



Active / Passive Cooling Insulation

Disruptive climate tech startup saving
electricity and material costs in hot
climates

www.coldins.com



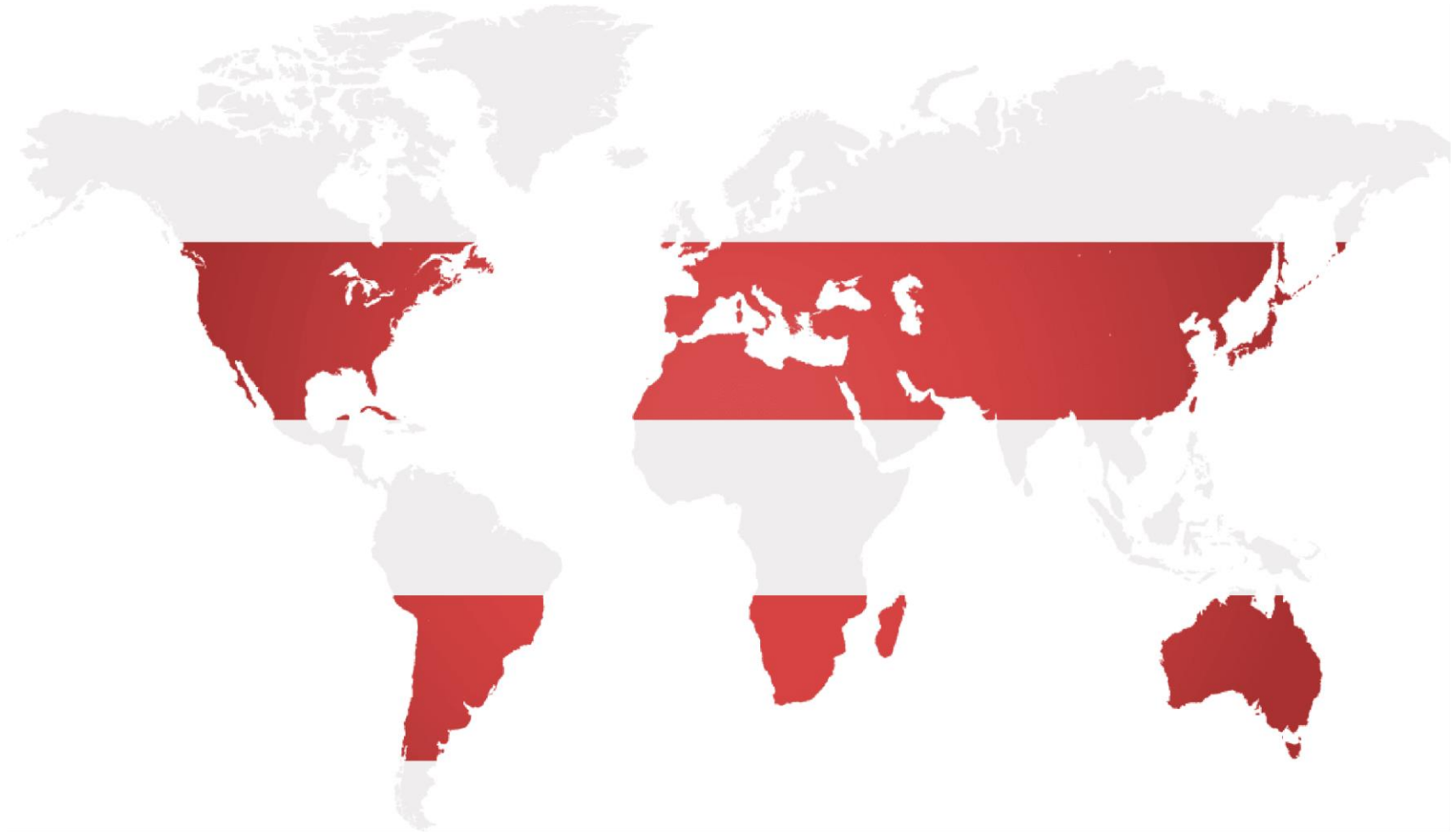
Coldins Oy · Niemenkatu 73, 15140 Lahti, Finland

Our Global Challenge

Areas in ● are heavily affected by global warming and are also the home for 48 % of the world population.

