



# José Méndez-Andino

EVP & Chief Research and Development Officer

# Innovation to Strengthen Core and Provide New Solutions

What you will hear today

1

## Transformative material and process innovation

fueled by a fundamental understanding of our materials, processes and products

2

## Our customer-centered innovation

delivers unique product solutions

3

## Proven capabilities and robust innovation process

enables repeatable success and value creation

# Innovation Based on Strong Science and Customer Insight

Unique materials, process, and product capabilities create differentiated value

## Our Global Team

~450 researchers

11 technology centers

## Our Focus

**Better materials**

for today,

**new functionality**

for tomorrow

## Materials and Process Innovation

Strong science fundamentals create meaningful, defensible positions on product platforms

### Industry-Leading Materials/Process

- Glass fibers
- Asphalt coating technology
- Formaldehyde-free binders
- Low-global warming potential blowing agents
- Furnace performance
- Advanced process control technology



## Customer-Centered Product and Systems Innovation

Human-centered design methodologies deliver winning product innovations with superior functionality and performance

### Market-Leading Functionality

- Thermal
- Fire
- Acoustics
- Moisture
- Structural

# Transformative Material and Process Innovation

Our **fundamental understanding** of our materials, processes and products unleash **margin enhancement opportunities today** and capital-efficient **growth into the future**



## Asphalt Coating Technology

- **Innovative performance features and benefits** in shingles, underlayments, and specialty asphalt
- **Improved network cost and supply advantages** through vertical integration and blending capabilities

**Material science + vertical integration = cost and performance competitive advantage**



## PINK Next Gen™ Fiberglas™

- **23% faster installation**, less dust, improved indoor comfort and sound reduction.<sup>1</sup>
- Improved density efficiency for a **lower cost network**

**New binder + fiber technologies = capital-efficient capacity gains vs. competition**



## Furnace Life

- Consistent **double-digit gains** in throughput, asset life and energy efficiency over the last decade
- **Lowest energy intensity** per pound of insulation glass

**Innovative refractory materials + advanced modeling + process controls = increased furnace performance**

# Customer-Centered Product Innovation Leader

Our material innovations start by leveraging **customer insights** in combination with our **distinctive technical capabilities** to deliver solutions **unique to Owens Corning** – 40+ product launches in 2021



## FOAMULAR® NGX

- Low Global Warming Potential blowing agent delivers **>80% reduction in embodied carbon of the product<sup>1</sup>**
- **Excellent market response** with strong momentum into 2022

**New materials + process change = 1st to market with a customer winning solution**



## Duration® Series Shingle

- **SureNail® technology** improves nail blow-through resistance up to 9x; popular TruDefinition® colors
- Cumulative **annual sales growth of 23%** over the past 3 years<sup>2</sup>

**Customer knowledge + innovative functionality = differentiated roofing solutions**



## FIBERGLAS™ Rebar

- **Up to 7X lighter than steel** – improves ease of handling, for labor (**50% faster installation**) and freight savings<sup>3</sup>
- **Exponential growth in annual sales** over past 3 years

**Human-centered design + material substitution = functionality that delivers labor savings**



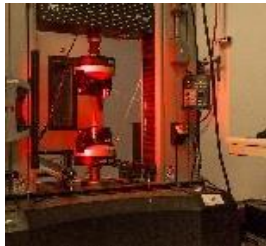
# Proven Capabilities to Grow Our Core and Expand Our Addressable Markets

Our robust **R&D management systems** allow for **repeatable human-centered innovation** across product categories and market segments



## Define & Discover

- Gain deep understanding of customer wants and needs in terms of **new functionality**, performance and overall product experience.
- Scope the innovations needed to **lead the industry** and win in the marketplace



## Develop

- **Human-centered** product and process designs
- Key invention development and **Intellectual Property protection**



## Deliver

- **Stage-gate process** for initiative qualification and implementation (including TPM Early Management)
- Go-to-market acceleration via strong **cross-functional and customer collaborations**