



NEXOFAB

ENERGETIC PREFAB ELEMENTS



“Unlock the future of exo-energetic modular prefab construction with cutting-edge Nexo-technology™ and our sustainable building solutions.”

Investment highlights



- **Strong Market Dynamics**

Positioned at the intersection of deep tech and climate tech, NEXOFAB™ addresses growing global demand for sustainable and advanced prefab construction solutions, unlocking significant market potential.



- **Performing and Scalable Product & Business Model**

Designed for scalability, our advanced composite and energetic prefab solutions are adaptable to diverse construction needs, enabling rapid growth and market penetration.



- **Technology - validation with Proven Use Cases**

Our technology is up to a proven concept stage, demonstrated across multiple applications and ready to transition into live demonstrators.



- **Strong Sales Strategy**

A results-driven sales approach ensures effective market entry and sustained revenue growth, with a focus on high-value partnerships and global scaling opportunities.



- **Highly Profitable Business Model**

Our cost-efficient production process and value-driven approach deliver high margins and a clear path to long-term profitability.



- **Talented and Committed Team**

A multidisciplinary team of experts, deeply committed to revolutionizing the construction industry with cutting-edge solutions.



Key Considerations

- **Technological Validation (PoC)**

Our technology has been proven at a lab scale and is patent pending, marking a significant step towards protection and commercialization.

- **First-Mover Advantage**

NEXOFAB™ is a pioneer in a rapidly changing market, ready to capitalize on emerging opportunities.

- **Market Trend**

With the growing focus on ESG and ecological urgency, we are well-positioned to meet the evolving demands of the built environment.

NEXOFAB™ is seeking **EUR 2,50 million** in its first funding round, to accelerate growth and scale key areas of the business, including:

- **Organizational Development:** Laying a solid foundation to drive future growth, including addressing competence gaps.
- **Securing Patents:** Protecting our innovative technology and intellectual property.
- **Conceptual Approvals:** Advancing key validations to prepare for live environment demonstrations.
- **Product Development:** Refining and scaling our hybrid* prefab solution for market readiness, while advancing the development of our fully integrated technology.
- **Sales and Market Expansion:** Penetrating new markets and building strategic partnerships.

This funding will enable us to transition **from proven laboratory-scale technology to full-scale deployment** (TRL4 up to TRL8), driving innovation and sustainability in the prefab and construction industries.

- **Seed Stage**

Moving from concept to live demonstrations, ready for market validation and global impact.

- **Future-Focused Impact**

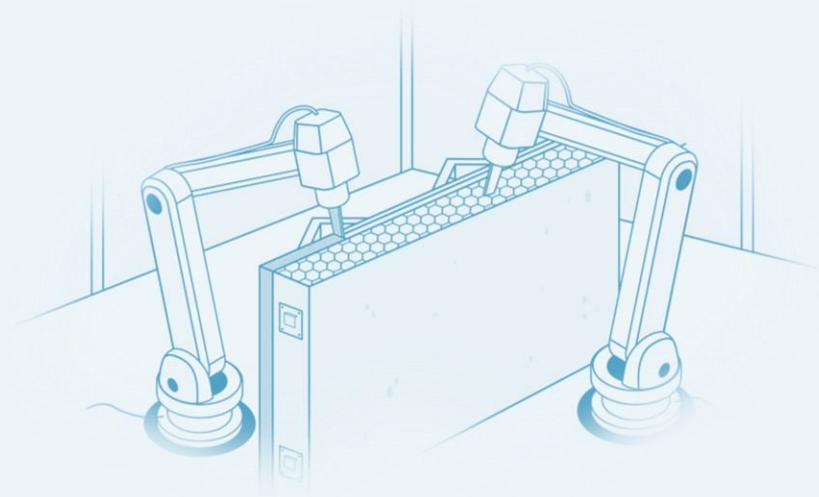
Leading the way in construction, energy, and climate innovation, sectors crucial for a sustainable future.

- **Adaptability-Focused**

Focusing on adaptability: housing, hospitals, schools, and more, delivering fast, cost-efficient, and sustainable solutions, both temporary and permanent.



Agenda



- I. Company Overview
- II. Product Description
- III. Tech Development
- IV. Market Analysis
- V. Business Plan



I. Company Overview



*"We are driving the transformation of cleantech, construction & energy,
... an exceptional opportunity to support an innovative and impactful
revolution in the built environment."*

Company Overview

Company at the Forefront of Innovation

NEXOFAB™ is a **Deep Tech Start-Up Venture** dedicated to developing scalable and transformative solutions in:

- **PropTech**
- **Circular Economy**
- **Clean Technology**
- **Renewable Energy**
- **Modular & Prefab Construction**
- **Sustainable Infrastructure**
- **Industry 4.0**

Our mission is to **disrupt traditional construction** industries and transform the way global challenges, such as sustainability, resource efficiency, and climate impact, are addressed, with a strong focus on driving **innovation** in the built environment.



NEXOFAB Europe B.V.

Holding company founded Q1_2024



Status: Seed stage



Employees: 8



Achievements

- **Raised:** ca. > €700.000,00,-
- **Business Awards:** Various nominations ongoing
 - **Sales:** Pré-sales ongoing
- **Publications:** > 540 publications in worldwide specialized press
- **Patents / IP:** > 8 patents pending

