



THE **BIG** LITTLE **GUIDE** BY SAINT-GOBAIN

IDEAS FOR MORE SUSTAINABLE WORKPLACES
AT SAINT-GOBAIN



BIG LITTLE MOVES

BY SAINT-GOBAIN

THE BIG LITTLE MOVES CAMPAIGN IS THE FIRST STEP IN THE CARE :4 PROGRAM!

This program concerns Saint-Gobain's real estate assets and is aimed at reducing the carbon footprint of our buildings, inspiring the market with model property developments, enhancing workplace comfort for its employees and cultivating a customer culture thanks to life-size laboratories.

Launched in the beginning on new buildings, the program today proposes tools for all situations encountered, all over the world:

- **Eco-reflexes accessible to all** which help align daily actions with key strategic messages (BIG Little Moves)
- **Renovation** of one or more premises (Open Labs)
- **Step-by-step renovation passport** for existing buildings (PASS :4)
- **Full-scale projects** of new or existing emblematic buildings (Building of Interest for the Group, **BIG**)

A PROGRAM FOR EVERYONE

Saint-Gobain has set itself ambitious environmental targets. Achieving them will require going beyond our manufacturing plants and involving everyone involved in the process. It's the little things we all do that make the difference and this change in culture encompasses the whole Group.

200 DAYS

This is the time spent at the office every year. IT devices, heating, air-conditioning and commuting make for a considerable environmental footprint. As employees, we have the power to be initiators, trendsetters and of course active players in these areas which are directly linked to our everyday life. And so, let's warmly welcome the BIG Little Guide!

On the agenda : simple gestures to encourage us to individually reduce our impact on the environment and, in particular, a few tips and ideas to make our working spaces more sustainable places, conducive to wellbeing. For the time being, though, discover the initiatives already led by Saint-Gobain and some ideas for driving the BIG Little Moves campaign locally, on site, in a fun and entertaining way. This guide is a basis of work designed to be completed according to the initiatives led and the local context.

READY, SET, LET'S GO AND FOLLOW THE BIG LITTLE GUIDE!



INTRODUCTION

The **BIG Little Moves** campaign roll-out continues. In January, we unveiled the employees' **top 10 gestures**, illustrated on a **commitment poster** that every site is invited to display to show the **engagement of its teams**.

Today, we can go further. **With this action guide, we want to give everyone the means to take real action**. Environmental impacts (water withdrawals, energy consumption, CO2 emissions, waste) are also synonymous with cost for Saint-Gobain. These fields of action correspond therefore to sources of savings, too.

The Group is committed to reducing its impacts very significantly by 2025. Today, the trend needs to be further strengthened to reach the targets set, particularly in the field of energy. While improvements will come from investments on the sites, each of us, at our own level, in our day-to-day actions, has a role to play. And on our sites, small, inexpensive initiatives can also make the difference. This is the true sense of the **BIG Little Moves** approach.

We can and must act, at different levels, to increase our positive contribution within our environment.

I am counting on your engagement

Claire PEDINI,
Senior Vice-President
of Saint-Gobain in charge
of Human Resources

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IT'S THE LITTLE THINGS WE ALL DO THAT MAKE ALL THE DIFFERENCE!

DRIVING THE CAMPAIGN

Join the **BIG Little Moves** community on My Saint-Gobain to discover all the items in the communication kit and thousands of ideas to roll out the campaign!

Becoming a BIG Little Moves follower is a whole mindset...

✔ **ENTERTAINING** : no more "eco-bashing." This initiative is fun, voluntary and springs from raised awareness on environmental impacts.

✔ **COLLABORATIVE** : we're all in this together, so the aim is to include as many people as possible as this is a cross-cutting subject that concerns all functions at all levels.

✔ **OPPORTUNISTIC** : it is important to make the most

what already exists and, in particular, when the time comes for renewals (contracts, equipment, etc..) to integrate wide-reaching actions which help make individual employee gestures really impactful at the scale of the site.

