



**INDRESMAT®**  
INDUSTRIAL RESINS & MATERIALS

Barcelona (ES) – Geleen (NL)

Funded by



## Purpose:

Redefining the  
thermal envelope  
materials for  
energy-efficient  
and sustainable  
buildings.



# The lack of energy-efficiency in buildings is a major contributor to CO2 emissions (39%)

## Problem to solve:

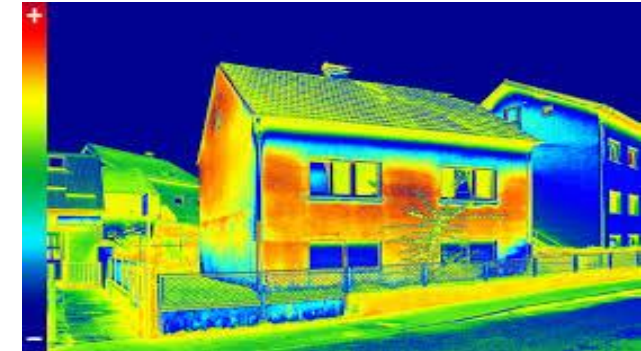
### **FREQUENCY**

*80% of existing buildings are not energy-efficient*



### **SEVERITY**

*Up to 70% of the energy-leaking can be caused by old or damaged windows*



### **URGENCY**

*35% of existing windows must be replaced within the next 8-10 years*



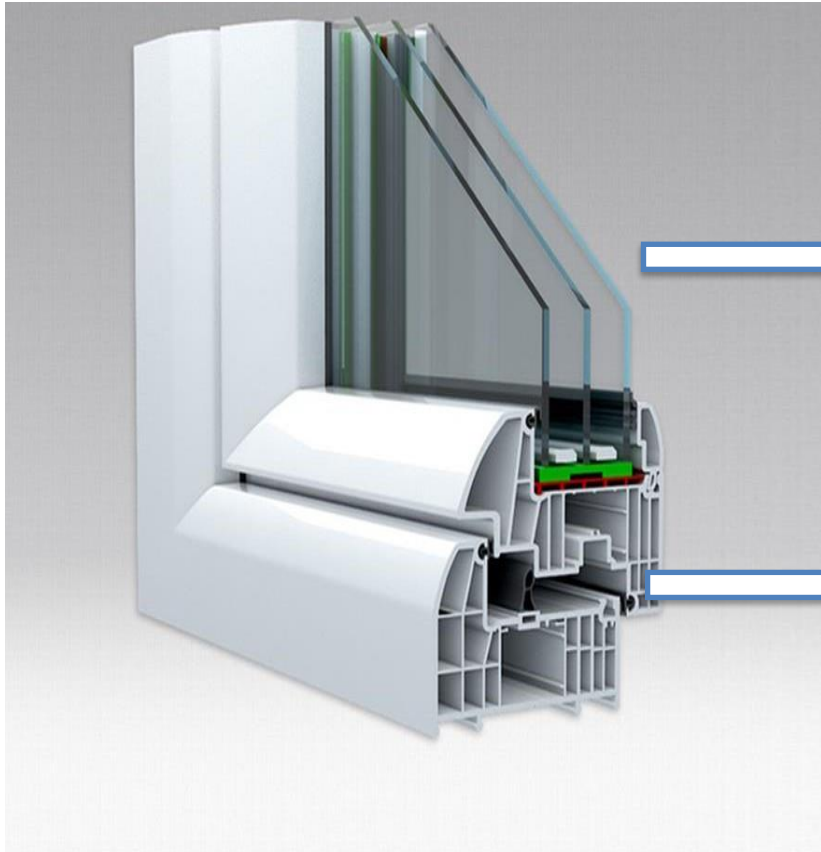
### **OPPORTUNITY**

*>70% energy-efficiency renovation actions are Windows replacement*



## Opportunity:

The frame is the most important and less energy-efficient component in the window