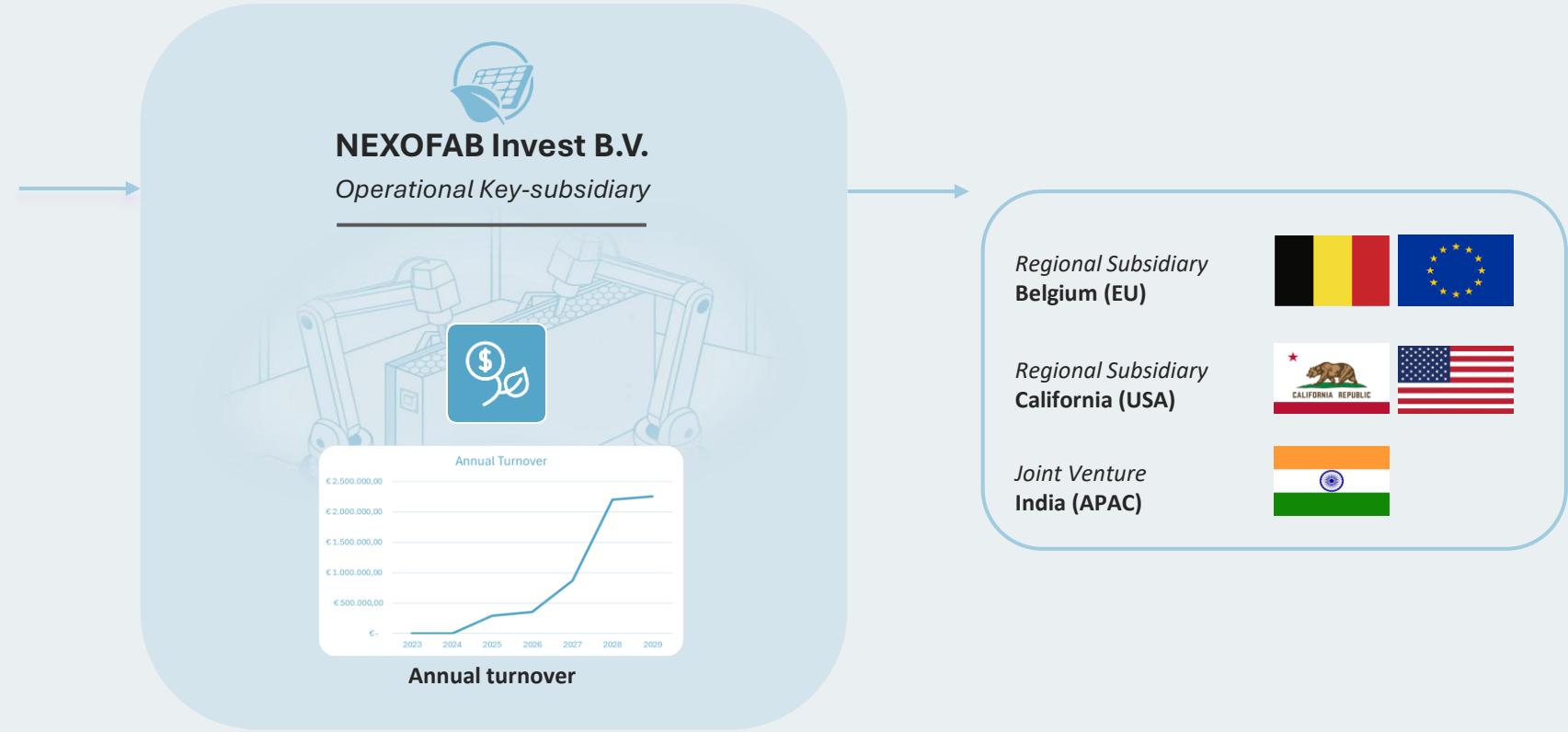


Company Overview

Seed Funding

1st funding round € 2,50 M

- This investment will primarily fund the establishment of **NEXOFAB Invest BV**, a key entity (subsidiary) for driving operations.
- The focus will be on:
 - **R&D and Production:** Developing hybrid demonstrators and leveraging fixed assets.
 - **Collaborations:** Supporting third-party projects and partnerships.
 - **Global Expansion:** Establishing the first strategic operational subsidiaries: (EU) Belgium and the USA (California).
- This initiative positions us to attract global partners, including lessees, joint ventures, and future subsidiaries under **NEXOFAB Invest BV**.



Company Overview

Funding Proposal for NEXOFAB Invest

- Funding Request:** EUR 2.50 million (1st Seed Round)
- Equity Proposal:** To be discussed
- Company Nominal Share Value:** EUR 25.00 million
- Total Funding Rounds Anticipated:** Approximately 2 or 3 rounds
- Pre-Money Valuation:** EUR 25.00 million
- Board Structure:** Core Team + External Advisory Board
- Board Representation Proposal:** Observer role and/or Supervisory Board position
- Next Funding Round:** Expected in 2026-2027 (>18-24 months)
- Current Monthly Burn Rate:** EUR 62,000

Summary

We are seeking an investment of €2.50 million with equity participation in NEXOFAB Invest (to be established).

Structure

The proposal includes offering direct equity under agreed equity terms as outlined in the Shareholders Agreement.

Founders NEXOFAB Europe BV (Holding)

Vera Heens (Co-Founder) and Jan Pee (Co-Founder, HANNLIES BV) have personally invested their wealth, expertise, and time to drive the company's growth and innovation.

Corporate governance

The investment entails equity participation in NEXOFAB Invest, the key-subsidiary company, adhering to strong corporate governance principles.

FINANCIALS NEXOFAB INVEST	2024F	2025F	2026F	2027F	2028F	2029F
Sales	0M€	0M €	8,2M €	16,2M €	19,8M €	23,4M €
OPEX	0M €	1,3M €	8,3M €	15,2M €	17,5M €	17,5M €
EBITDA	- 0,7M €	-1,0 €	0,4M €	3,2M €	4,7M €	8,5M €
Capex	0M €	5,1M €	0M€	2,5M €	5M €	5M €
Headcount	8	11	13	14	15	15
IRR	10%	Exit year	2030	Valuation	5,0M €	
Potential Acquirers		Justification				
<i>We have not defined an M&A strategy, but globally, large companies may be interested in keeping us off the market and/or acquiring us due to our deep tech. status.</i>						
NEXOFAB Europe BV	Investor(s)					→
80%	20%	Seed				Series A/B/...



Company Overview

Exit Strategy for Investor Relations

- Our exit strategy is designed to align with investor goals, ensuring a clear pathway to realizing returns while supporting the long-term vision of NEXOFAB.
- Key components include:
 - **IPO (Initial Public Offering):** Positioning NEXOFAB for a public listing to unlock maximum value and liquidity for investors.
 - **Acquisition by Strategic Partners:** Exploring opportunities for acquisition by larger industry players or strategic partners seeking to expand into our market segments.
 - **Share Buyback Programs:** Providing an option for investors to sell shares back to the company or key stakeholders at predefined milestones.
 - **Secondary Market Transactions:** Enabling investors to sell their equity to third parties or new investors during subsequent funding rounds.
- Ensuring a flexible and investor-friendly approach, delivering robust returns while fostering sustainable growth.



Company Overview

The People Behind the Deep Tech Venture



Jan Pee | Co-Founder & C.E.O.

MSc in Civil Engineering, MBA in Economics (JKU Linz), BSc Real Estate (Syntra-Leuven)

- Construction & Infra Industry Expert
- Technical Engineering Expert
- Prefab & Modular Construction Expert
- Precast Industry Expert
- Façade Closure Expert
- Strategic Leadership
- Innovative Product Development
- International Market Expansion
- Commercial Operations & Sales
- Business Development Expert



Ronald Grefhorst | C.T.O.

MSc in Aerospace Engineering (TU Delft)

- Expert in Fiber-Reinforced Polymers (FRP)
- Leading Research Projects
- Technical Design Lead Experience
- Construction & Infra Expert
- Material Science and Practical Application



Jean André | International Business Development Director

BSc Sciences & Mathematics, Electronics and Computer Science (Bs Antwerp)

- International Business Development Expertise
- International Electronics Distribution Experience
- Transition to Wood Frame Construction
- Strategic Management Support
- Expertise in Go-to-Market Strategies
- Asset to Global Business Development



Jos Van Bedts | Financial Advisor / Accountant

Mathematics, BAcc, UCLL, PgCert IAS/IFRS, EHSAL, ACLT, FHS Brussels, CPD (Brussels)

- Financial Management Expertise
- Key Role in Financial Oversight
- Strategic Financial Planning and Investment
- International Experience in Deep Tech Ventures
- Proven Track Record in Risk and Opportunity Management



Company Overview

The People Behind the Deep Tech Venture



Fabrice De Neve | CAD Design

BSc Industrial Engineering & CAD/REVIT Design (Bs Aalst)

- Technical Engineering Expert
- Expert in Advanced Design Software (CAD)
- Leadership in Design Automation
- Oversight of Design Evolution
- Critical Role in Documentation and Integration (BIM)