✔ **CREATIVE** : repetition is key here. Habits don't change overnight. It's sometimes necessary to repeat and reinvent new ways of getting messages through.

A BIG LITTLE CAMPAIGN-DRIVING APPROACH

1ST STEP

- Display posters
- Distribute stickers and calendars
- Screen animation films
- Spread the word
- Set BIG Little Moves as PC Wallpaper



2ND STEP

- Incorporate the moves into already existing communication media (IT newsletter, orientation presentations, cafeteria menus...)
- Ask to see the **BIG Little Moves poster** when visiting facilities
- Locally organize the signing of the commitment poster to involve top management and all employees
- Create an ideas box on your site to collect suggestions



3RD STEP

- Organize a team-building event, challenges (a car-free week, charity fundraising...), one theme day on a BIG Little Moves topic
- Distribute eco-responsible goodies branded with BIG Little Moves (cups, water-bottles, memory sticks, tote bag...)
- Organize a BIG Little Moves activity during EHS day



And of course, follow all the recommendations in this guide!

Also available, the **30 best RESPONSIBLE PURCHASING practices Guide**. To discover it, [click here](#).



ENERGY

While energy is vital to most human activities, in the face of current issues around fossil resource depletion and the threat of climate change, we need to behave in a more energy-efficient way.

Inside a building, energy consumption includes: heating, hot water, lighting, office equipment, air-conditioning, etc.

At the same time, information and communication technologies have become indispensable: remote meetings, information searches, sending documents, etc. Yet these generate specific impacts which are ever on the increase. For example, data-storage centers consume **1.5 percent of the world's electricity** i.e. the equivalent **production of 30 nuclear power stations**. Individually and collectively, we can reduce consumption and rethink the energy mix to use greener, and therefore, less carbon-intensive energy.



INITIATIVE



CARE:4 is an exemplary program which concerns Saint-Gobain's existing building stock. Its aim is to help the Group to inspire the market, reduce its carbon footprint, enhance comfort

and cultivate its customer culture. Thanks to the first 32 projects realized between 2008 and 2016, 6,400MWh of electricity and 2,200 tons of CO2 are saved every year!

LIGHTING

FOCUS ON

Lighting represents

10-15%

of an office's energy expenses, yet minimum actions can be implemented to obtain more comfort and save energy.

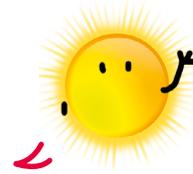
It is reckoned that up to 70% of expenses may be saved by optimizing energy.

Did you know?

A lighting methodology guide was published in 2017 by the innovative materials sector. It helps select the best solution in terms of energy performance and cost while considering the specifics of the environment and working situations

[CLICK HERE TO DISCOVER FOR YOURSELF](#)

A few bright ideas



- ✓ I'm off? I switch off. **30 minutes of pointless lighting adds up to 120 hours of lighting at the end of one year.**
- ✓ I ask to have my **desk placed perpendicular to the window** to get more daylight and reduce glare and reflections. This is much better for my eyesight and my comfort!
- ✓ As soon as **it's bright enough, I switch off the lights.**
- ✓ I **keep the windows** clear to maximize daylight.

And to go further, at the scale of the entity or site



Clean and dust the windows and lightbulbs: **a clean bulb** offers 40percent more lighting

Avoid equipment using extremely energy-intensive halogen lamps

Install in areas of frequent passage **automatic lights-off devices** (presence detectors, timers, shutdown timers for nights and weekends...)



Install **low-consumption LED-type bulbs** at each replacement: they last 8 times longer than classic lightbulbs and use 3 to 5 times less energy.



Prefer **back-up spot lights** to general lighting



Prefer **light colors** for the ceiling, walls and furniture

Shift to **green energy**. Negotiate a contract with your energy supplier

HEATING, AIR-CONDITIONING & VENTILATION

FOCUS ON

50%

This is the share these items represent in the energy consumption of buildings. Without altering occupant comfort, it is often necessary to earmark significant investments. However, before embarking on such work, some daily reflexes can already make a difference.



