



GREEN PRODUCTS



whenever possible.

Why are certain SOMFY products labelled Act for Green

but not others?

Act for Green is a progressive approach to product eco-design. Act for Green criteria are gradually applied to new projects as part of the Somfy brand's long-term commitment. Conversely, certain technologies are still difficult to assess from an environmental standpoint and it is not appropriate to apply Act for Green to every project. However, we remain on the lookout for knowledge advancements that can help make progress.

Why is there a Somfy-specific label?

Today, a label suited to Somfy product specifications is lacking. A proactive company, Somfy chose to create its own environmental performance label. As a result, criteria are factual and the final environmental product declaration, the PEP Ecopassport[®], is examined by Bureau Veritas.

Why is product transport not a criterion?

Component and product transport has a very low environmental impact, barely a few percentage points. Criteria have been established for product design (eco-design) and electrical consumption, which are main energy efficiency improvement factors. However, in keeping with its continuous improvement process, Somfy optimises transport

Why don't criteria apply to batteries included in certain products (control points, security kits)?

Contrary to popular belief, batteries account for a very small portion of a product's total environmental impact. Recycling schemes have existed for a long time, greatly reducing the impact of batteries. Energy efficient improvements mainly focus on product design and the selection of electronic components.

How were the criteria determined?

Thorough environmental studies called LCAs (Life Cycle Analysis) were conducted for each product typology. Criteria were set according to the product elements with the highest impact and allow for a clear and transparent reduction of environmental effects. The health and environmental impact of materials is also taken into account, particularly in compliance with REACH and ROHS regulations.

Is there proof of data reliability?

All the data are integrated into the environmental impact declaration PEP Ecopassport[®], and verified by an independent third party (Bureau Veritas LCIE). The PEP Ecopassport[®] complies with international ISO 14040s and ISO 14025 standards. <u>http://www.pep-ecopassport.org/</u>

Are there social, societal and ethical criteria?

Act for Green portrays the technical eco-design of our products and concerns only their environmental aspects. In-house processes regarding such topics have been set up and are explained in detail in Somfy's financial report available online.

What happens to end-of-life products?

Every European country has its own system for the collection and processing of electrical equipment waste. Since 2006 in France, SOMFY has contributed to the collection of products directly sold to the general public. In 2012, further action was taken by setting up an industry network supported by Recylum, an eco-friendly organization.



GREEN TEAMS



Do the Somfy factories pollute?

Site activities are tertiary, industrial and logistics-related. The industrial sites operate mainly to assemble products using plastic and metal components, and outsourced electronic circuit boards. Assembly operations do not generate gas, liquid or substance emissions, except for packing waste or manufacturing scrap, which undergo waste separation and value processes. Local residents are not affected by any specific noise emissions. Industrial activities mainly take place inside the buildings and involve the assembly of small parts.

Where can we access the SOMFY group's Environment Policy?

Somfy complies with the French regulations on Social and Environmental Reporting, which in turn is verified and validated by a Statutory Auditor.

How are products shipped?

We optimise transportation modes by maximising sea transport for long-distance shipping, and train and road transport for intra-continental shipping. Air transport is seldom used and involves the handling of exceptional and unforeseeable events.

Are we aiming for an ISO 14 001 certification?

As of today, we are not working towards ISO 14 0001 certification. We believe our current organisation will help us obtain environmental efficiency based on our team. The environmental policy is available in the annual report.

Can we add eco-friendly practices?

Of course! Join the Green Team and become a Green Ambassador. On a voluntary basis and in agreement with their manager, the Green Ambassadors carry eco-practices in their sector. They collect and share information and / or they drive environmental initiatives with the help or support of the Environment Directorate according to the time they wish to devote to it.

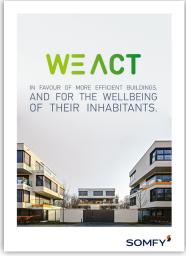
What is the purpose for setting up green teams?

Encourage teams to implement eco-responsible practices by supporting and sharing each other's best practices.

Where can we find out about best practices?

Find all the information on the Yammer group Green Team.

GREEN BUIDINGS



How can I learn more about greener and healthier buildings?

Providing windows with a view of landscapes increases cognitive functions and memory by 10 to 25%, reduces hospital stay time by 8.5% and increases employee productivity by 18%.

- > SMART LIGHTING by Somfy and Philips, How combining solar protection, natural and indoor lighting contribute to the energy performance of buildings. 2015 <u>https://service.somfy.com/downloads/bui_v4/onix-24p-a4-v9.pdf</u>
- > REHVA Guidebook n°6, Indoor Climate & Productivity in Offices, 2006 <u>https://www.rehva.eu/fileadmin/Promotional_material/PPTs/Nr_6_Indoor_Climate_and_</u> <u>Productivity_in_Offices.pdf</u>

10 to 25% improvement in cognitive test results

> Heshong, Windows and Offices: A Study of Office Worker Performance and the Indoor Environment, 2003, <u>http://h-m-g.com/projects/daylighting/summaries%20on%20daylighting.htm</u>

20 to 26% faster student progression

> Heshong, Windows and Offices: A Study of Office Worker Performance and the Indoor Environment, 2003. http://h-m-g.com/projects/daylighting/summaries%20on%20daylighting.htm 89% of respondents consider that their office lighting conditions have a significant or very significant effect on their quality of life at work. When asked about main workplace frustrations related to lighting, the following problems were mentioned: inability to control lighting oneself (32%), artificial lighting is too bright (32%) and discomfort caused by sunlight glare (18%).