Lucija Stepinac | Tech Officer LSAM

PhD Additive Manufacturing of Large-Scale Load-Bearing Composite Structures & MSc Structural Engineering (Univ. Zagreb & Univ. Lausanne)

- Expert in LSAM / FDM
- Leading Research Projects
- Technical Design Lead Experience
- Construction & Infra Expert
- Material Science and Practical Application



Joe Bachaalany | SVP Biz. Dev. USA

Master's Degree, Organizational Leadership & BSc Computer Science (Harvard Business School & Notre Dame Univ. Louaize (NDU))

- Expert in Business Development
- Organizational Leadership
- MBA Equivalent Program and experience.
- Business Transformation Management
- S&OP, CPG subject matter expert
- Project Delivery
- Technology Solutions Expert



Jari Oorts | Software Engineer

LBSc Computer Science (Antwerp)

- Expert in Generative AI
- Specialized in developing innovative generative AI models, including machine learning, neural networks, and natural language processing.
- Software Development Expert
- Skilled in the full software development lifecycle, building scalable and efficient applications using modern tools and technologies.
- Blockchain Software Engineer.
- Experienced in blockchain technology, smart contracts, and decentralized applications (dApps), driving secure and transparent digital solutions.



Company Overview

What We Do and How We Are Transforming the Future

Circular Model

Input	Process	Output
Post-consumer plastic waste	LSAM & Industry 4.0 integration	Prefabricated, energy-efficient construction elements

Dual-Level Sustainability

I. Environmental Impact

- Reduced reliance on virgin raw materials
- Efficient waste recycling
- Carbon sequestration integrated into materials
- Zero-waste production and lifecycle optimization

II. Functional Enhancements

- Enhanced embedded functionalities
- Energy generation via photovoltaic technology
- Smart living solutions with Energy Management Systems (EMS)
- Off-grid energy independence and distribution
- Durable, flexible, and modular construction elements



II. Product Description

I. The problem



“Our elements are the future of construction, designed with sustainable materials to set a new standard in modern building. By combining innovation, efficiency, and environmental responsibility.”

Product Description

The problem | Footprint vs Housing



**39% of CO₂ emissions
from construction industry**

- Depletion of virgin materials
- Reliance on critical raw materials (concrete/steel/wood)
- Limited reuse of traditional materials
- High environmental impact (CO₂ emissions)

Way forward?



**Growing need for affordable,
sustainable housing**

- Waste generated in production
- Low flexibility in design and use
- Low construction speed
- High energy consumption in use



Product Description

The problem | Challenges of Current Construction

I. Environmental Impact

- I. High CO₂ emissions (39% GCE)
- II. Resource depletion and excessive waste

II. Energy Challenges

- I. High energy demands
- II. Limited integration of renewable energy systems

III. Inefficiencies in Construction

- I. Long construction timelines
- II. Separate building layers and high transportation costs
- III. Labor shortages

IV. Limited Technology Adoption

- I. Minimal use of AI, IoT, and Industry 4.0 practices

V. Rising Costs

- I. Increasing construction costs
- II. Lack of affordable housing solutions

VI. Linear Waste Model

- I. "Take-make-dispose" approach with limited recycling

VII. Climate Resilience

- I. Structures poorly equipped for extreme weather

VIII. Transportation Dependency

- I. Heavy reliance on transporting raw materials
- II. High costs and emissions from transportation



Product Description

The Way Forward by Innovation

I. Low-Carbon Materials & Zero-Waste Processes

Transition to recycled, unsorted, and bio-based polymers
Implement advanced composites and zero-waste production

II. Net-Zero+ & Energy Efficiency

Design energy-efficient buildings with solar systems

III. Modular & Prefabricated Solutions

Use prefabricated systems with fully integrated utilities
Produce off-site to streamline efficiency

IV. Adoption of Industry 4.0

Invest in AI-driven planning, smart sensors, and robotics

V. Cost-Effective & Scalable Prefab Systems

Use recycled polymers and scalable prefab technologies

VI. Circular Economy Principles

Focus on reusable materials and modular designs for disassembly

VII. Climate-Resilient Structures

Create adaptable, weatherproof designs for extreme conditions

VIII. Localized Manufacturing

Establish distributed production hubs to reduce transportation needs



II. Product Description

I. The Solution | Composite Evolution



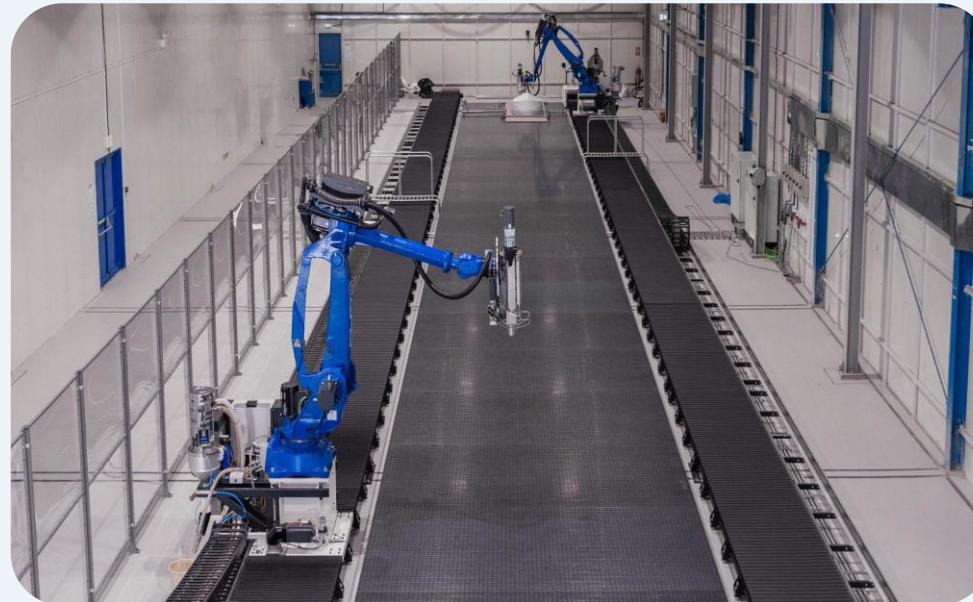
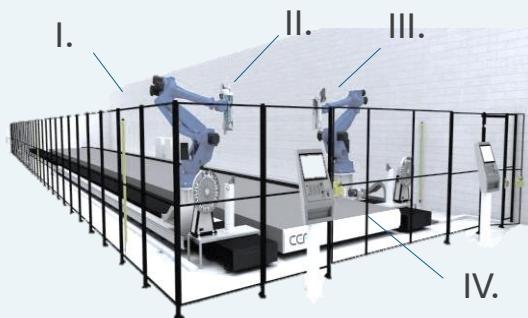
"The stone, wood & steel era is long gone, NEXOFAB™ is pioneering the future with advanced lightweight composite prefab solutions."

