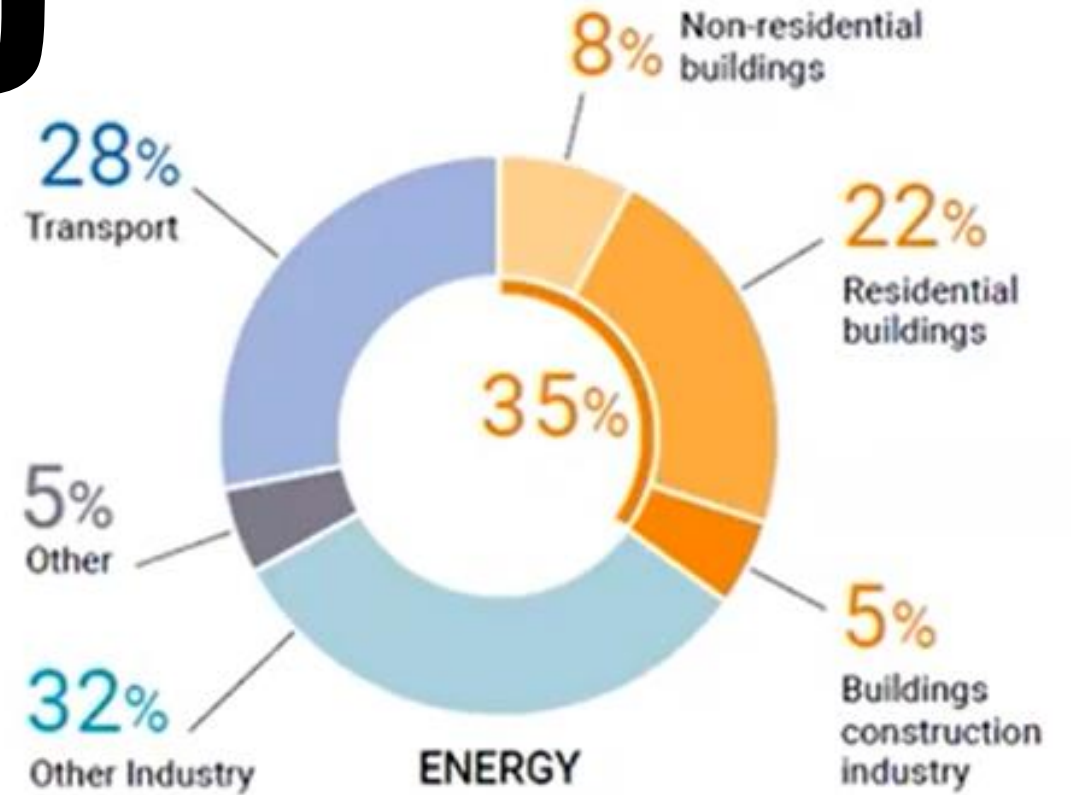
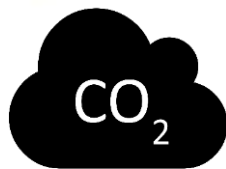
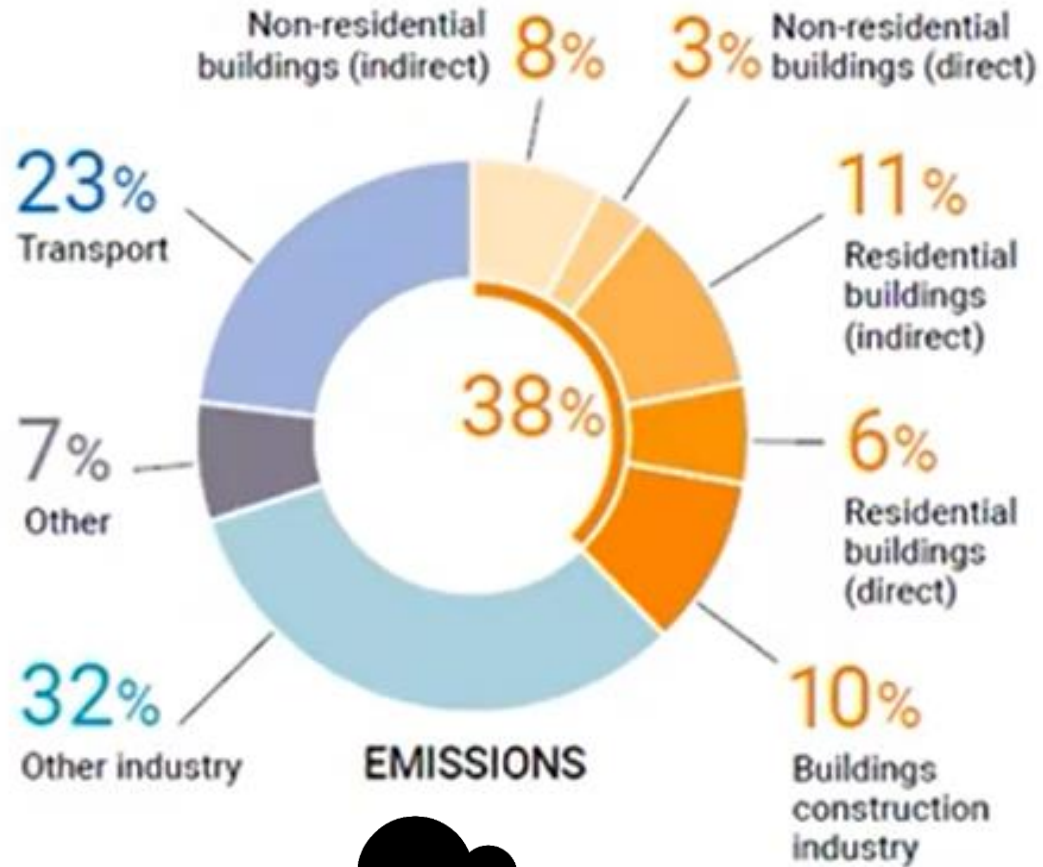