### *GLAZING RADIATION*

Triple glass	>0.5 W/m <sup>2</sup> K
Double glass	>1.0 W/m <sup>2</sup> K



### GLASS

**High Insulation**

### *PROFILE THERMAL TRANSMITTANCE*

PVC	>1.5 W/m <sup>2</sup> K
Aluminium	>2.2 W/m <sup>2</sup> K
Timber	>1.2 W/m <sup>2</sup> K



### FRAMES

**Low Insulation**





## Our solution:

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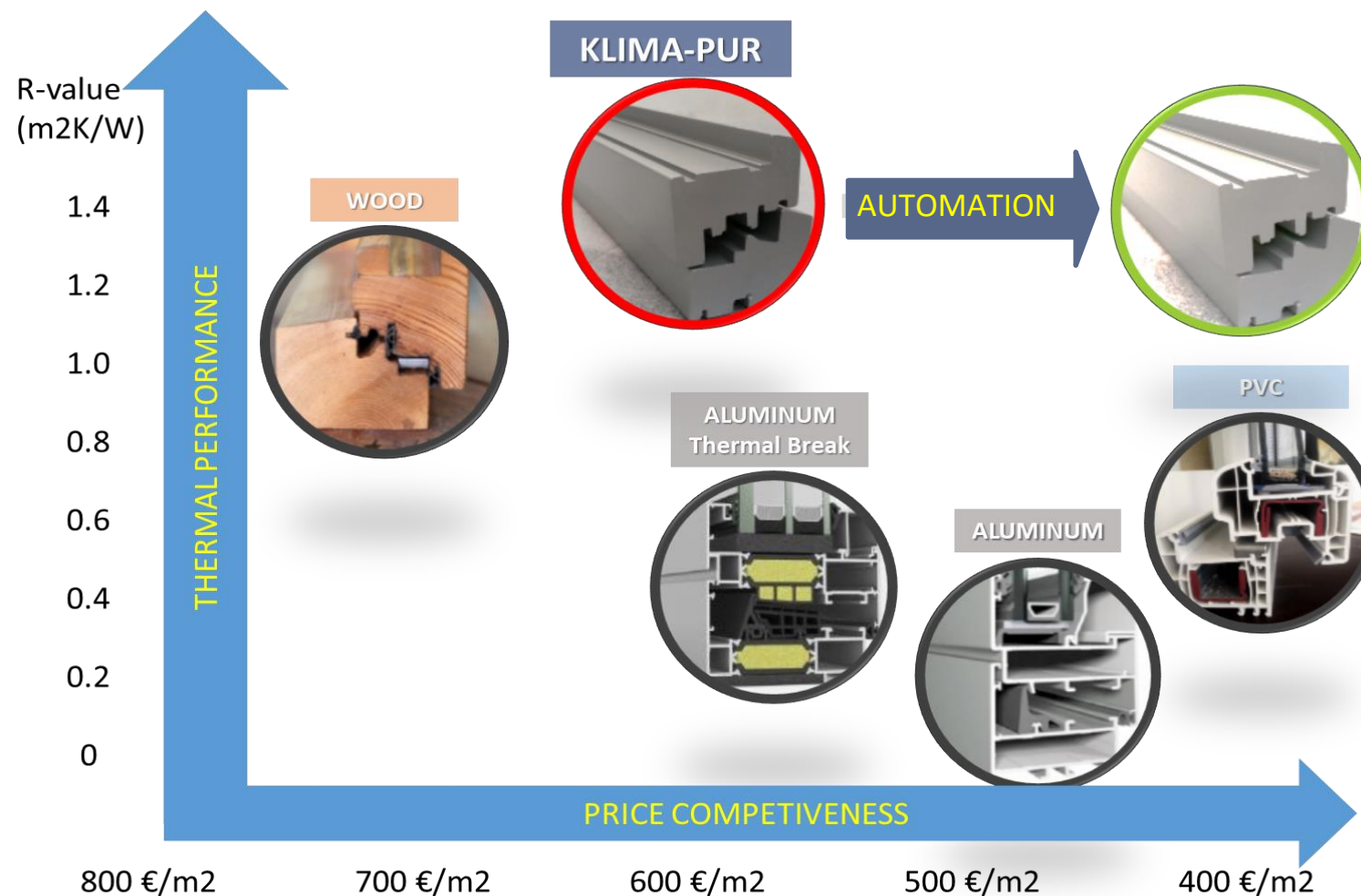
- ▶ **Energy Efficient** ( $U_f = 0.8 \text{ W/m}^2\text{K}$ )  
32% higher than best performing alternative (PVC)
- ▶ **Acoustic Damping** (-10 dB)  
55% better than best performing alternative (Timber)
- ▶ **Durable** (30-40 years)  
Similar or even longer lifespan than competitors
- ▶ **Lightweight** (400 kg/m<sup>3</sup>)  
35% lighter than lighter material (Aluminium)
- ▶ **Sustainable** (180 kgCO<sub>2</sub>/kg)  
Only 15% higher than Timber
- ▶ **Circular by design** (up to 100% recyclable)  
Single material and easy-to-repair/reuse/recycle