Product Description

The Solution | Industrial Progress in a Controlled Factory Setting

- **LSAM Technology**

- I. Large Scale Additive Manufacturing (LSAM / CFAM)
- II. Fused Deposition Modeling (FDM)
- III. 3DP Robotic Extrusion
- IV. Thermoforming Print Bed



Product Description

The Solution | Composition

- **Advanced Lightweight Composite**

- I. Unsorted Thermoplastic Waste (Unaligned Polymers)**

- I. Repurposing and transforming unsorted thermoplastic polymers (with unaligned matrices), recycled polymers, and bio-based polymers into advanced, high-performance (mechanical & thermal) meta-materials (composite).

- II. Revolutionary Thermal Insulation via CO₂ Sequestration***

- I. Utilizing captured carbon dioxide to produce high-efficiency insulation materials with reduced environmental impact.
 - I. *NSGIP (Nexo Simultaneous Gas Injection Process): A novel gas injection method for creating lightweight, high-strength composite insulation with precise material control.*



Thermoplastic Waste



Liquid CO₂



***Excluding Hybrid Versions:**
Hybrid designs utilizing chemically foamed, 3D-extruded insulation made from unaligned or/and recycled polymers.



Product Description

The Solution | Composition

- **Advanced Lightweight Composite**

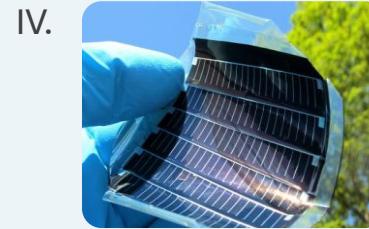
III. Innovative Structural Reinforcement (Crystalline Fiber)*

- I. Advanced crystalline fiber integration to enhance mechanical properties and structural integrity.
 - I. *NCFP (Nexo Continuous Fiber Process): A proprietary process that enables the continuous alignment and embedding of fibers, delivering superior load-bearing performance in composite materials.*



IV. Innovative Solar Cell-Integrated Façade System

- I. High-efficiency photovoltaic integration is achieved by combining high-performance solar cells with a design-specific recycled polymethyl methacrylate (rPMMA) protective outer layer. These components are seamlessly integrated and fused through advanced 3D printing technology to form the PIPV Façade Cladding System.



Blast Furnace Slag



Solar Cells

***Excluding Hybrid Versions:**
Hybrid designs utilizing pultruded GFRP beams (Fully Developed and Compliant with EN Standards).

Product Description

The Solution | Final Result

- **Nexo Prefab Technology**

- I. **Nexo Prefab Construction System (NPCS™)**

- I. Standardized prefabricated building elements for constructing, among other things, residential and commercial buildings.
 - II. Lightweight and durable eco-friendly components for contemporary architecture.

- II. **Nexo Prefab Infrastructure System (NPIS™)**

- I. Standardized prefabricated building elements for constructing various structures, including roads, sound barriers, pedestrian walkways, driveways, and bridges.
 - II. Lightweight and durable eco-friendly components for contemporary infrastructure.



I.



Product Description

The Solution | BIM Digital Prefabrication, Embedded Utilities & FIM

- **Unmatched Flexibility**

- I. A New Standard in Prefab Construction Innovation (BIM)**

- I. Our advanced production systems offer unmatched flexibility, enabling the seamless integration of all utilities: ‘pipelines, drainage, water supply, ventilation, heating, and electricity, ..’, directly and digitally (BIM) embedded into the prefab elements during manufacturing.

- II. Revolutionizing Utility Assembly (CAD-2-3DMF)**

- I. By embedding utilities at the factory stage, we drastically accelerate on-site assembly while significantly reducing material costs, waste and transportation. This approach minimizes construction errors, ensuring greater efficiency, reliability, longevity, and precision in every project.

- III. Fully Integrated, Smarter Prefab Solutions (FIM)**

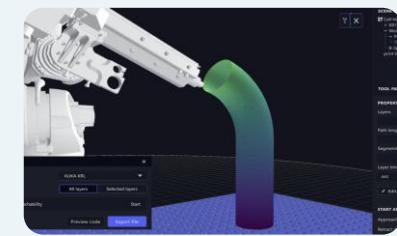
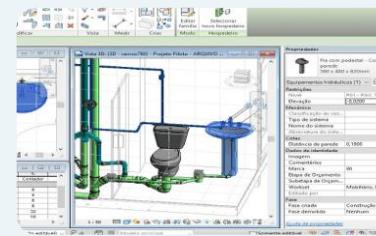
- I. We seamlessly transition from BIM (Building Information Modeling) to FIM (Facility Information Modeling), enabling real-time monitoring, smart living & energy management, and predictive maintenance. IoT sensors track building performance, while EMS optimizes energy use, ensuring durability, efficiency, and sustainability in our prefab solutions.



- I.



- II.



- III.



Product Description

The Solution | Assembly on the Construction-Site

- **Easily Assembly On-Site**

- I. **Easy Assembly & Connectivity**

- I. Our building systems are specifically engineered for easy and rapid assembly, as well as seamless utility connectivity, thanks to their lightweight and durable composite design and the integration of user-friendly connection boxes. This significantly reduces workload and minimizes the risk of errors during installation.

- II. **Standardized Elements**

- I. The standardized components contribute to faster project completion, with fewer disruptions due to weather conditions or unforeseen circumstances.

- III. **Accelerating Construction**

- I. Whether for residential or commercial projects, NEXOFAB's prefab and modular systems provide an efficient and reliable solution, significantly accelerating construction processes and reducing costs.



- I.



- I.

- I. We are actively exploring robotic assembly solutions for construction sites, leveraging our advanced lightweight composite prefab elements as the ideal enabler for this innovation. Furthermore, numerous organizations worldwide are driving advancements in this assembly technology.



II. Product Description

II. The Solution | Exo-Energetic Revolution



"Combining modular & prefab solutions with exo-renewable energy and gen. AI-driven technologies, we are building the future with smart, sustainable, and transformative constructions."

Product Description

The Solution | Exo-Energetic Prefab

- **Energetic Prefab Elements (EPE™)**

- I. **Addressing Global Key Challenges to the Max**

- I. Energetic Prefab Elements (EPE™) elevate our NPCS™ and NPIS™ to the forefront of energy independence, featuring cutting-edge integrated photovoltaic (PV) façade solutions.

- II. **Revolutionary in Every Aspect**

- I. They are designed to generate self-sustained renewable energy for off-grid applications, functioning as mini power plants within construction and ensuring reliable access to energy.

- III. **A complete end-to-end Solution**

- I. Lightweight, durable, and eco-friendly components efficiently harness solar power, making them the perfect choice for modern architectural designs focused on sustainability and total energy independence.



- **NexoPODS™ (NexoPODS):**

- Fully functional living pods, assembled off-site using NPCS™ or EPE™ volumetric pre-assembled in factory settings.



Product Description

The Solution | NexoSMART A.I. 

- **NexoSMART: Gen. AI Smart Living and Energy Management (Gen AI EMS)**

I. Revolutionizing Smart Living

- I. NexoSMART combines cutting-edge AI-driven technology with intuitive interfaces, including avatar, voice, and touch controls, to deliver unmatched convenience and adaptability. At its core is the Master e-Wall, a central hub integrating all utilities—lighting, electricity, heating, cooling, ventilation, energy storage, and more—powered by a smart energy system and seamlessly connected with advanced technology.