Climate change and population growth necessitates the need for novel solutions to improve energy efficiency and living comfort.

Coldins patent pending active / passive cooling insulation provides cooler living conditions and increased comfort for the inhabitants.



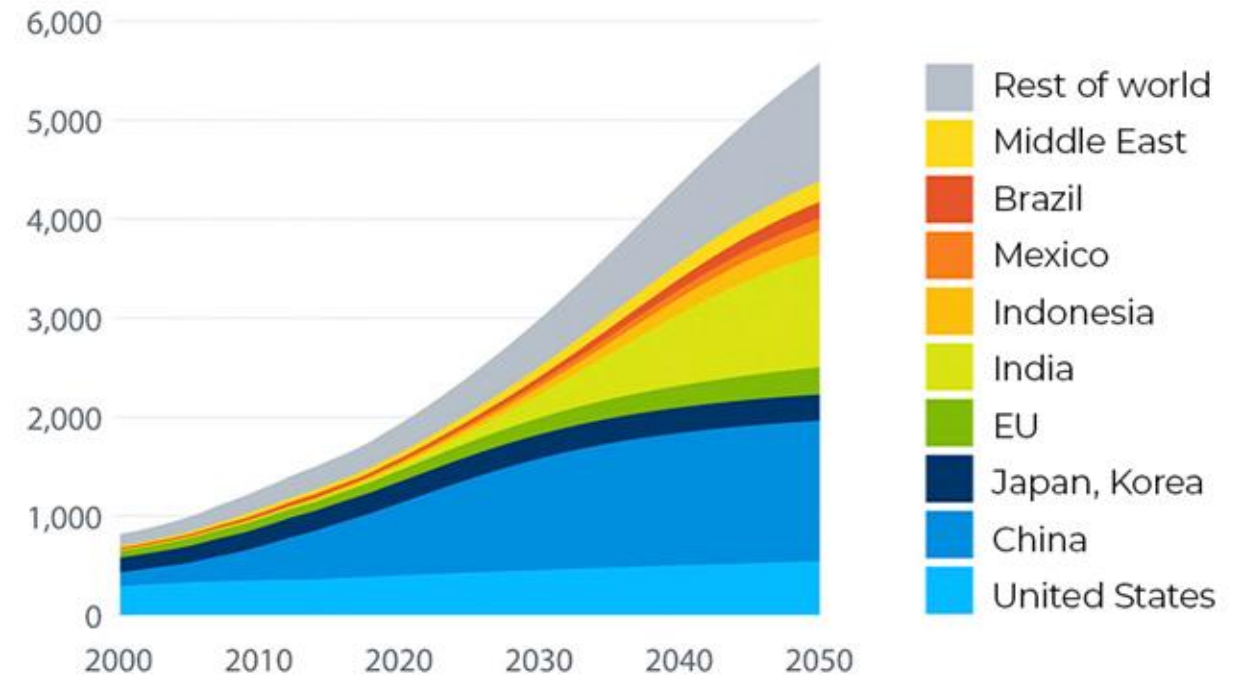
Global Challenge

Rapidly rising costs and emissions from electric cooling of spaces

- Global electricity demand to exceed 30 700 TWh by 2027 (CAGR 25-27: 3.2 %)*
- Space cooling energy demand growing 4 % annually since 2000, accelerated to 5 % in 2022
- Space cooling uses ~10% of global electricity mainly from fossil fuels, emitting over 1.5 billion tons of Green House Gasses (GHG) annually
- 85 % of new demand will come from hot climate areas China, India, Latin America, Middle East and Southeast Asia.

