## FOR A BETTER WORLD

Contribution des isolants à l'impact environnemental des bâtiments Vincent Briard – Sustainable Building & Partnerships Director

Construction durable pour des villes résilientes – LIST 07/06/2023









#### **Knauf Insulation in a nutshell**





# Knauf Insulation is defined by Sustainability





Over the lifetime of buildings, Knauf Insulation glasswool products save 200 times the emissions generated in manufacturing

But this is not enough anymore, we need to go beyond ...

... Climate Change requires not an evolution but a revolution !

Resource Energy Design



#### **Carbon in construction & insulation impact**



### 37% 10%



### 3-5%

Contribution of built environment to annual global emissions Including 10% embodied carbon Renovation rate across the built environment in order for the EU to meet its 2050 Carbon Neutral target Insulation products embodied carbon in new constructions



#### Resource





- Recycled content: glass cullet (bottles, windows ...) average 60% of total batch. Every 10% cullet => 3% less energy.
- Recyclability: in context of circular economy, new (2022) recycling plant RESULATION for construction & demolition mineral wool waste
- ECOSE Technology: binder based on starch of plants. On-going research on second generation to step away from traditional agriculture sourcing



#### Energy





#### Approx 3000 kWh or 1100 kg CO2 per ton GW

- Gas & electricity: main energy carriers. In 2022, most plants converted to renewable electricity (on / off sites). Looking for biomethane supply opportunities. Electrification is a fundamental trend. Longer term, hydrogen & CCUS also considered
- CI Continuous Improvement: a strategic driver across manufacturing plants triggering engagement of colleagues: energy losses (heat recovery, compress air, lighting, motors control ...)



#### Aligning our activities with the Paris Climate Agreement is a fundamental transition



#### KI carbon reduction pathway Scope 1&2 emissions

5% yearly organic growth



ENERGY RELATED SOURCES + FURNACE RAW MATERIALS EMISSIONS



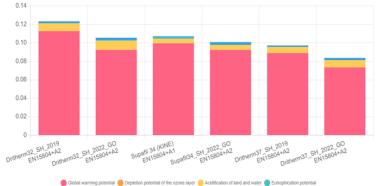






 EcoDesign: > 80% of products covered with EPDs. Innovation supported by ecodesign: products / systems & buildings

#### **KINE:** Ecolndex of several solutions of cavity wall GMW products and impact of GO's



Formation potential of tropospheric ozone photometrical oxidants
Acialication of land and water
Europhication potential
Formation potential of tropospheric ozone photometrical oxidants
Abiotic depletion potential for non-fossil resources









Not an evolution, but a revolution

All KI 5500 employees on board

**Renovation is the priority** 

New targets 2032

Thank you !