Let's blast through some cool ideas

- ✓ I **keep the radiators clear** to ensure good heat diffusion.
- ✓ I **close connecting doors to spaces** barely if at all heated (storage rooms, staircases...).
- ✓ I **open the window in the morning** to let in some fresh air and ventilate the room, but I always remember to turn the radiator off first.
- ✓ In summer or winter, I **dress to match the season** to avoid excess energy consumption.
- ✓ I **close sun protections** like blinds then the windows as soon as the outside temperature exceeds that of the office.

1° is significant!

Going from 23°C to 22°C (or from 73.4°F to 71.6°F) represents 7% less energy consumption.

And to go further, at the scale of the entity or site



Allow for a **more relaxed dress code** during heatwaves (e.g.: why not have a tie-free day)

Install devices which **automatically stop** heating and air-conditioning



Set radiators according to the external temperature and sunlight, and not necessarily all in the same way



Clean radiators every year

Check the boiler at least once a year



Prefer **solar or wood heaters** which emits 12 times less CO₂ than oil heaters and 6 times less than a gas installation.

EQUIPMENT & DIGITAL

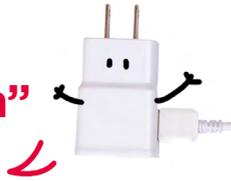
FOCUS ON

21%

This is how much IT equipment weighs in an office building's electricity consumption. 2/3 of this consumption occurs during periods of inactivity.



A few "plugged-in" ideas



- ✓ I prefer rechargeable batteries: to produce a classic battery requires between 40 and 140 times the amount of energy you actually get from using it.
- ✓ At breaks or during a meeting, I switch off my screen when away from my desk.
- ✓ I unplug the battery from my devices when they're charged.
- ✓ I turn off the power supply for my PC and screen at the end of the day - 4percent of screens and 15percent of CPUs are left on permanently, day and night. Is this really useful?

I extend the service life of my electronic devices:

A breakdown? I consider repairing then recycling electronic equipment.

A renewal? I consider reconditioned equipment, it's time to give devices a second life.

- A laptop consumes 50 to 80 percent less than a desktop
- Environmental labels indicate energy-efficient and economical equipment (Energy Star, TCO...)



- ✓ I optimize my web searches (precise queries, accessing sites via bookmarks...).
- ✓ I archive my emails.
- ✓ I sort through my Inbox (unsubscribe from newsletters, email notifications, ads...).
- ✓ I target and avoid multiplying recipients: sending a mail to 10 recipients multiplies its environmental impact by 4.
- ✓ I optimize the sending of attachments (put on server rather than send by mail - use of URL, hyperlinks, zipped files, SFTS...).

- ✓ I opt for e-mail alternatives (My Saint-Gobain, instant messaging, phone...). Email exchanges in a 100-strong business emit as much CO2 as 13 roundtrip flights between Paris and New-York.



15 000 km

This is the average distance travelled by a piece of digital data (email, video, downloading...).

And to go further, at the scale of the entity or site

Do the rounds at the end of the day/ week to make sure that equipment is switched off (coffee machines, printers...)



Prefer collective to individual printers



Install power strips with global power off switch/ systems

Ensure the management of WEEE (waste from electric and electronic equipment)

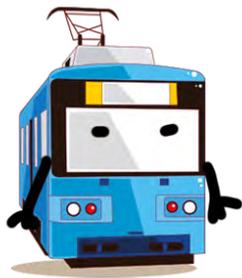
Prefer equipment provided with longer warranties



Implement energy-efficient equipment (environmental labels...)

TRANSPORT

Moving people accounts for the bulk of CO2 emissions for office activities. Indeed, rising human mobility generates a constant increase in greenhouse gas emissions having an impact on climate deregulation. Yet it is possible to progressively change how we work in order to limit travel and consequently reduce energy consumption and associated CO2 emissions.