*Source: International Energy Agency
"Global Electricity 2025" report

Projected number of air conditioning units in use worldwide (in millions)



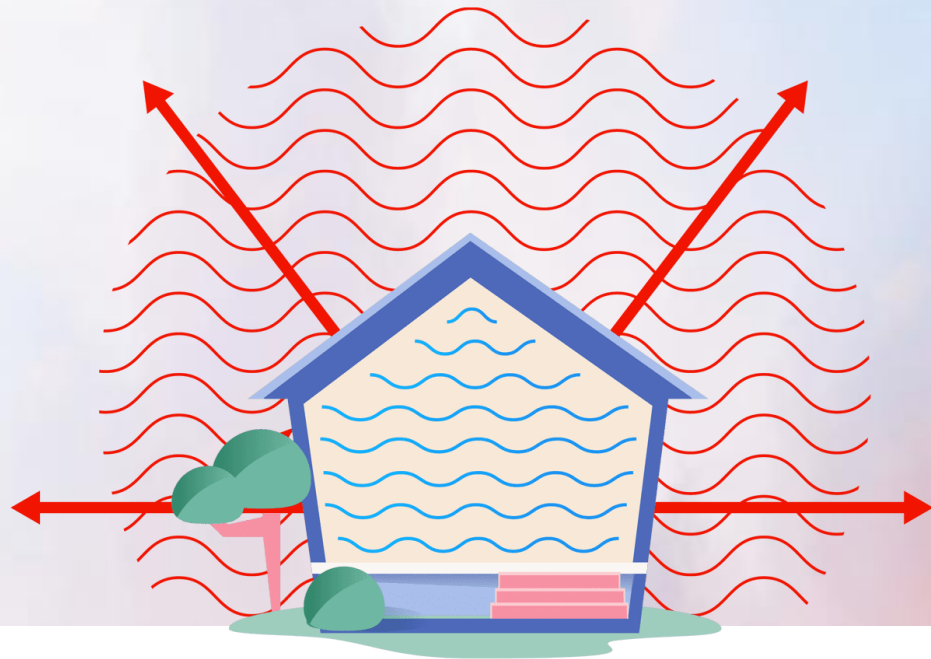
Global solution

Based on innovative usage of daily temperature cycles

Day mode

(Hot air can't get in):

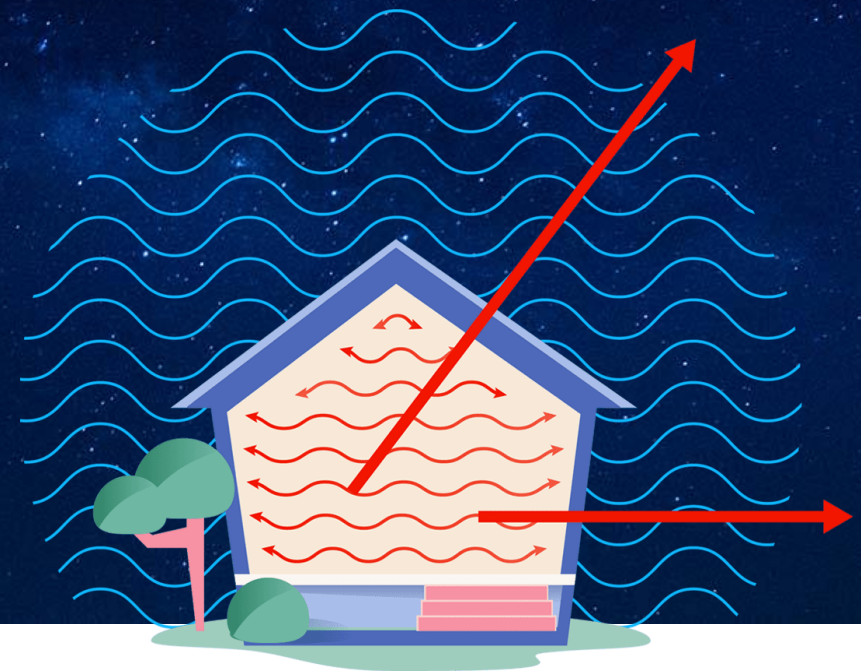
Hot air buoyancy prevents wall heating



Night mode

(Active cooling):