Study conducted by Opinion Matters, on 1,000 persons 22 years old or more working in an office in France, Opinion Matters, 2017 <u>https://www.clusterlumiere.com/wp-content/uploads/2017/07/Lutron_survey-infographic_FR_FINAL.pdf</u>

RESIDENTIAL

Comfortable summer conditions

In Budapest and Rome, solar protection reduces the use of air conditioning by 30%, in Stockholm by 20% and in Brussels by 15%. The European average is 36%.

> Physibel & ES-SO, Energy saving and CO2 reduction potential from solar shading systems and shutters in the eu-25, 2005 <u>http://www.energy-efficiency-watch.org/fileadmin/eew_documents/Documents/Community/ES-SO/ESCORP-EU25.pdf</u>

As a result of automation, inside temperatures can decrease by at least 9°.

> Physibel & ES-SO, Energy saving and CO2 reduction potential from solar shading systems and shutters in the eu-25, 2005 http://www.energy-efficiency-watch.org/fileadmin/eew_documents/Documents/Community/ES-SO/ESCORP-EU25.pdf

Roller shutters improve windows' capacity to block solar heat by a 70% average.

> SNFPSA

Regardless of geographical areas or window types, closed roller shutters can reduce indoor temperatures by more than 5°C compared with a building without shutters.

> SNFPSA & TBC, 2011 http://www.fermeture-store.org/files/ffb2/Commun/02-PRESSE/2011-06-CP-SNFPSA-Volets-roulants.pdf

Heating

In Stockholm, solar protection can reduce heat consumption by 15%, in Brussels and Budapest by 10% and in Rome by 5%.

> Physibel & ES-SO, Energy saving and CO2 reduction potential from solar shading systems and shutters in the eu-25, 2005 http://www.energy-efficiency-watch.org/fileadmin/eew_documents/Documents/Community/ES-SO/ESCORP-EU25.pdf

As a result of automation, heating costs can be reduced by at least 10%.

> Physibel & ES-SO, Energy saving and CO2 reduction potential from solar shading systems and shutters in the eu-25, 2005 http://www.energy-efficiency-watch.org/fileadmin/eew_documents/Documents/Community/ES-SO/ESCORP-EU25.pdf

Up to 22% savings in heating consumption thanks to roller shutters in a private home with single-glazed glass windows and located in the Paris area (up to 9% savings with double-glazed glass windows). Automated management can reduce heating needs further by 6%.

> SNFPSA & TBC, 2011 http://www.fermeture-store.org/files/ffb2/Commun/02-PRESSE/2011-06-CP-SNFPSA-Volets-roulants.pdf

Regardless of window types of geographical areas, using roller shutters can significantly reduce home heat consumption. Gains range from 6 to 34%, based on roller shutter thermal performance and window type.

> SNFPSA & TBC, 2011 http://www.fermeture-store.org/files/ffb2/Commun/02-PRESSE/2011-06-CP-SNFPSA-Volets-roulants.pdf

NON-RESIDENTIAL

Manually operated blinds are moved less than twice a week.

> Estia, Global lighting performance, 2015, <u>http://service.somfy.com/downloads/bui_v4/estia-study-english-ver-3.0.pdf?</u> ga=2.136261302.622405742.1525675645-71166283.1523628943

Within the EU buildings it is assumed that 60% of the energy end-use is either for space heating or space cooling. > ES-SO, High performance dynamic shading solutions for energy efficiency and comfort in buildings, 2015 <u>https://service.somfy.com/downloads/bui_v4/es-so-study-2015pdf</u>

Lighting

Thanks to automated solar protection and efficient lighting solutions, energy consumption for lighting can be reduced by 54%, for air conditioning, ventilation and heating by 10% and total energy consumption by 29%.

> IES, How combining solar protection, natural and indoor lighting contribute to the energy performance of buildings, 2015 <u>https://service.somfy.com/downloads/bui_v4/onix-24p-a4-v9pdf</u>.Study jointly conducted with Philips in an ONIX tertiary building in Lille By automating the shading solution, you can gain significant savings on artificial light: 35% savings in Switzerland, €2/m² per year in France, up to 25% in Brazil.

> ESTIA Study, 2014

> IES, Smart lightning by Somfy & Philips, 2016 Sustentech, Simulation of integrated systems, 2015

Heating

The ES-SO 2015 Study gives some examples of potential savings from Europe: Stockholm and Brussels 25-65%, Rome 30-70%.

> ES-SO, High performance dynamic shading solutions for energy efficiency and comfort in buildings, 2015 <u>https://service.somfy.com/downloads/bui_v4/es-so-study-2015.pdf</u>

Comfortable summer conditions

Overall building energy cost savings of 10% are predicted for air-conditioned offices employing automatically controlled solar shading systems.

> ES-S0, High performance dynamic shading solutions for energy efficiency and comfort in buildings, 2015 <u>https://service.somfy.com/downloads/bui_v4/es-so-study-2015.pdf</u>

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