II. Powered by Advanced AI Software

- I. The next-generation AI software optimizes energy usage by adapting to occupant habits and preferences, ensuring precise indoor temperature control and efficient energy distribution across devices for maximum comfort with minimal waste. Wall-embedded touch controls complement voice and avatar interfaces, allowing effortless management of all smart living aspects, from adjusting lighting to controlling appliances and indoor climate.

III. A Fully Integrated, Sustainable Solution

- I. NexoSMART and the Master e-Wall simplify installation, enhance energy efficiency, and reduce operational costs. Together, they form the foundation of sustainable, intelligent, and future-ready prefab construction, setting a new benchmark for modern living.



Product Description

The Solution | NexoGRID

- **NexoGRID: Gen. AI-Driven Network Optimization & Energy Storage**

I. NexoGRID delivers an Innovative Solution

- I. Delivering an integrated solution for managing and optimizing energy surpluses including storage. This advanced software automatically and efficiently directs excess energy to both private and public networks.

II. Generative AI-driven Technology

- I. NexoGRID analyzes real-time energy generation and consumption, intelligently distributing surplus energy to the most suitable network. Whether sharing energy within a local community or feeding it back to a public grid, NexoGRID ensures maximum utilization of available energy.

III. The Dynamic Approach

- I. This approach not only reduces waste but also contributes to a more stable and sustainable energy grid. With its intuitive interface, users gain full control and visibility over their energy flows, leading to cost savings and a greener future.
- II. NexoGRID seamlessly connects energy, technology, and networks into one powerful solution.



Product Description

The Solution | The Product Recap

Nexo Prefab Construction & Infra System (NPCS™ & NPIS™)

- Shift to Low-Carbon Materials
 - Waste & Recycled Thermoplastic Polymers
 - Industrial Furnace Slag
 - CO₂ Capture and Storage
- Cost-Efficient Materials
- Zero-Waste & Cost-Efficient Production
- Lightweight & Durable
- Energy-Efficient Buildings
- Modular & Prefabricated Systems
- Fully Integrated & Flexible Design
- Industry 4.0 Solution
- Circular Economy
- Climate-Resilient Structures
- Localized Production



Energetic Prefab Elements (EPE™)

- Renewable Energy Generating & Net-Zero+ Efficient Nexo Prefab Construction & Infra System

NexoSMART (NS™)

- Smart Living & Energy Management (AI)



NexoGRID (NG™)

- Off-Grid Application (AI)
- Energy Surplus Distribution



Product Description

The Solution | Perspectives by Redefining the Future

- **NexoWIRE | NexoINDUCTION | NexoMAGNETICS | NexoLIGHT | ...**

- I. A forward-thinking vision that revolutionizes infrastructure by integrating wiring and energy pathways directly into systems through advanced metal printing technology.
- II. This approach not only enables the creation of energy grids and networks but also allows these pathways to support wireless energy transfer, inductive charging, magnetism, and lighting circuits.
- III. By embedding multifunctional printed networks, NEXOFAB redefines connectivity and energy management, paving the way for seamless integration of cutting-edge technologies into future living spaces and infrastructure.
- IV. This innovative vision ensures maximum efficiency, adaptability, and sustainability in modern systems.



III. Tech Development

- I. Hybrid System*
- II. Fully Advanced System



"Evolving from hybrid to fully advanced, a sustainable, innovative, and future-ready building system that is clean, flexible, and built to support future generations endlessly."

Tech Development

Hybrid system* | Work Plan Structure

- **Key Technical Milestones**

- I. **TRL 4 (Months 1-3): Refinement of Hybrid Technology**
 - I. Objective: Develop and optimize design, material composition, and LSAM digitalization, including print strategies, CAD conversion, layout, and layer build-up. Establish R&D&I operational fixed assets to support innovation.
- II. **TRL 5A (Months 4-6): Small-Scale Testing**
 - I. Objective: Validate design, material composition, and production processes through small-scale demo elements, ensuring technical feasibility and performance consistency.
- III. **TRL 5B (Months 7-10): Full-Scale Testing**
 - I. Objective: Assess full-scale mechanical, thermal, and environmental performance under operational conditions, ensuring scalability and regulatory compliance.
- IV. **TRL 6 (Months 10-14): Prototype Testing**
 - I. Objective: Demonstrate system integration in controlled environments, validating the hybrid prefab system's technical, structural, and functional feasibility before real-world deployment.
- V. **TRL 7 (Months 14-18): Live Testing in Three Regions**
 - I. Objective: Validate real-world performance through strategically deployed test dwellings:
 - I. Flanders (120m², two floors) - United States (80m² tiny house, dual-use) - India (80m² tiny house, dual-use)
 - II. Evaluation Criteria:
 - I. Structural integrity - Energy efficiency & insulation performance - Solar energy production & sustainability metrics
 - III. User experience & environmental adaptability
 - IV. Engage stakeholders and industry partners to gather critical feedback and expand international partnerships for market entry.
- VI. **TRL 8 (Months 18-24): Market Entry & Certification**
 - I. Objective: Finalize design optimization, certification, and regulatory compliance to support full-scale commercialization.
 - II. Secure intellectual property (IP), patents, and licensing to establish a market-ready, scalable hybrid prefab solution.



nexo technology

Nexo-Technology™ combines proven technologies, with our hybrid version firmly established as a validated foundation at Technology Readiness Level 4 (TRL 4 – approved at lab scale).

This hybrid version is on track for global market introduction within 18 months, while the development of our more advanced Nexo-Technology™ progresses in parallel.

<https://www.voxelmatters.com/researchers-replace-steel-floors-with-3d-printing/>



Tech Development

Fully Advanced System | Work Plan Structure

- **Highlights Hybrid vs. Fully Advanced**

- I. **Hybrid Prefab System (24 months)**

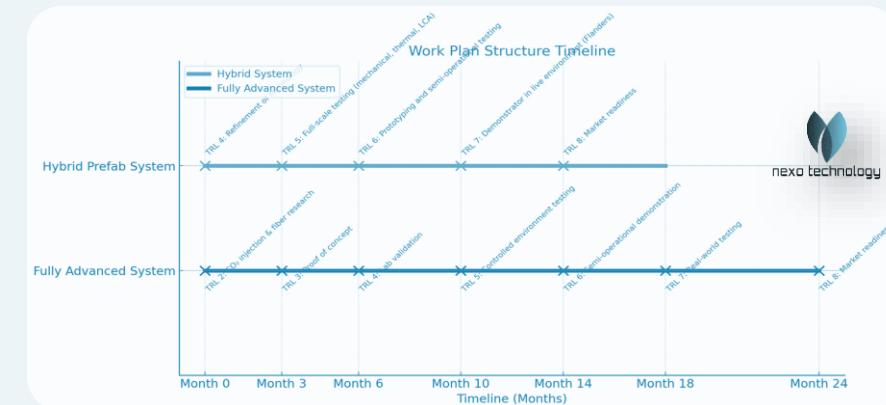
- I. Emphasis on full-scale testing of mechanical, thermal, and environmental properties.
 - II. Comprehensive LCA study for environmental validation.
 - III. Real-world performance demonstrated in Flanders and abroad (live environment test), preparing for immediate market entry by Month 18.