We created frames made from foamed **biobased Polyurethane**



## Market positioning:

KLIMA-PUR is a top performance material requiring price competitiveness & scalability



Funding needed to **scale up production** and **automate** the manufacturing process

**MARKET LEADERS** (and future customers)

**Pella**

**deceuninck**

**Kömmering**  
TODAY FOR TOMORROW



**REHAU**

**MARVIN**



**Andersen**



**PRIMO**

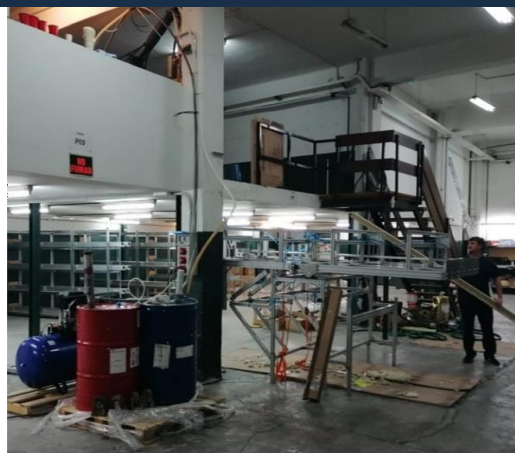
**JELD-WEN**  
WINDOWS & DOORS