INITIATIVE

In Germany, Sekurit has launched the JobRad initiative which proposes to employees to hire cycles usable even at weekends! This solution helps reduce travel-related carbon emissions, saves time

by avoiding traffic-jams and is a great way of keeping in shape.

240 000



This is the estimated number of tons of CO2 that represent Saint-Gobain employees travelling to and from work and on business trips in 2015.

On the road to some best practices



- ✓ Stop taking the elevator to go up one or two floors: you spend 7 times more calories **using the stairs!**
- ✓ I live close to the office? **I walk or cycle to work!**
- ✓ Several miles to travel? **I prefer to take public transport!**
- ✓ If I have to take my car, I adopt **flexible driving and a moderate speed**: aggressive driving in town can increase fuel consumption by 40percent.
- ✓ **I have my car serviced regularly**: under-inflated tires cause around 30percent of over-consumption!
- ✓ I talk with my colleagues and get organized for **car-pooling**.
- ✓ If I have to organize a meeting with new contacts, **I choose a venue that limits each person's travel**.
- ✓ A meeting with external people? I opt to **use the phone or video-conference**.
- ✓ If I have the possibility, **I work from home**.
- ✓ A long-distance business trip? **I go by train rather than plane**. Over the same distance, a plane discharges at least 33 times more CO2 than a train.

And to go further, at the scale of the entity or site

Provide garages for **bicycles**



Install **video-conference solutions**

Implement alternative solutions: **electric bikes for short-distance travel** or on **manufacturing facilities** or **electrical terminals**



If moving site, draw up a **mobility plan**



Introduce a **CO2 emissions calculator** related to business trips. The calculation may be one-off when booking transport and in the form of an annual report for the employee

Propose a company car catalog with a choice of **electric or hybrid cars**



Facilitate **car-pooling** between employees



Train sales reps on **eco-driving**

Organize a **collective challenge day** on the theme of mobility

WASTE

In addition to manufacturing activities, office work generates a significant and large variety of waste: print-outs, packaging, without forgetting the waste from electric and electronic equipment or some hazardous waste such as toners.

It is essential to reduce the quantity of our waste, particularly by recovering it, but especially by reducing its harmfulness, i.e. by learning **not to throw into the classic waste bin** waste which may be dangerous for people and the planet.



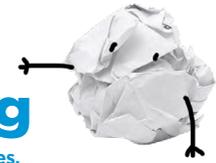
INITIATIVE

In China, the Delegation has replaced all paper or plastic cups by mugs for all employees and visitors.

It is reckoned that there is between

120 and 140 kg

of waste per year per employee involved in office activities, of which concern paper.



None of these ideas should be thrown away

- ✓ I arrange mugs for my guests! Throwaway cups represent 5kg of waste per year and per person.
- ✓ I sort my glass, paper, cardboard, plastic waste; one bin for each.
- ✓ Instead of plastic cups, plates and cutlery, I prefer washable and reusable dishes.
- ✓ I prefer eco-designed products, where the end-of-life phase and/or social and environmental impact is integrated into the product's design.
- ✓ I avoid over-packaged products (it's not just a question of style and beauty, the packaging weight has an impact on the environment).
- ✓ I collect and deposit my batteries in the place chosen for recycling piles.

And to go further, at the scale of the entity or site



Install **recycling bins** in break rooms (batteries, light-bulbs, small Waste Electrical Electronic Equipment)



Make sure that **sorting instructions** are followed properly from the employee to the cleaning service provider to make recycling possible

Opt for **rechargeable printer cartridges**

Put **rough draft trays** near photocopiers to recover unnecessary printing



Collect and recycle fluorescents lamps and tubes which contain mercury

When renegotiating a **collection contract**, include selective collection if this is not the case.