- II. **Fully Advanced System (24 – 36 months)**

- I. Parallel R&D to push the boundaries of material innovation (CO₂ injection and crystalline fibers).
 - II. Longer timeline to develop and validate advanced prefab integration.

- III. **Outcomes**

- I. Hybrid system ready for rapid commercialization.
 - II. Our highly & fully advanced system is set for commercialization within presumably 24-36 months, supported by ongoing technological advancements. (Research & Development of this fully advanced system can be co-funded by EU innovation funds, which we aim to initiate in Q2 2025.)



Tech Development

Innovation Features

• Innovation Features Summary

I. This revolutionary building system combines

- Cutting-edge materials, advanced energy management, and modular construction techniques, offering unparalleled durability, efficiency, and adaptability. Its integration of sustainability and advanced technologies ensures a truly future-ready and a real net-zero+ building solution.

Category	Innovation Features	Benefits	Value	Functionality
Materials	Made from reinforced recycled thermoplastics	Durable, resistant to the environment	No maintenance	Eco-friendly and sustainable materials with a circular lifecycle
Construction	Prefabricated in a factory, modular	Low-weight, consistent quality	Fast and easy installation	Short lead-times, flexibility in geometry, and large-scale additive manufacturing
Integration	High-level function integration (piping, cabling, insulation)	Simplifies installation and reduces errors	Less uncertainty and no loss of investment	Combines utilities into a single, efficient system
Energy	Integrated solar cells and energy management	Energy harvesting and efficient use of energy	Self-sufficient or net-zero+	No reliance on the grid, maximizing energy independence
Adaptability	Flexibility in design and use	Easy to re-assemble, customizable	Scalable and future-proof	Adaptable to various architectural requirements
Sustainability	Focus on recycled and renewable materials	Environmentally friendly	Reduces carbon footprint	Aligns with global sustainability goals
Efficiency	No post-processing on-site	Faster construction timelines	Cost-effective	Minimizes site labor and disruption, ensuring faster project completion
Durability	Resistant to weather and environmental challenges	Long-lasting performance	Reliable investment	Withstands extreme conditions for long-term use
Technology	AI-driven energy management and control	Optimized energy usage	Reduced operational costs	Adapts to occupant behavior, ensuring maximum comfort with minimal waste
Production	Large-scale additive manufacturing	Faster production	Consistent quality at scale	Enables mass customization while maintaining speed and accuracy
Mobility	Easy to transport and assemble	Simplifies logistics	Reduces time and resources for deployment	Ideal for remote or challenging construction sites
Aesthetics	Flexibility in geometry and design	Modern, adaptable styles	Increased market appeal	Accommodates creative and diverse architectural expressions



IV. Market Analysis

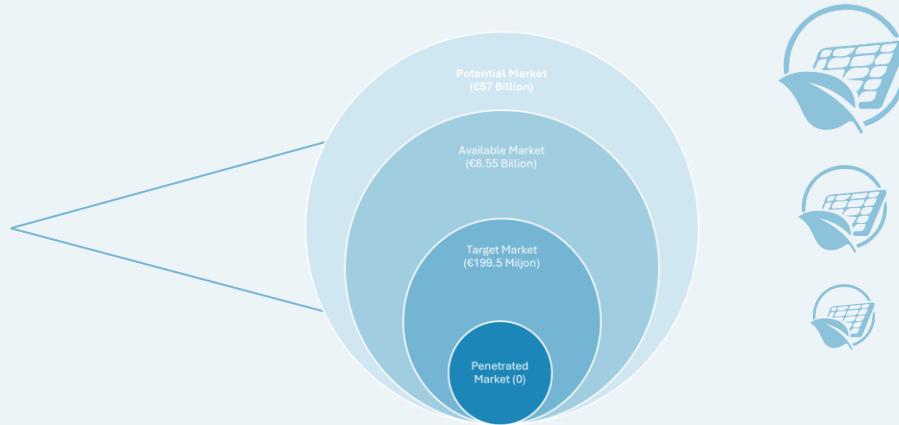


“A well-thought-out combination of modular principles, the flexibility of prefab, seamless connectivity, and cutting-edge smart technology, the smartphone for the construction industry.”

Market Analysis

Targeted Customers | Users

- **Target Markets**
- **Who Are the Customers?**
 - I. Lessees in Regional Markets Globally
 - II. International Governments & Institutions
 - III. International Defense Organizations
- **What Are the Segments?**
 - I. Residential Sector
 - II. Commercial Sector
 - III. Government Sector
 - IV. Defense and Reconstruction
 - V. Non-Profit Organizations



- **Note:** According to a global market analysis by FortuneBusinessInsights.com, the global construction market is valued at €120 billion, with the modular construction sector estimated at €85 billion and the prefabricated (prefab) construction sector alone valued at €57 billion. Given that our operations span both modular and prefab construction, we have taken a highly conservative approach by using the €57 billion market value in our assessment.



Market Analysis

Targeted Customers | Users

• Target Markets

I. Global Licensing Agreements

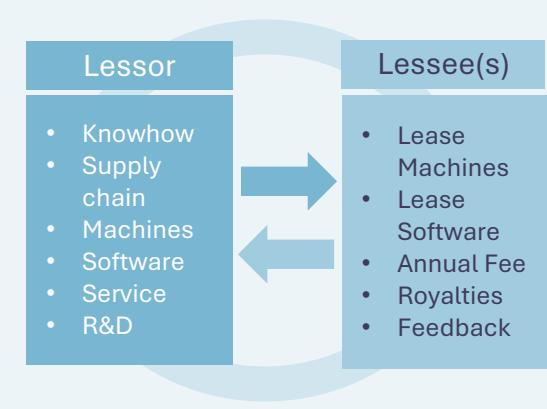
(External B2B/B2C Solutions & Building as a Service (BaaS) under NEXOFAB Corporate Identity)

- **Lessor/Lessee Strategy:**
 - Leveraging a model that facilitates flexible and scalable agreements, ensuring mutual benefit for both lessors and lessees.
- **Global Licensing & Strategic Partnerships:**
 - Expanding our reach through international licensing agreements and forming strategic alliances to enhance market presence.
- **Recurring Revenue via Royalties:**
 - Generating sustainable, ongoing income through royalty-based agreements, ensuring long-term financial growth.
- **Sale of Know-How & Manufacturing Solutions:**
 - Offering expertise and turnkey solutions in manufacturing processes and technology to partners worldwide.
- **Scalability & Long-Term Profitability:**
 - Focusing on scalable operations designed for growth, enabling consistent long-term profitability.