Saint-Gobain: hacia una construcción e industria sostenibles-de la ambición a la realidad

04.05.2022

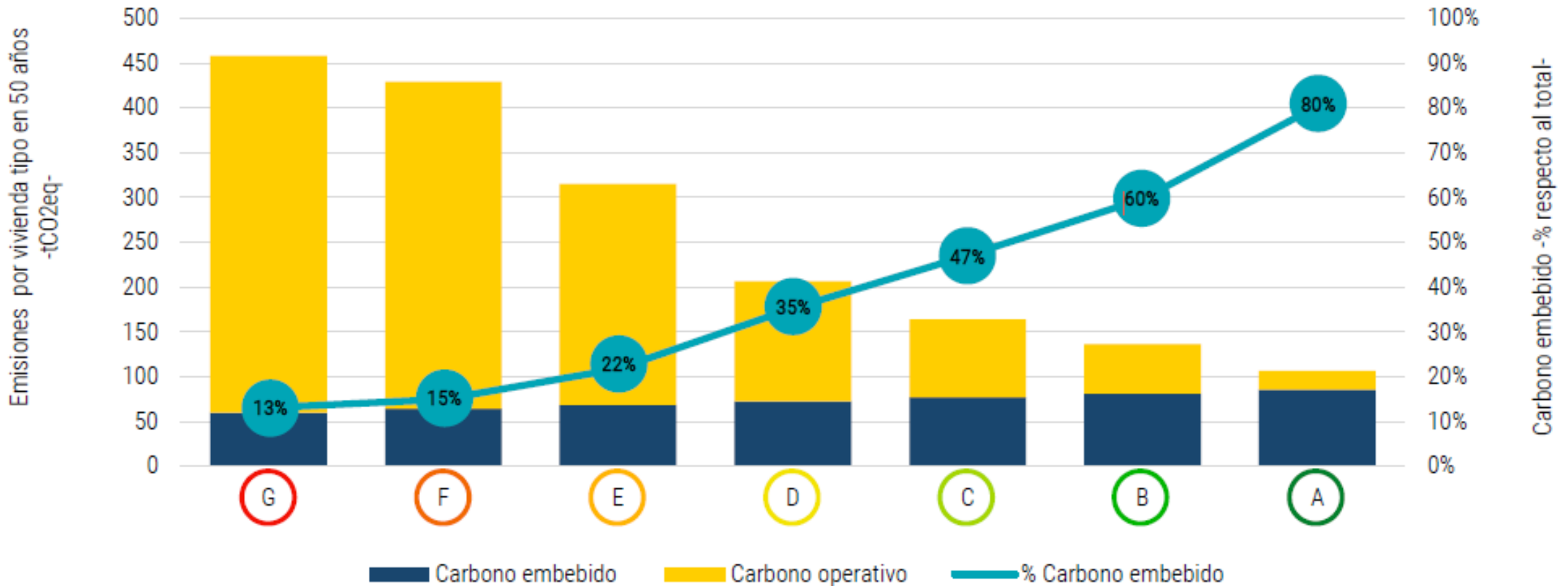
UN NUMERO A TENER EN MENTE

40



CARBONO OPERACIONAL Y CARBONO EMBEBIDO

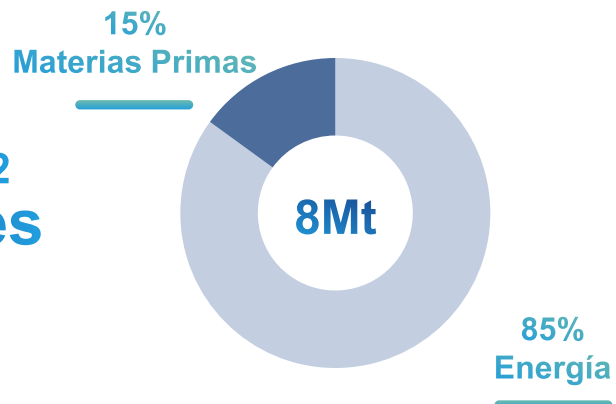
Figura 1. Tendencia de carbono embebido y operativo según calificación energética de la vivienda. Fuente: Elaboración propia



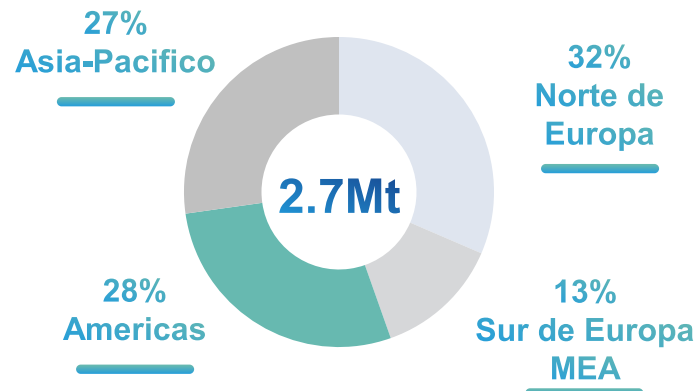
ACTUAMOS SOBRE LOS 3 ALCANCES

Scope 1 (Directas)

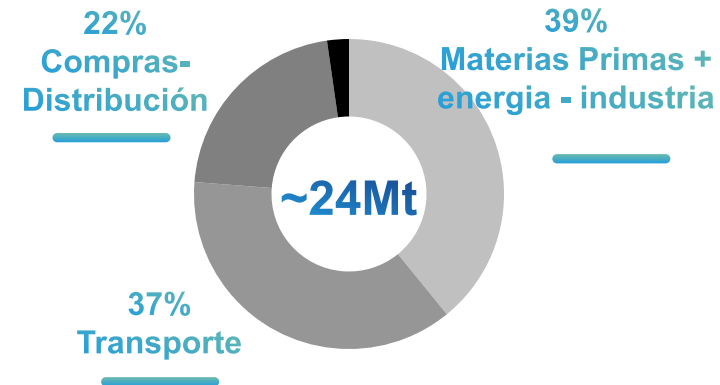
2017 CO₂ emisiones



Scope 2 (Indirectas)



Scope 3 (Cadena de Valor)



Palancas de Actuación



Innovación en nuestros procesos

Industrial, diseño de productos



Optimizar/reducir nuestro uso de energía



Transición a energía libre de carbono



Proveedores & Logística
materias primas & transportes

EN EL CAMINO HACIA LA NEUTRALIDAD DE CARBONO, 2030 ES NUESTRO PRÓXIMO HITO

2019 Firma del compromiso del Pacto Mundial de la ONU para la neutralidad de carbono en 2050



2030

2050

En
nuestros
procesos

Science-Based Targets

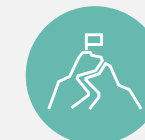
Scope 1 + 2
(Directas + Indirectas)

-33%

Scope 3
(Cadena de Valor)

-16%

Valores Absolutos de reducción de CO2 vs. 2017



Objetivo 2050
ZERO CARBON

En nuestra
oferta de
soluciones

- Ofrecer las mejores low-CO₂ **soluciones sostenibles en nuestros mercados**
- Permitir a nuestros clientes **descarbonizar sus procesos**

Science-Based Targets



FLAT GLASS MANUFACTURING AT SAINT-GOBAIN



1

Batch

Glass is made of **silica, soda ash, lime, dolomite, recycled glass (cullet)** and additives adjusted according to desired color and properties.