## The way up to here:

Unique manufacturing technology for unique product in the market



**Prototyping**  
(Pre-market product)



**Industrialization**  
(Manufacturing Pilot Plant)



**Product market fit (B2C)**  
(End users as customers)



**Demo Pilots (B2B)**  
(Architects as customers)



**Technology Automation**  
(Window producers as customers)

## MILESTONES



**-TARGET-**  
Large scale  
productivity



2019

2020

2021

2022

2023

2024

2025



## IP Strategy:

# 3 Levels of industrial protection for a unique disruptive technology concept

### MANUFACTURING TECHNOLOGY



*Molding process*

**PATENT (EU granted,  
pending UK, US, CAN, CN, JP, KR)**

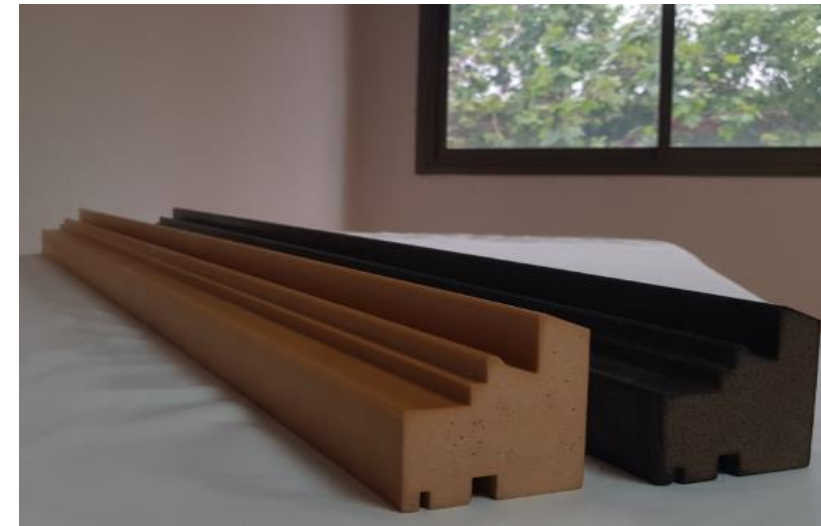
### PRODUCT



*Product design*

**TRADEMARK (EU granted)  
INDUSTRIAL DESIGN (pending)**

### MATERIAL



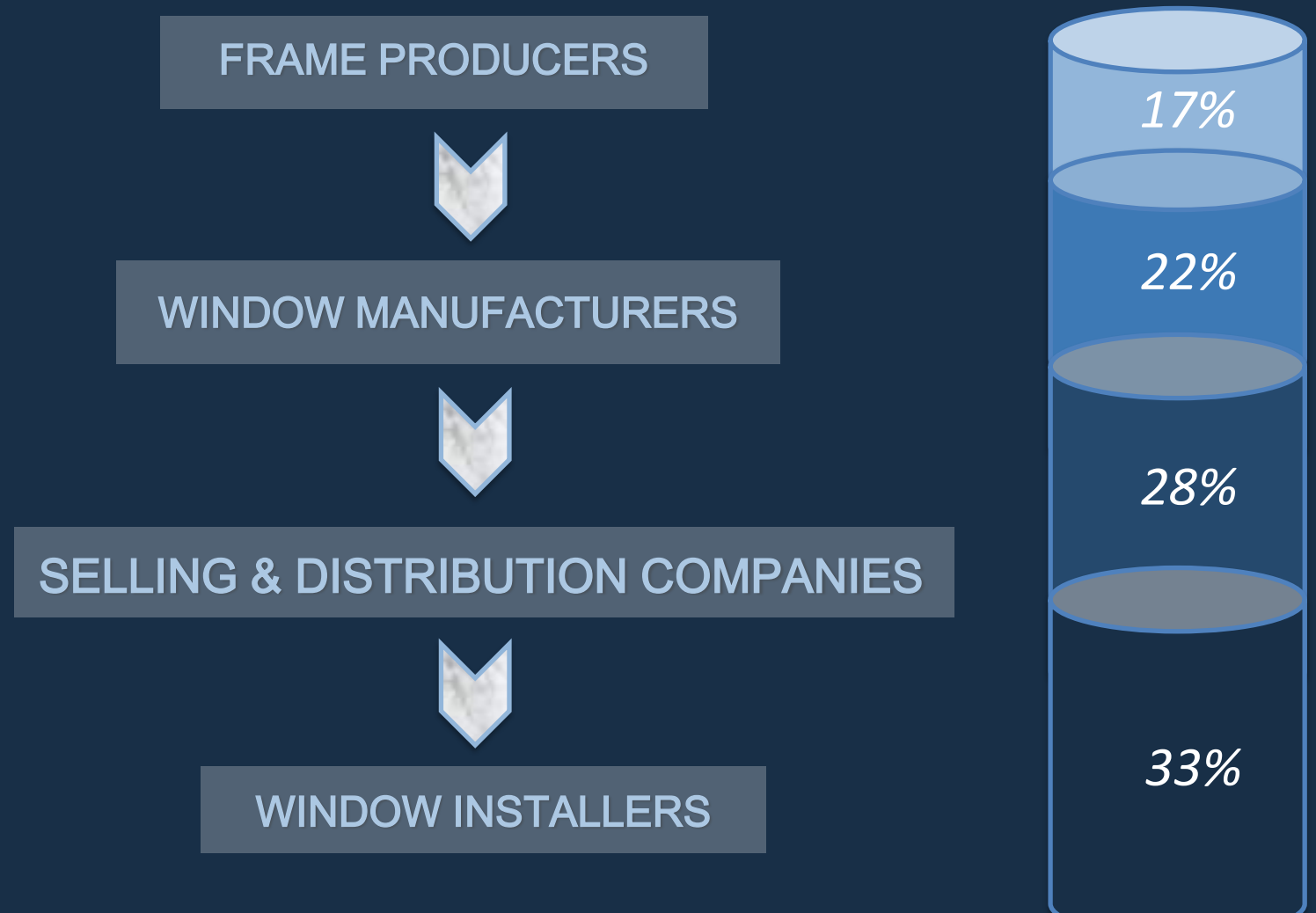
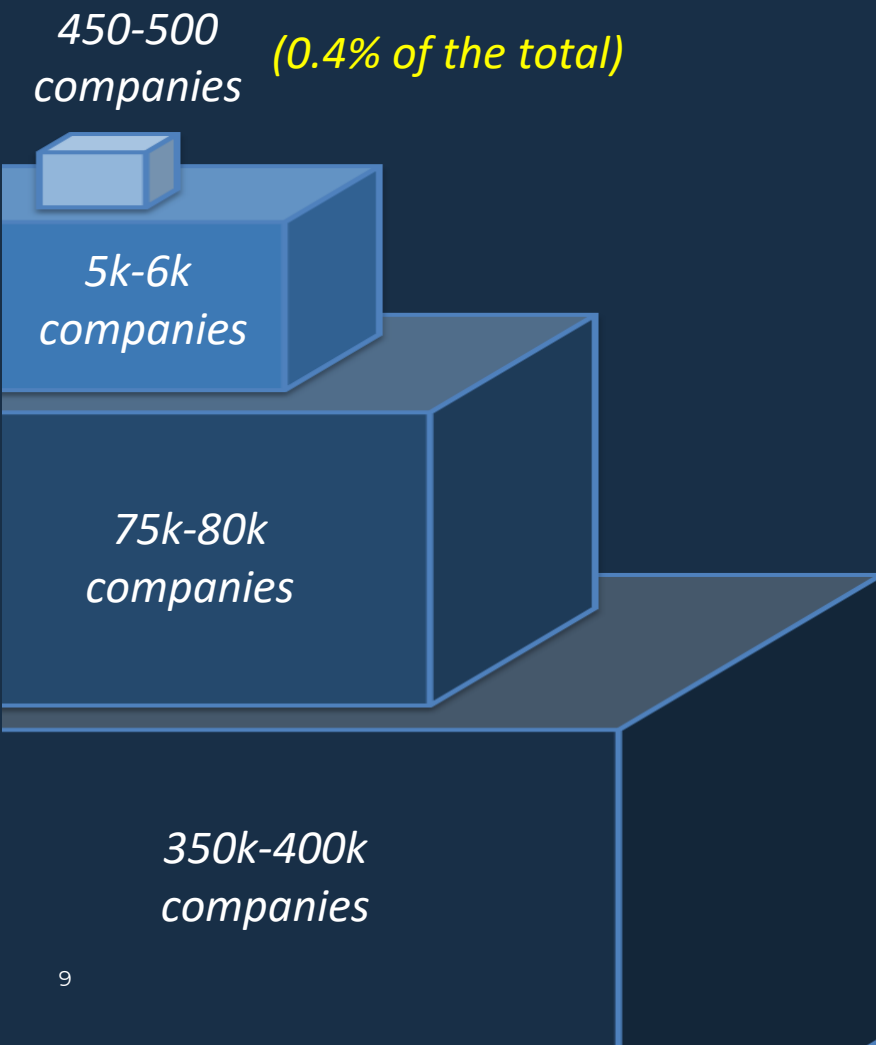
*BioPUR formulations  
(60-70% biobased)*