II. Strategic Goals: Reconstruction, Urgent Housing Solutions, Emergencies

(In-House B2G/B2I/B2O/B2B/B2C Solutions & Building as a Service (BaaS) under NEXOFAB Corporation & Brand)

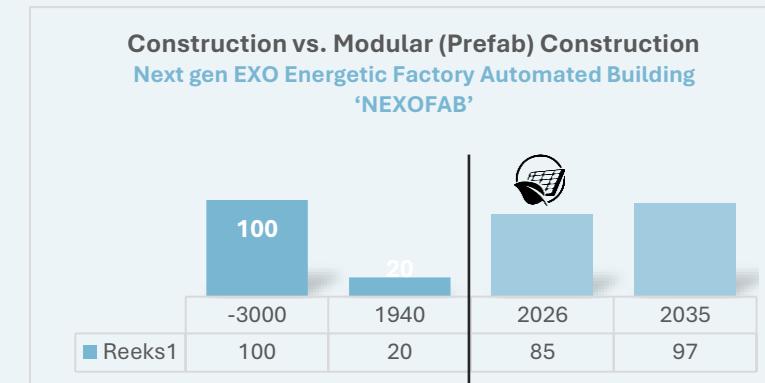
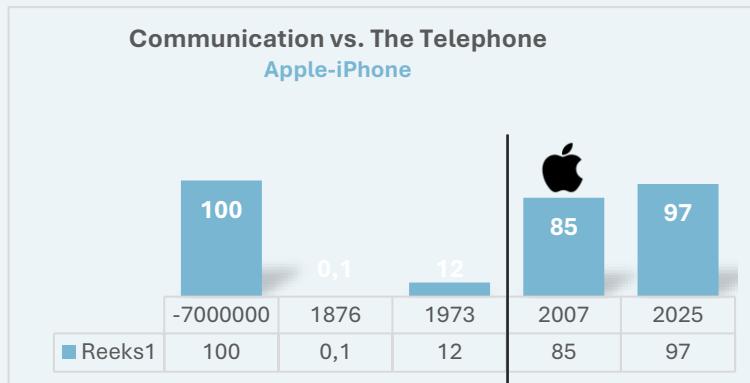
- **A key segment of our customer base:**
 - Organizations, governments, NGOs, and defense agencies worldwide, focused on regions impacted by war or climate change.
 - These entities are dedicated to reconstruction efforts, particularly in providing rapid, off-grid modular housing solutions.
 - Our products, designed for both temporary and permanent structures such as homes, hospitals, and other essential facilities, are produced in-house and delivered from our own operational subsidiaries in Belgium (Europe) and California (USA).
 - With a commitment to quick deployment, sustainability, and energy-efficient solutions, we aim to support global reconstruction initiatives, ensuring the swift and responsible delivery of critical infrastructure directly from our own production facilities.



Market Analysis

Study Case | How Innovation Sparks the Adoption

Description	Introduction Year	Users (%)	Point in history
Primitive communication	-7000000	100	more than 7M years ago
Wired telephone	1876	0,1	
Wireless telephone	1973	12	
Basic smartphone	2007	85	A turning point in history through the power of innovation
Advanced smartphone	2025	97	
Primitive construction (stone, clay, wood, concrete, steel, ...)	-3000	100	more than 3K years ago
Modular (Prefab) construction (concrete, wood, steel,...)	1940	20	
NEXOFAB Hybrid System (advanced lightweight composites 2 exo-energetic prefab system)	2026	85	A turning point in history through the power of innovation
NEXOFAB Fully Advanced (combining advanced lightweight composites with a fully integrated technological ecosystem)	2035	97	



Market Analysis

Study Case | Balancing Affordability and Scalability



Market Analysis

Study Case | Balancing Affordability and Scalability



	nozzle dim (mm)	Speed	Qe
nozzle I	4	72 kg/h	
nozzle II	24	85 kg/h	
nozzle III	55	220 kg/h	
nozzle IV	86	350 kg/h	
nozzle V	100	410 kg/h	
Limited speed robotics (2lm/1sec.)			

	WxH (max) m ²	Speed s/m ²	Tot sec.	Tot min.
wall	2,40*2,65	6,36	30,00	190,80 sec
floorslab	2,40*8,00	19,20	18,00	345,60 sec

CASE 1 DWELLING PRODUCTION TIMELINE

Dwelling 160m²

	10,00*8,00 horizontal slabs	speed	sec	min
Floorslabs	80,00 m ²	18,00	1440,00	24,00
Roofslabs	80,00 m ²	18,00	1440,00	24,00

	10,00*5,70*2	114,00 min 15m ² windows/doors	99,00 m ²	
	8,00*5,70*2	91,20 min 15m ² window/doors	76,20 m ²	
Walls BIPV	175,20 m ²	30,00		5256,00
Windows	30,00 m ²			87,60

	Interior Walls	72,00 m ²	18,00	1296,00	21,60
Nexosmart/Nexog	1,00 FF		FF		15,00
Battery module	1,00 FF		FF		15,00
Overall handling	1,00 FF		FF		60,00

net zero+ passive dwelling:

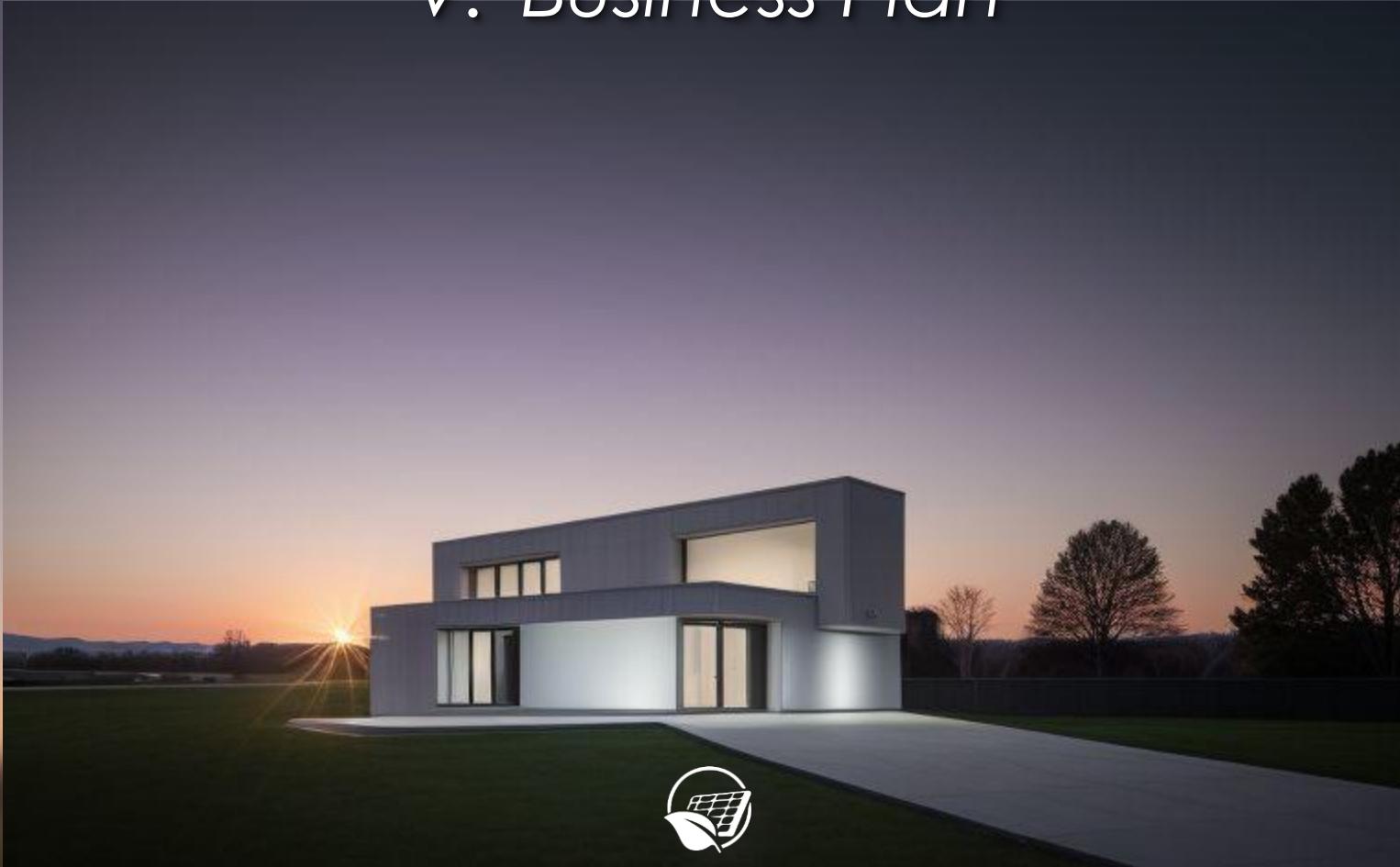
water and windproof including doors, windows, **BIPV, nexogrid and nexosmart** integration