3

Forming

Molten glass is poured onto a **bath of liquid tin**. Gear wheels stretch or push the glass to obtain the required thickness (2 to 19mm) and width (3 to 5m).

4

Cooling

The glass passes through a cooling tunnel over **100 meters long**, to drop from **600°C to room temperature** while controlling the product's thermal and mechanical stresses.

2

Melting

Raw materials are melted in a furnace at **more than 1,500°C**. The thermal energy of the flames is recovered in the regenerators, while that of the fumes can be used to produce electricity or to heat the industrial site.

6

Stacking and storage

The glass sheets are lifted by **suction-cup stackers** or by **robots** and placed on **stillages** to be stored in the warehouse.

5

Inspection and cutting

Regular checks are made and samples taken to verify the quality of the glass, which is **automatically cut into sheets** of 1 to 20 square meters.



DID YOU KNOW?

- Using one ton of cullet in the manufacturing of flat glass **saves 300kg of CO₂**. Saint-Gobain uses more than 30% of cullet in its production, with an objective of **40% in 2030**.
- A flat glass production line is more than **500 meters long**, the length of five soccer fields placed end to end.



Fabricación vidrio



Post-consumer



Pre-consumer



Edificio



Planta procesamiento



La producción de Saint-Gobain Glass usa del 20 al 40% de vidrio reciclado conocido como casco de vidrio. Más de 1.200.000 de toneladas de casco de vidrio se funde cada año en los 34 hornos que alimentan las líneas de vidrio float de la empresa. Esto permite:

- Una disminución del consumo de materias primas de 1,5 millones de toneladas de materias primas (recursos naturales) que se consumen.
- Una disminución de emisiones de de CO₂ (gases de efecto invernadero) de 300.000 toneladas.

PLASTERBOARD MANUFACTURING AT SAINT-GOBAIN



DID YOU KNOW?

- Saint-Gobain uses recycled materials in its plasterboard production: up to **100% for paper** and **30% for gypsum**.
- The manufacturing process is **continuously improving** its energy efficiency, thanks in particular to artificial intelligence.

1

Calcination

Gypsum is ground then **heated to 160°C to be dehydrated**. The powder obtained (stucco), stored in silos, feeds the production of plasterboard.

2

Mixing

The stucco powder is mixed with **water and additives to obtain a slurry**. The dosages are adjusted according to the desired properties of the finished product, such as fire resistance.

3

Forming

The slurry is **spread on a paper liner** as a support, then a second paper liner is placed on the top. After a quick setting, the boards are **precut**.

4

Drying

The boards pass through a dryer where the temperature can reach up to 300°C. The evaporation of excess water **strengthens the cohesion of the gypsum** to the paper liner.

5

Finishing and packaging

The plasterboards are **resized, inspected then packed** before being stored by AGVs.



Reciclaje Placo
Servicio de reciclaje Placa de Yeso Laminado

¿Sabías que los residuos PYL de una obra pueden reciclarse?
Placo, gestor de residuos autorizado, pone a tu disposición un nuevo servicio para reciclar los residuos PYL de la construcción.

Beneficios de reciclar PYL

- ✓ Serás una empresa Sostenible
- ✓ Protegerás el Medio Ambiente
- ✓ Ayudará a preservar los recursos naturales
- ✓ Tendrás + puntos para obtener los certificados BREEAM, LEED



Cuatro etapas

- ❑ Etapa 1.- La empresa interesada comunica la obra a Placo para recogida del residuo.
- ❑ Etapa 2.- Desde Placo se facilita a obra el contacto de los transportistas de residuos autorizados en la zona para que puedan colocar los contenedores para el uso exclusivo de reciclaje de Placo.
- ❑ Etapa 3.- Se transportan los residuos hasta el punto de reciclaje más cercano.
- ❑ Placo los reutiliza en la fabricación de Placa de Yeso Laminado, u otros productos, y emite el correspondiente certificado.