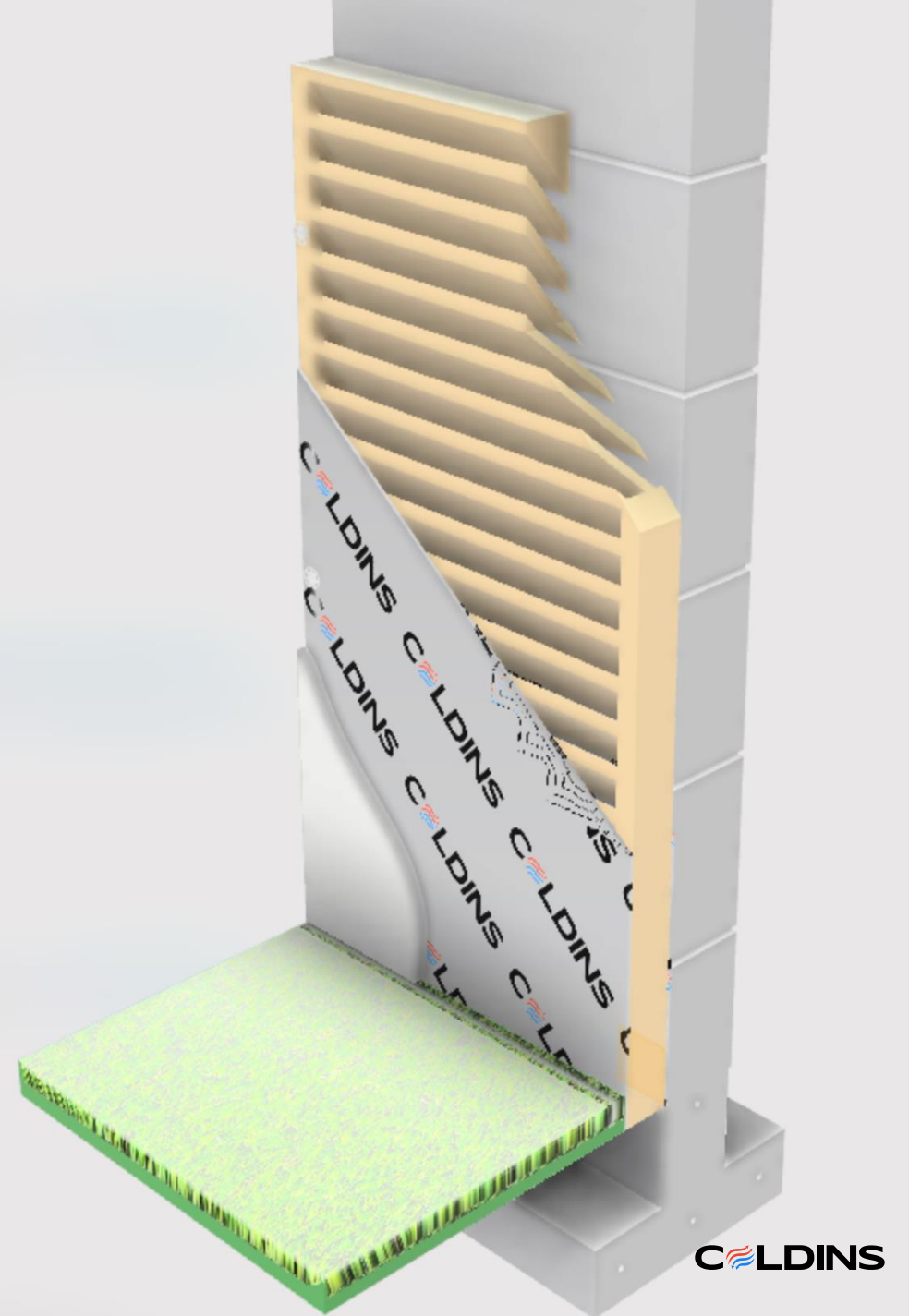
Convection enables wall cooling



Coldins disruptive insulation technology

More sustainable and boosting energy efficiency in hot climate areas

- Standard insulation in hot climates saves ~**30%** energy and adding more insulation is costly and complex
- Coldins board improves energy efficiency by another **40%** in solid-wall buildings with up to **70%** less material
- Cuts AC cost, GHG emissions and enhances comfort in solid-wall buildings
- Fast payback for end-customer: ~ **3 years**
- Annual savings of ~ **30\$/m²** of cooled space



