



CIRCULARITY IN CONSTRUCTION DRIVERS, ROUTES AND NEXT STEPS

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DRIVERS FOR CIRCULARITY



Access to raw materials



5x more non-metallic minerals extracted in 2017 vs 1970

≤1.7x



Environmental Footprint



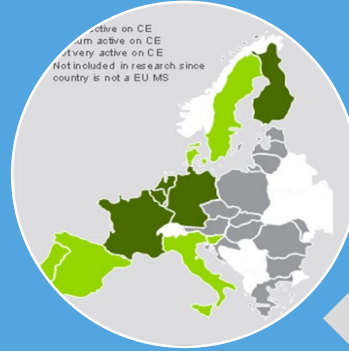
Extraction



Transportation



Waste handling & landfilling



Not included in research since country is not a EU MS

Public Policies



Developing worldwide



Becoming more stringent



Decarbonisation

39% Global sector emissions

11% Embodied carbon



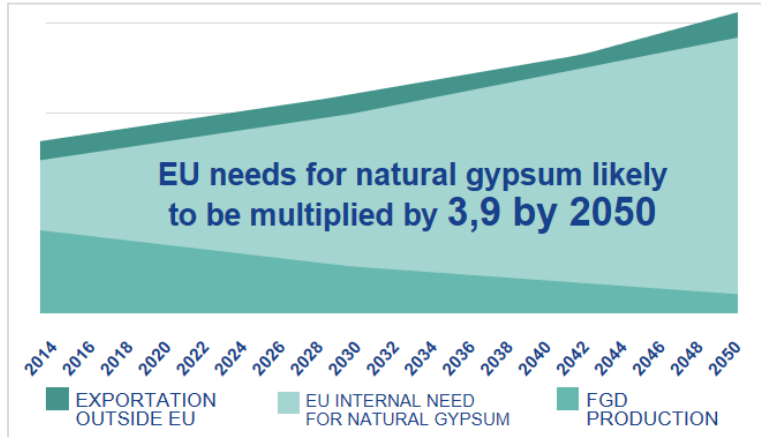
Market demand



DRIVERS FOR CIRCULARITY - RAW MATERIALS AVAILABILITY



GYPSUM



Access to raw materials

5x more non-metallic minerals extracted in 2017 vs 1970

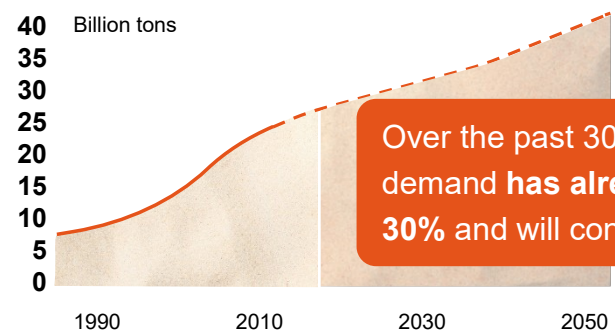
≤1.7x

FORECAST OF NATURAL GYPSUM DEMAND IN EUROPE (AVERAGE SCENARIO)

- 4x** more gypsum needed in 2050 compared with 2014
- 5x** Less DSG (synthetic gypsum) available in 2050 compared to 2014
- In a context of increasing local community pressures and mining/environmental legislations



SAND



Worldwide cement production





Country	Cement prod (Mt)
China	2,500
India	280
USA	83
Iran	75
Turkey	75



3 ROUTES TOWARDS CIRCULARITY



Products & systems offering

-  Circularity in innovation process, rethink formulations, design products for recycling, etc..
-  Develop light weight systems
-  Assess our products & systems performance (LCA / SCORE)
-  Adjust quantities: kitting, bulk format, product cut-offs recycling



ENERGY & CARBON



HEALTH & WELLBEING



RESOURCES* & CIRCULARITY
* incl. water



Supply chain & operations



- Reduce process waste landfilled – zero by 2025



- Reduce resource intensity – e.g. lighter products and same performance



- Increase recycled / renewable content in products & packaging



Integrating more recycled materials in our flat glass activity



Our gypsum plants use up to 25% recycled CDW



Network & service ecosystem



- Securing access to secondary raw materials



- Maximising synergies between our businesses and activities






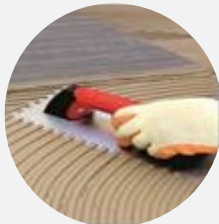
- New business models : service based models; reuse