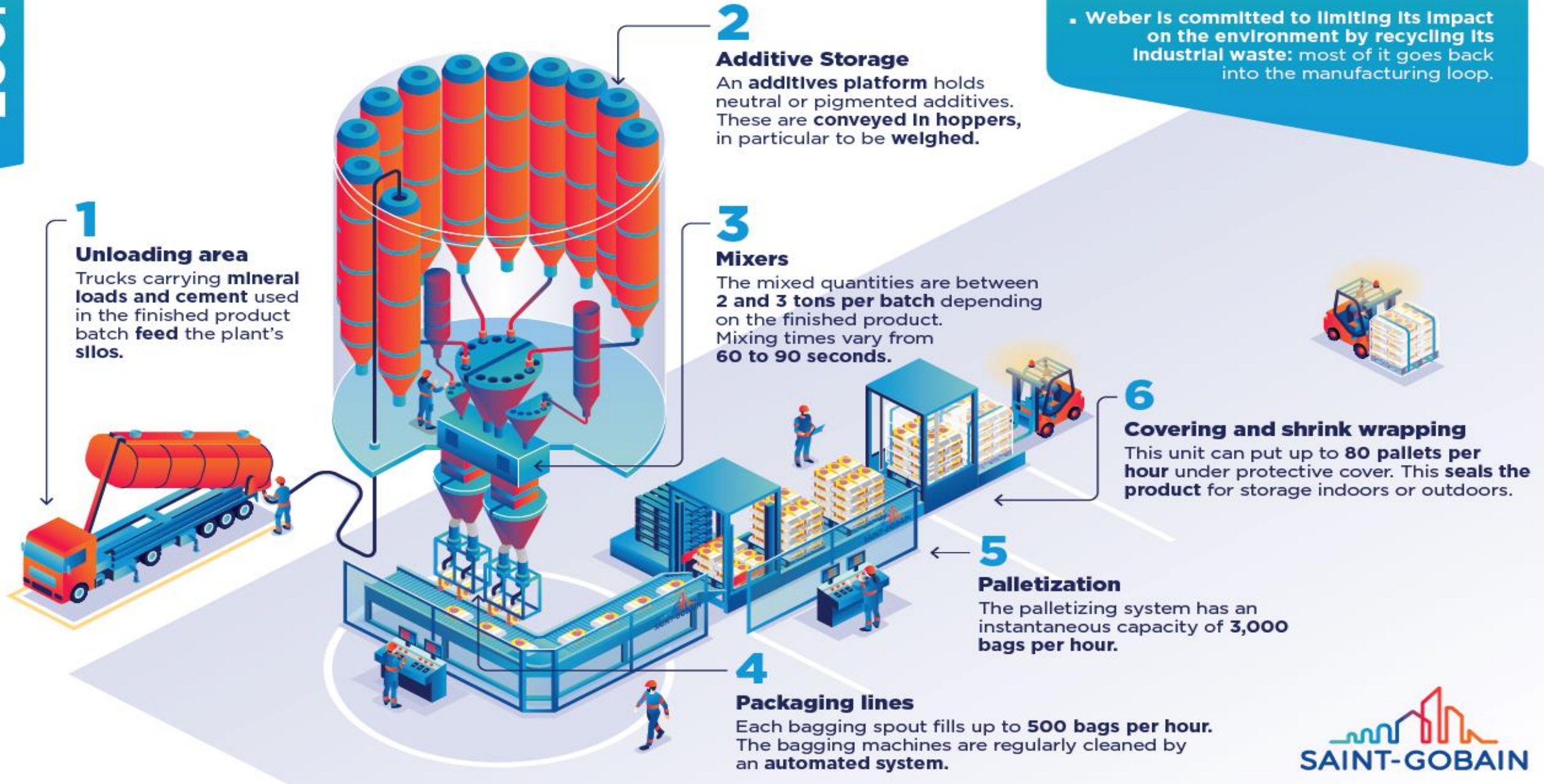


MORTARS MANUFACTURING BY WEBER



DID YOU KNOW?

- This line can produce **30 bags per minute** and supply **40 different mortars** in one day.
- Weber is committed to limiting its impact on the environment by recycling its industrial waste: most of it goes back into the manufacturing loop.



GLASS WOOL MANUFACTURING BY ISOVER

ISOVER
SAINT-GOBAIN

DID YOU KNOW?

- In Europe, ISOVER glass wool is produced with **60% of recycled glass** (cullet). **Objective for 2025: 70%!**
- Glass wool can be **compressed up to 10 times** while retaining its properties. This increases the quantity transported by truck and **reduces** the product's **carbon Impact**.

1

Batch

Glass wool is made from **recycled glass** (cullet) supplemented with **soda ash, sand and limestone**. The components are weighed to adjust the batch mixture.

2

Melting

The mixture is melted in a gas or electric furnace at **over 1,400°C**.

3

Fiberizing

The liquid glass passes through **centrifugal spinners**. It comes out in the form of glass fibers, onto which a **binder is sprayed**, forming a mattress.