**TRADE SECRET**



## Value chain:

This is a highly fragmented market where no company has 2-digit market share



## Market Strategy:

### ENTRY STRATEGY

**B2C Customers**

**HOUSES & BUILDING  
RENOVATIONS**  
Local market (ES, NL)

**Market traction &  
brand awareness**



### SALES OF **WINDOWS**

(Conditioned by low scale frame production)

### DEPLOYMENT STRATEGY

**B2B Customers**

**WINDOW  
MANUFACTURERS**  
European market

**Internationalization &  
network expansion**

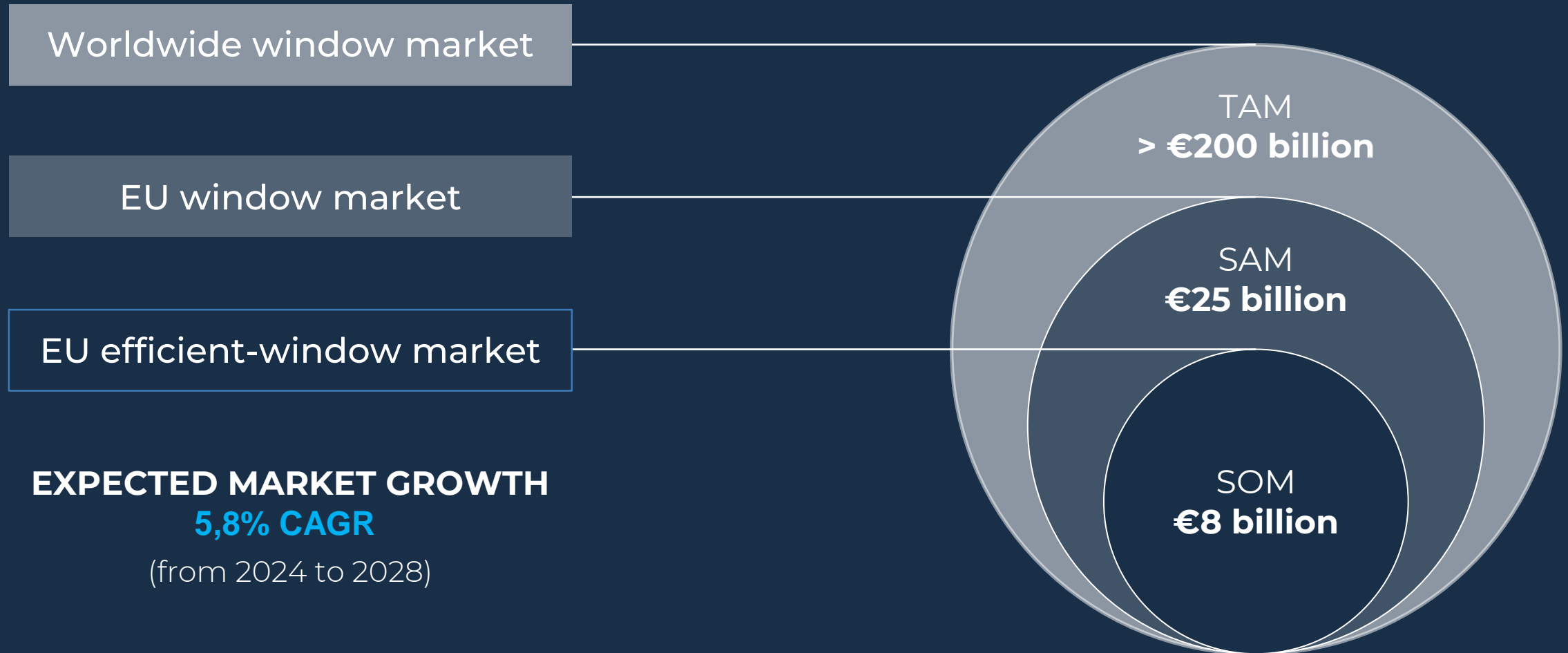


### SALES OF **FRAMES**

(Large scale frame production needed)

## Market size:

The Window market is hot, and is expected to grow to €200bn





## Sales Forecast:

(Total Sales in k€)

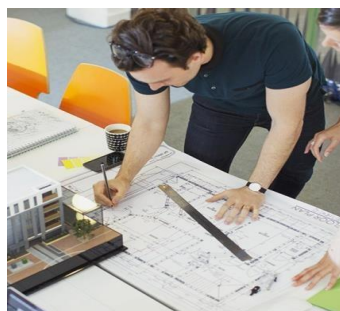
The technology automation is key for business upscaling and international deployment

### SALES OF WINDOWS



#### END USERS

5-25k€ per deal



#### ARCHITECS

25-150k€ per deal

320

2024

680

2025

1.580

2026

### SALES OF WINDOWS & FRAMES



#### WINDOWS PRODUCERS

100-300k€ per deal

4.535

2027

9.600

2028

26.800

2029

### TECHNOLOGY SUPPLY

126.001

59.921

2030

94.064

2031

2032

Pilot demo plant (1.200 m2)