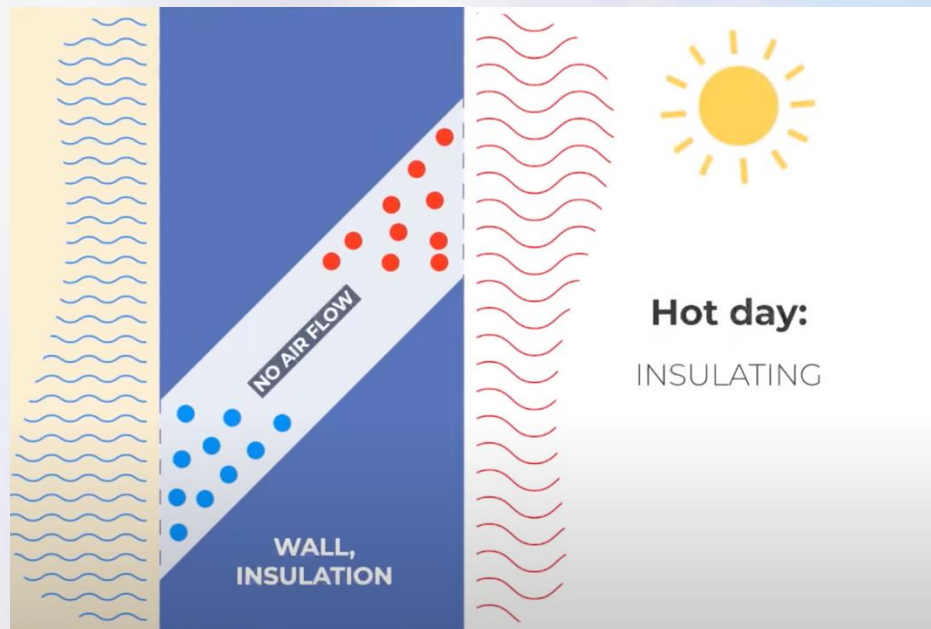
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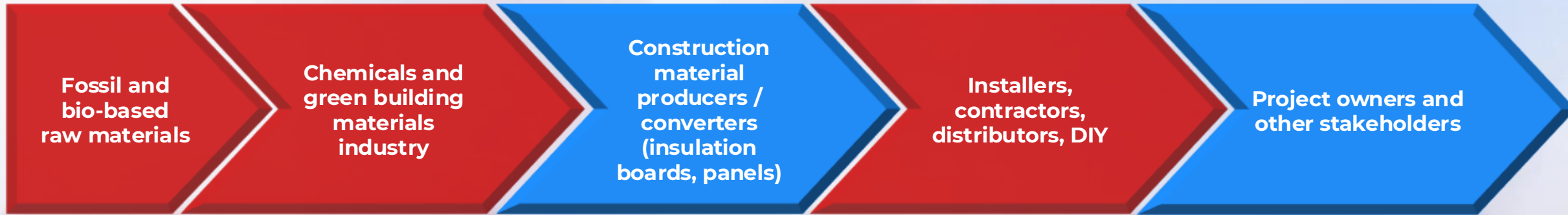
Market size and growth

- 2024 addressable market \$12 Bn
- Broad market applicability: new builds and existing stock
- ~ 80 hot-climate countries
- Insulation sector CAGR 5–7 % in 2025 – 2030
- Coldins target \$ 0.6 Bn (5 % market) by 2035
- Near-term focus United Arab Emirates



Coldins target customers

Turn construction material producers into 'coopetitors'



