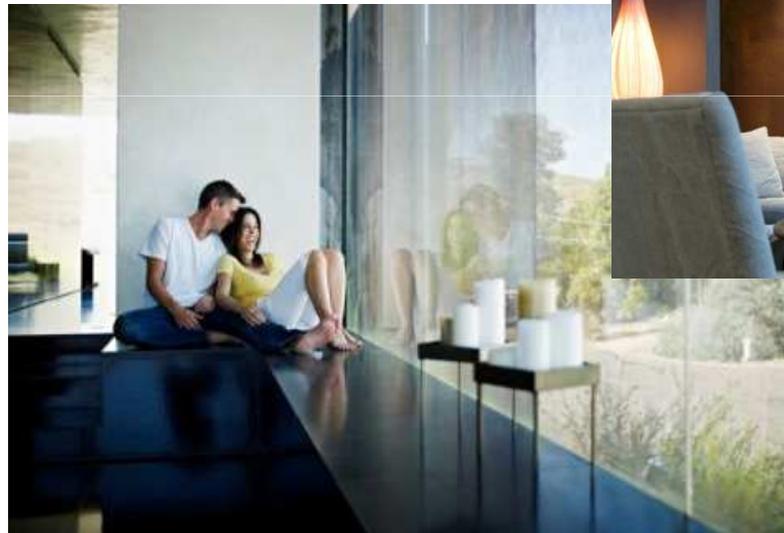


## CONFORT



Los escenarios confort se activan cuando la habitación está ocupada, configurando la habitación al gusto del usuario.

Escenario: Noche, video, relax



# Escenario Confort

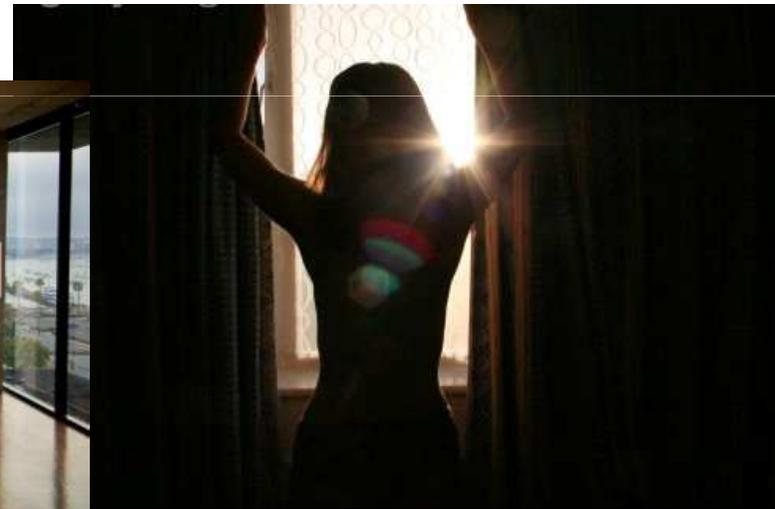


## PROTECCIÓN



La automatización permite proteger la habitación, mobiliario, decoración, cortinas...

- Escenario de bienvenida
- Bloqueo de cortinas para tareas de mantenimiento

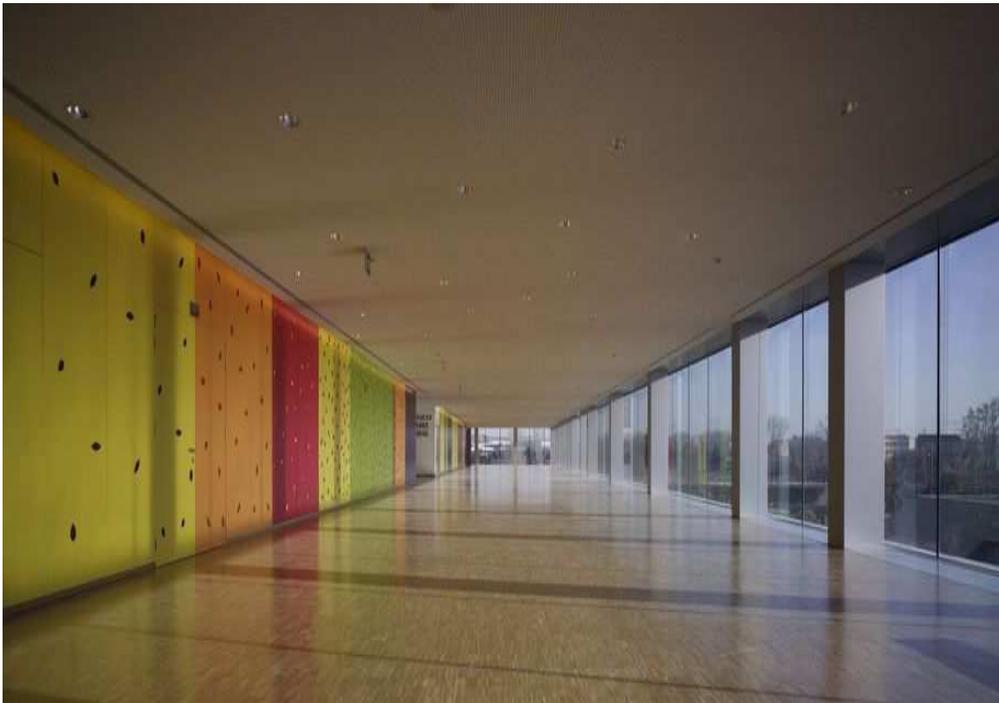


**Escenario Protección**



*La Llotja , Palacio de Congresos y Teatro de Lleida*

## *Fachada Dinámica*



**Experiencias**



*Edificio "Oracle" Parque tecnológico de Málaga*

*Disconfort Térmico*



Experiencias



*Sede de Desarrollo Rural y Medio Ambiente de Navarra*

*Disconfort Lumínico*



Experiencias



**Project type:**  
New building

**Date:**  
11/2009

**Owner:**  
MGM Resorts International  
& Dubai World

**Architect or Interior Designer:**  
Rafael Vinoly Architects of New York /  
Gensler / HKS

**Installer:**  
Mason Contract

**Motors:**  
Sonesse® 50 RTS (Radio Technology  
Somfy)

**Controls:**  
Customized DecoFlex RTS (Radio  
Technology Somfy) Wall switches



**MGM City center's Vdara Tower  
Las Vegas  
Roman shades**



**Project type:**  
New building

**Date:**  
06/2010

**Owner:**  
Beijing Pangushi Investment Ltd

**Architect or Interior Designer:**  
C.Y. Lee

**Motors:**  
Glystro®+ Sonesse® 50

**Controls:**  
Telis Lounge RTS (Radio Technology Somfy)



**Pangu 7-Star Hotel  
Beijing - China  
Cortina Enrollable**



**Project type:**  
New building

**Owner:**  
Ritz Carlton Jakarta

**Architect or Interior Designer:**  
Smallwood, Reynolds, Stewart &  
Associates

**Installer:**  
Hunter Douglas Indonesia

**Motors:**  
Concept 25

**Controls:**  
Individual switch



**Ritz Carlton Jakarta**  
**Jakarta - Indonesia**  
**Roman Shade**

# Gracias

HOME MOTION by  
**somfy**