Install used toner collection bins and opt for **reusable and rechargeable toners**



Opt for **coffee machines** with easily recyclable capsules



Let everybody sort their waste at source by **providing recycling bins** for paper, either individual or collective bins

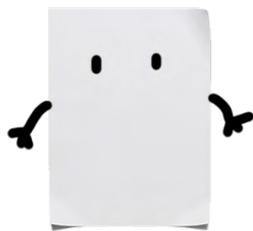


Opt for **coffee machines** where you can use your **own mug** (no cup distributed).

Organize a **zero waste challenge** in the office for a week or more!

PAPER, CARDBOARD

Paradoxically, digital development does not come with a **reduction in paper consumption** which still represents 75percent of office waste. Yet, contrary to conventional wisdom, **we recycle better at home than at the office**. Upstream, we could limit our paper consumption and downstream, encourage everyone to reduce our environmental impact.



INITIATIVE

In Poland, SEKURIT Transports subsidiary located in Zary-Kunice has managed to reduce its number of print-outs by replacing office printers by printing centers and locating them

a certain distance away. A simple idea for significant changes!



1 document out of 4

is thrown away 5 minutes after being printed, while 16percent of print-outs are never read.

The writing's on the wall for these initiatives



- ✓ **I reuse the back of rough drafts:** paper is the number one office consumable with 80 kg of paper per person and per year, i.e. the equivalent of 30 reams of paper.
- ✓ To dry my hands, **I only take the number of paper towels needed.**
- ✓ If it remains legible, I use the **"reduction"** function on the photocopier or printer, putting 2 pages on one sheet.
- ✓ If a document has to be read by several people, **I print one copy** and pass it around
- ✓ **I don't scrunch up the sheet of paper before throwing it away:** this avoids increasing its volume which damages the ecological balance of the recycling process
- ✓ **I optimize the print layout** (line spacing, deleting of virtually-empty pages, size of margins...)
- ✓ **I only print what is strictly necessary, and in black and white**

And to go further, at the scale of the entity or site



Select **labeled paper** (FSC, PEFC ...) or with a high recycled content, and avoid glossy paper, which undergoes more treatment and is more difficult to recycle.



Prefer **low-weight paper:** 60 g/m² is perfectly adequate for printing.



Transform **paper printed on one side only** (containing non-confidential data) into small notebooks and notepads for employees.



Program printers by default in black and white and recto-verso.



Implement a **badge-based printing system** to really print only the documents you need.



Dematerialize pay-slips, why not an **electronic safe?**



Install **electric dryers** in toilets.

WATER

An office worker consumes between 10 and 30 liters of water per day (excluding air-conditioning and catering). Without forgetting the water that we consume indirectly, water being necessary to produce virtually all our daily consumptions.

For example, 11,000 liters of water are necessary to make a pair of jeans! However, according to some studies, by 2030, demand for water could exceed supply which is not without consequence. Indeed, water is becoming increasingly scarce and costly and it is our duty to conserve this vital resource.



INITIATIVE

In Mexico, a dry toilet system has been installed in the Vetrotex and Adfors plants in Tlaxcala.



An office employee consumes

10 to 30 liters

of water per day (excluding air-conditioning and catering).

A flowing stream of ideas



- ✓ **I report any leaks:** a tap running for 3 minutes wastes the equivalent of 36 one-liter bottles of water.
- ✓ **I wash my hands in cold water:** to heat 1 cubic meter of water, approximately 2kg of CO2 are rejected.
- ✓ **I close taps properly** after use.
- ✓ **I only fill the kettle with the water I need to heat.**
- ✓ In a meeting, **I opt for water jugs** rather than bottles
- ✓ **I prefer reusable water-bottles** to plastic bottles that take 400 to 500 years to degrade.