1 Automated plant (15,000 m2)



5-8 Licensed customers

AUTOMATION = Scalability + Price competitiveness

## Our Finance Request:

We request 3M€ to 1 or 2 co-investors to lead a **8.5M€ round** with the EIC

### WE NEED

- ☐ EU funding: **2.5 M€** (EIC Accelerator grant)
- 3 M€** (EIC Accelerator equity)
- ☐ Investors: **3 M€** (1-2 leading co-investors)

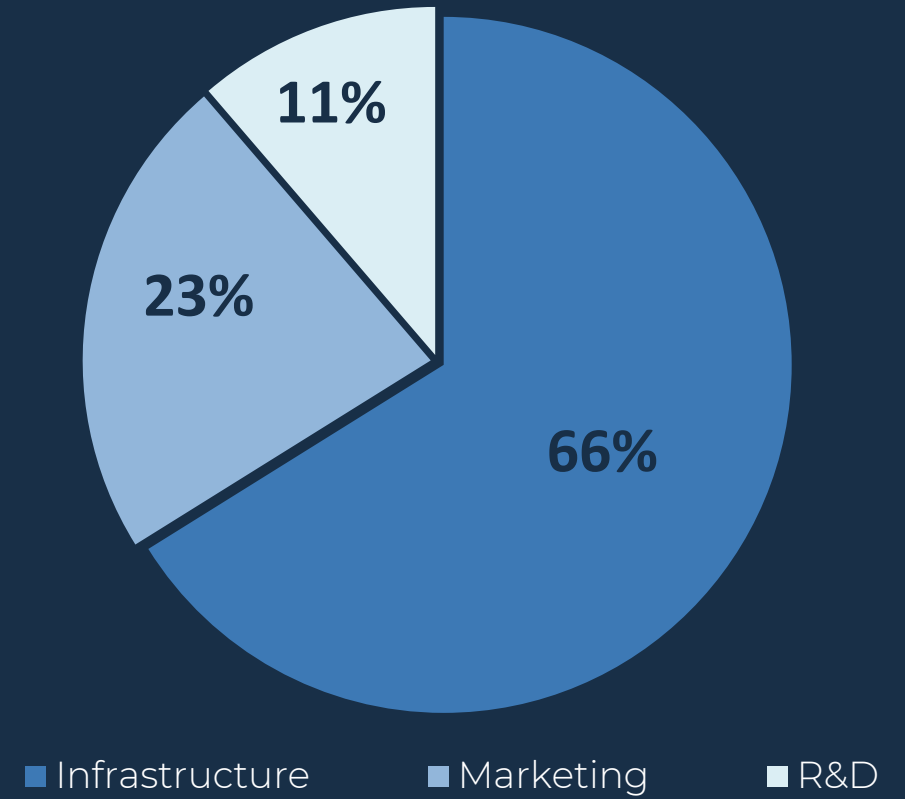
### WE OFFER

- ☐ Shares in exchange: **Up to 30-35% shares**
- ☐ Exit plan: **To negotiate**

### ALREADY RAISED

- ☐ EU Grants: **3.6 M€**

Use of funds split



## Core Team & Ecosystem:

Expertise, High Education and prominent collaborative ecosystem

### EXECUTIVE BOARD



**Pablo (CEO)**  
MSc Chemist  
Company vision



**Vincent (CBO)**  
PhD Chemist  
Market explorer



**Angela (COO)**  
Engineer  
Supply chain



**Ulises (CFO)**  
PhD Economist  
Financial Strategy



**Enrique (Accountant)**  
Accountant  
Financial administration



**Guzide (R&D)**  
PhD Architect  
Project Manager



**Ashwin (R&D)**  
PhD Chemist  
Materials expert



**Joan (R&D)**  
Technician  
Applications expert

### CORE TEAM

### CHEMICAL PARTNERS



### TECHNOLOGIC PARTNERS



### INTERESTED WINDOW MANUFACTURERS





Redefining the  
thermal envelope  
materials for  
Sustainable Nearly  
Zero Energy  
Buildings.



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