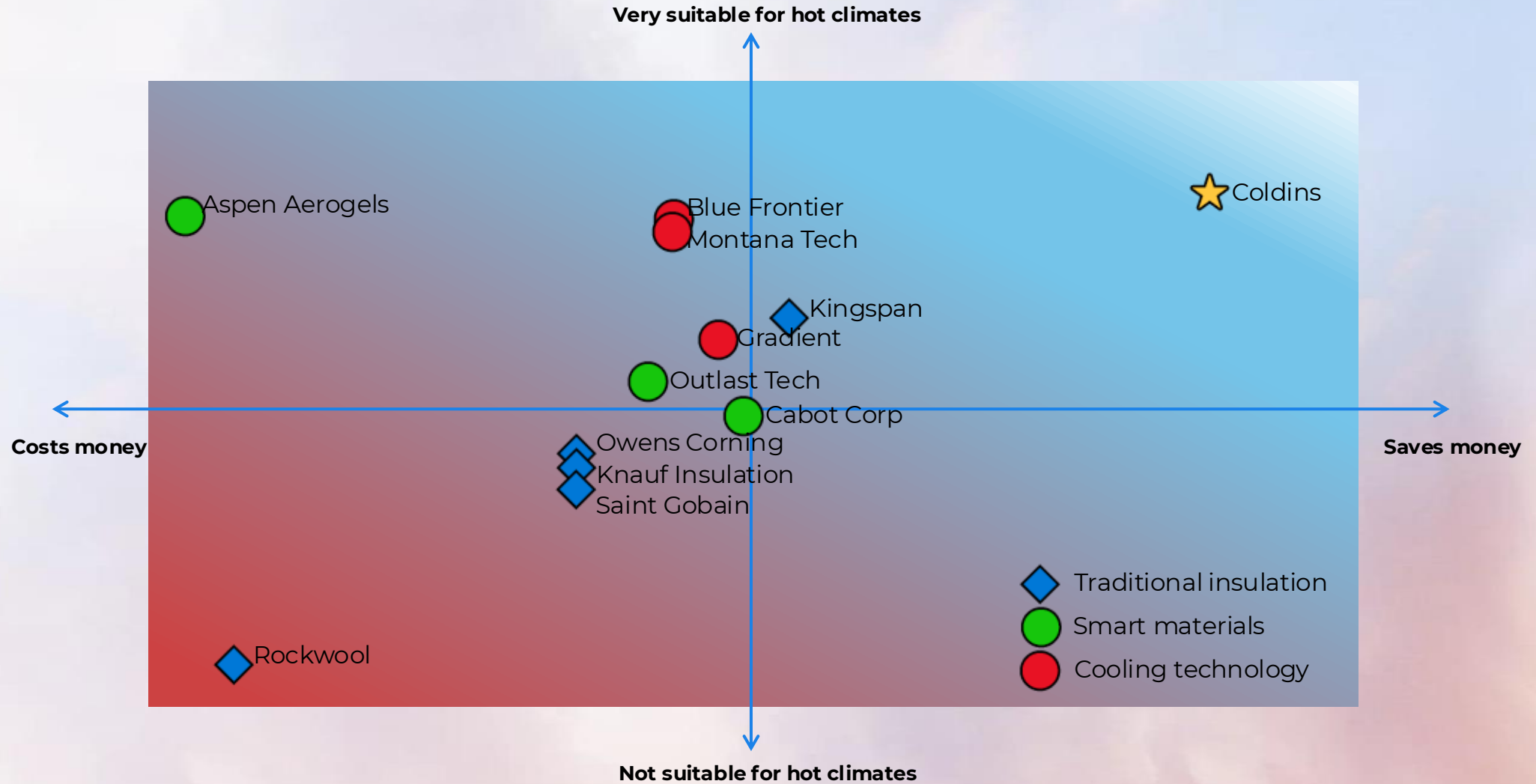
Shell
Exxon
BASF (green initiatives)
Dupont (sustainable solutions)
Braskem
Nature Works
Novamont
Corbion
Avantium
Metsä Spring

Alubond
Armacell (Ikan Inc.)
Holcim
Huntsman
Kingspan Group
Knauf
Owens Corning
Recticel
Rockwool
Saint-Gobain

DIY chains

Architects
Real estate developers
Data-centre operators
Private households
GCC governments
Hydroponic farming
Protein farming
Data-centre operators
Etc.