And to go further, at the scale of the entity or site



Encourage **the flagging of malfunctions** using a simple system



Install **water coolers**



See to **tap maintenance** by regularly changing the seals



When replacing toilets, opt for **dual flush or dry "composting" toilets.**

Install **mixer-taps** that help save up to 10 percent of water compared to a classic tap, or **self-closing taps** to avoid wasting water



Implement a **water-recovery system** (stormwater or underground water) to water the plants or flush the toilet, if possible

FOOD, CATERING

Farming is responsible for 20percent of the world's CO2emissions. This sector is also a source of pollution, notably by degrading soil, groundwater and biodiversity.

Furthermore, there will be 9 billion humans walking on this planet by 2050 and it is vital for us to sustain it so that we will be able to feed the future world population without wasting our resources. Proposing more responsible, more local consumption will help reduce the environmental impact of our food.



INITIATIVE

The South-African Delegation will soon embark on processing the organic waste of its company canteen! This initiative will subsequently be implemented in all sites willing to join in the action.



It is reckoned that between

150g to 200 kg

of food is wasted per meal in collective catering.

Some strong and appetizing ideas...



- ✓ At the end of the meeting, I **collect the leftovers from the refreshments break** and bring them to the coffee room, or share them with my colleagues
- ✓ I **reduce my meat consumption**: 15,415 liters of water are needed to produce 1kg of beef, compared to 1,160 liters to produce 1 kg of wheat.
- ✓ I **serve myself just the right quantity of food and water** to avoid waste
- ✓ I choose **fruit and veg that are in season**
- ✓ I prefer **organically-farmed food and local produce**

And to go further, at the scale of the entity or site



Include in the catering service agreement:

- **A discount or free piece of fruit** if the employee brings his or her own mug, bag, cutlery...
- **Billing by weight** rather than by meal: this helps adapt portions to one's hunger and avoid waste.
- **Using mugs** to serve hot drinks taken on site.
- **Use of local produce, in season, and vegetarian options** in the canteen.



Buy in large packs without **outer package** (coffee, sugar, biscuits...)



Compost organic waste from the canteen and/or coffee breaks (tea bags, cookies...)



Set up a **participative vegetable garden**



Prefer easily **recyclable coffee capsules** and ensure collection



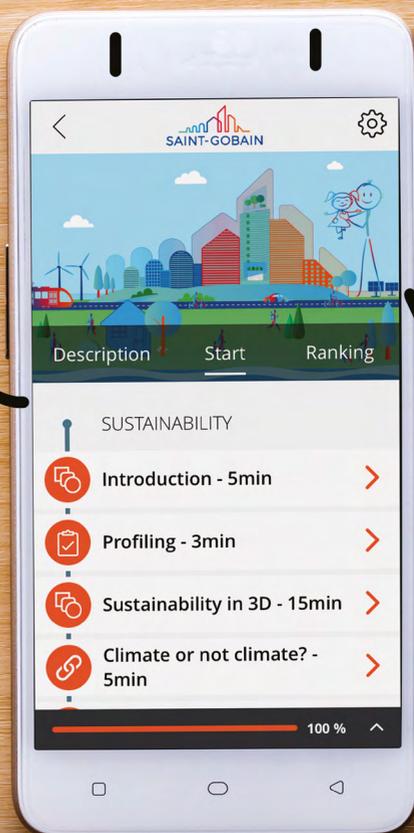
Propose **several plate sizes** so customers can adopt their portions.



Opt for **fair-trade organic tea, coffee**

BIG **LITTLE** MOVES BY SAINT-GOBAIN

Curious to discover more about how sustainability can be a growth opportunity for the construction sector and for Saint-Gobain?



BECOME A SUSTAINABLE HABITAT HERO!

TO DO SO, NOTHING COULD BE EASIER:

1. DOWNLOAD THE SPRINT SAINT-GOBAIN APP ON APPLE & GOOGLE PLAY
2. LOG IN WITH YOUR SGID AND THE PASSWORD HERO12345
3. DISCOVER THE TRAINING MODULES IN THE "SUSTAINABLE HABITAT" CATEGORY
4. HAVE FUN AND COLLECT THE STARS AND DIPLOMAS!