4

Forming

The mattress passes through a curing oven to **polymerize the binder**, which confers mechanical properties and compressibility on the final product.

6

Packaging

The mattress is **compressed** in a roll-up machine to be packed as a roll.

5

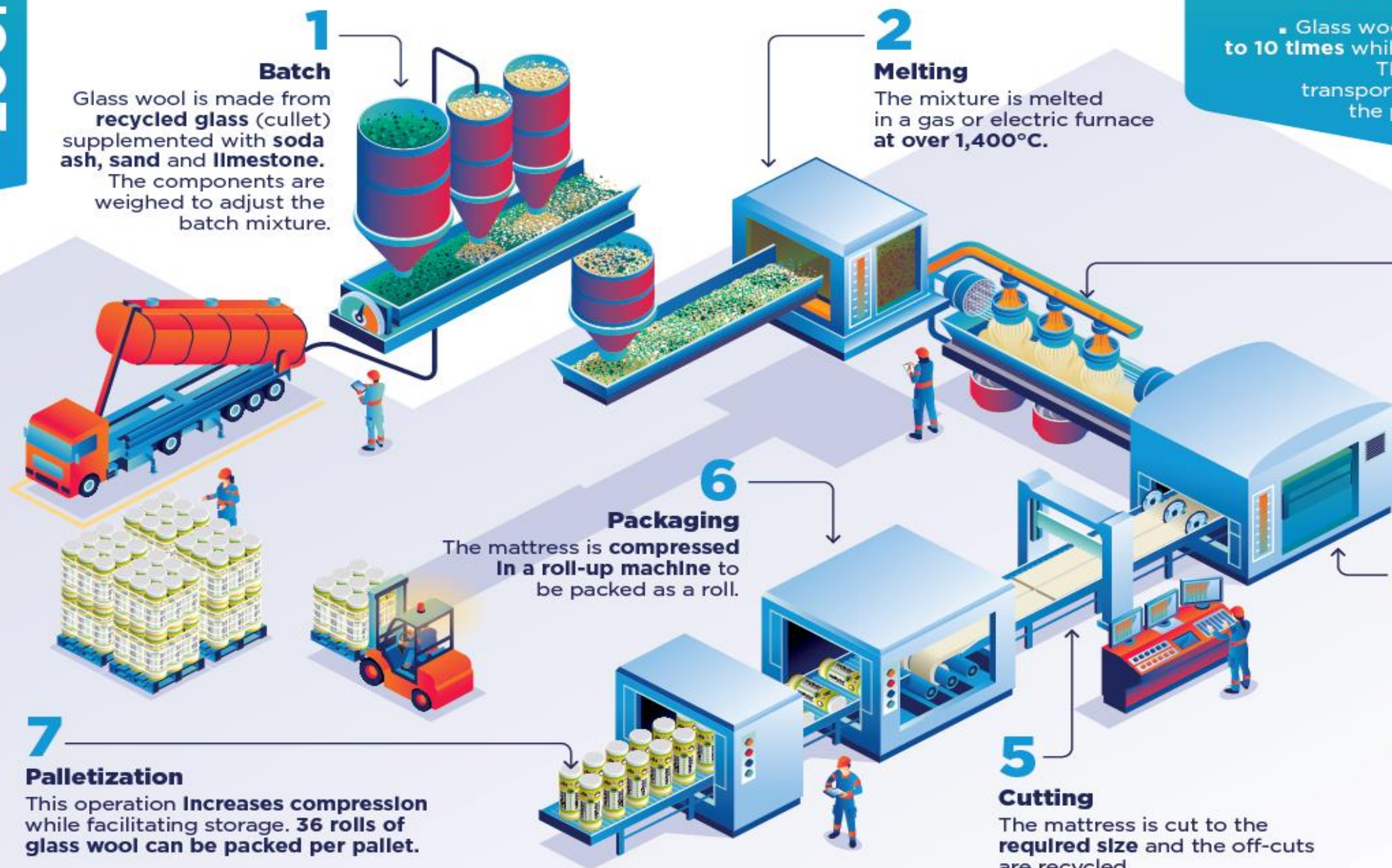
Cutting

The mattress is cut to the **required size** and the off-cuts are recycled.

7

Palletization

This operation **increases compression** while facilitating storage. **36 rolls of glass wool can be packed per pallet**.





**MAKING
THE WORLD
A BETTER
HOME**

— **GRACIAS**