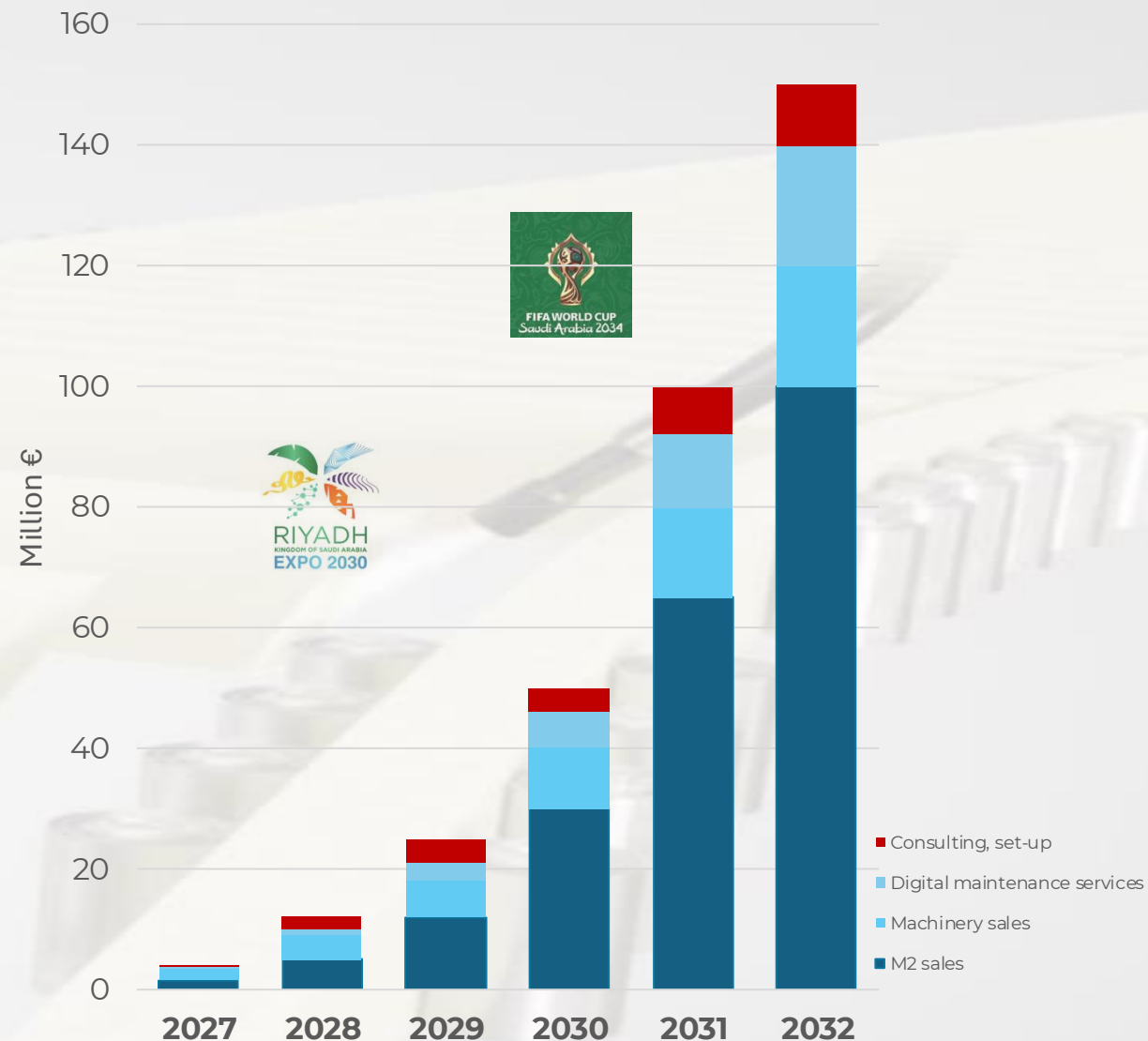
Competitive landscape



Scalable and profitable Business model

B2B insulation material Production-as-a-Service

	Traditional model	Coldins PaaS
Factory free production	✗ No	✓ Yes
Runs without owning machines	✗ No	✓ Yes
Capex need	✗ High	✓ Low
Revenue source	Product sales	Licensing + per-use fees
Scalability	Slow (asset tied)	Fast (partner driven)



Alliances and partnerships



Go-to-market

Previous and future milestones



Team



Ask 750K€

+

Network support with GCC region stakeholders in building sector



Why invest now

Massive market with regulatory tailwinds

- Addressable market \$ 12 bln
- Strong policy support for energy efficiency
- GCC region building business is booming, with 2 world events in 2030 and 2034 in the area

Allocation 750K€

- | | |
|-------------------------------|-----|
| • Field experiment | 40% |
| • Panel production capability | 25% |
| • Business development | 25% |
| • Certification & compliance | 10% |