120 collection points in our distribution network

OUR 3 ROUTES TOWARDS CIRCULARITY – EXAMPLES


Products & systems offering

Weber.col flex eco

-56% CO₂ emissions
-33% Resources Depletion
-25% Water consumption







Kitting : precut plasterboards, avoid waste on jobsite



100% recyclable bucket (mortars) with ~25% recycled content

Supply chain & operations

Lighter gypsum products with the same performance




Submerged Burner Melter (SBM) - LIFE project 2019-2026





WOOL2LOOP

Network & service ecosystem






ISOVER RECYCLING

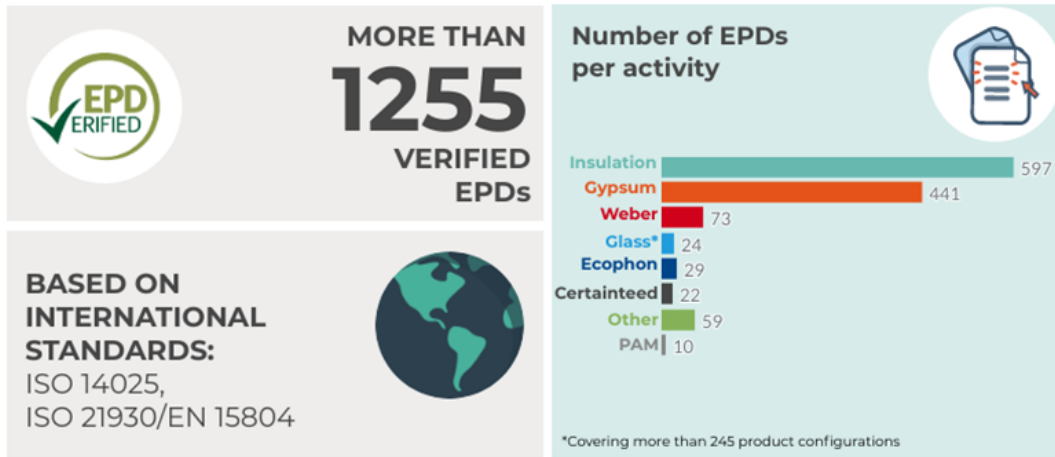
Gypsum recycling facilities





PRODUCT INFORMATION AT THE ROOT OF OUR SUSTAINABILITY STRATEGY

August 2020, at Saint-Gobain



Some of our brands which have EPDs



Countries where products are covered with EPDs



Program operators where our EPDs are published:



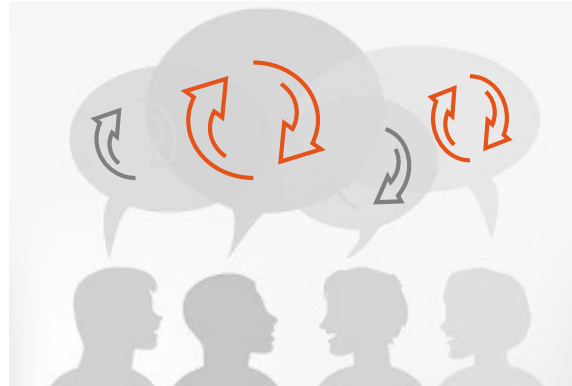
CHALLENGES TO SCALE UP CIRCULARITY

Why is it still so cheap to landfill CDW waste ?

By when will selective demolition be put in practice ?

How to engage the whole value chain in the circularity transformation ?

How to access quality secondary raw materials?



How to increase demand for recycled products?

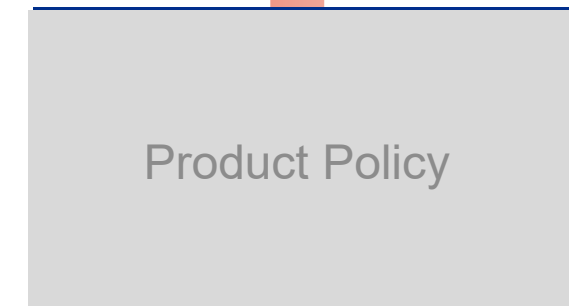
How to facilitate the safe handling and transport of waste aimed at being recycled in new processes (interface waste/chemicals)?

By when will buildings be assessed for their life cycle performance, incl. circularity ?

*How to better locate recyclable waste?
What about digital?*

How can buildings and product policies complement each other?

POLICIES FOR CIRCULAR ECONOMY



TO CONCLUDE

- ✓ Circularity is a strategic direction aimed at responding to the pressure on resources and improving waste management
- ✓ Circularity is a key driver to decarbonize buildings; and it will contribute directly to our 2050 climate objective
- ✓ Our three fold approach covers products and solutions (via eco-innovation); efficiencies in our supply chain; and developing recycling services
- ✓ Policy at EU level can unlock several obstacles and help the whole value chain embrace circularity, e.g. via setting targets for recycling & recycled content
- ✓ Building & product policies should support each other. Life cycle approach and product information via EPDs are at the core of a lasting circularity approach



THANK YOU !