	DWELLING 160m ²	247,20
Conservative notice:		

1 dwelling per day can be produced, including handling and shipment preparation.



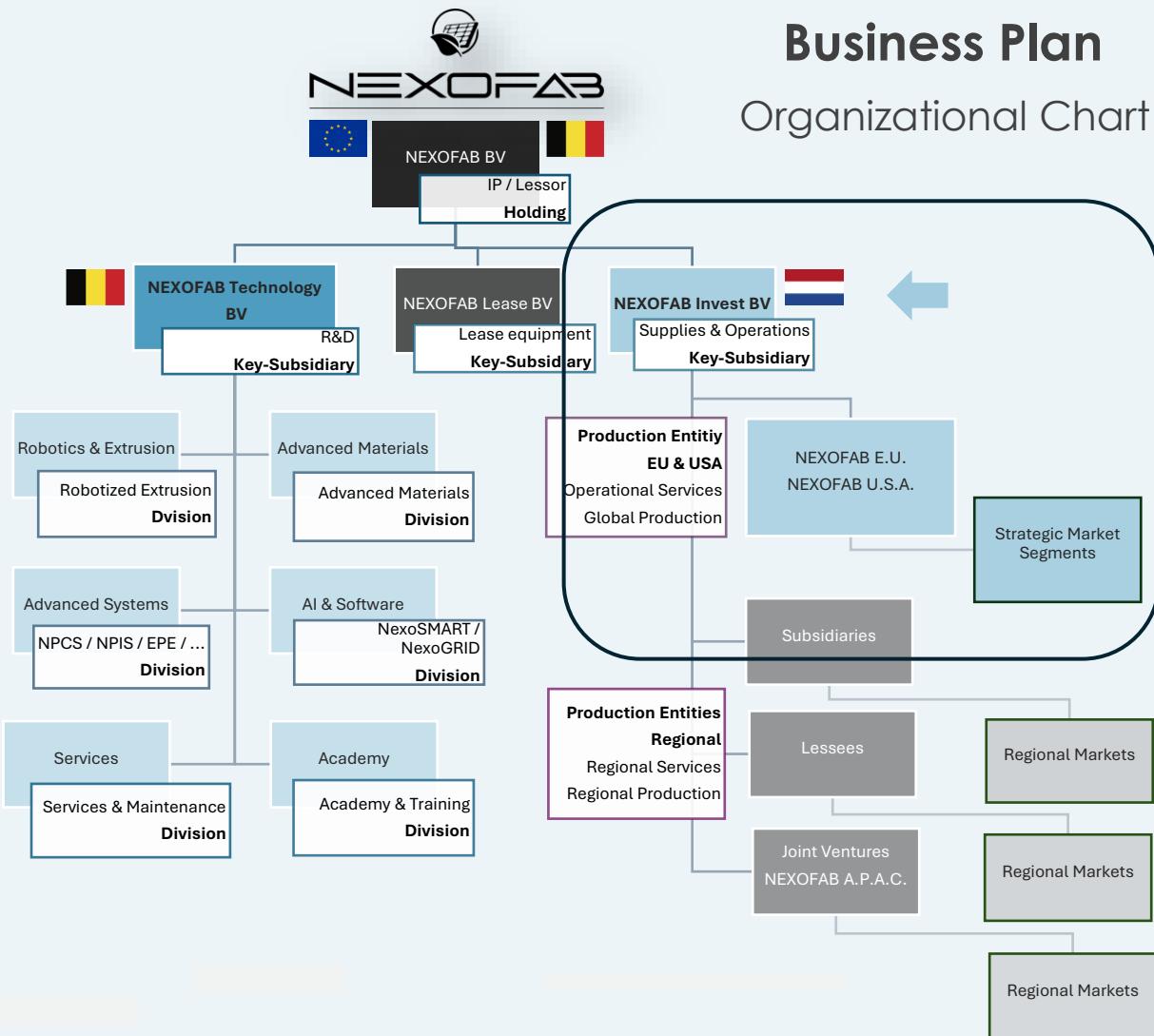
V. Business Plan



“Our business plan focuses on transforming construction through sustainable technologies, positioning us to lead the market in smart, self-sustaining prefab constructions.”

Business Plan

Organizational Chart



NEXOFAB Invest B.V.

(Operational Key-subsidiary)



NEXOFAB EU (BeNeLux region - W - EU)
(International Manufacturing Subsidiary/Joint Venture)



NEXOFAB USA (California region - USA)
(International Manufacturing Subsidiary/Joint Venture)



NEXOFAB APAC (Mumbai region - India)
(International Manufacturing Joint Venture)



Business Plan

NEXOFAB Invest | Financial Reality and Projections

• Volume vs. Pricing

I. Growth Strategy

I. Our growth strategy begins with establishing subsidiaries under the key entity, NEXOFAB Invest, strategically located in Belgium (Europe) and the USA (California). These hubs are positioned to target specialized markets, such as government contracts and reconstruction efforts in war-affected or climate-impacted regions. This approach ensures a strong global presence from the outset, providing a solid foundation to expand into these vital sectors from strategically chosen bases.

II. Conservative Projections

I. We are adopting a conservative approach in our projections. Each production unit has the capacity to produce two 160m² dwellings per day, equating to 730 dwellings annually per machine unit (365 days * 2 dwellings per day) based on an 8-hour shift. We anticipate potential expansion, allowing for up to three times this production rate at full capacity. However, this expanded production rate is not factored into the initial project calculations.

III. Pricing Strategy

I. The selling price per dwelling is set at €150,000, ensuring competitive pricing in the market while maintaining profitability.

Revenue in 1000€



Production of dwellings in numbers (Belgium & USA)



Business Plan

NEXOFAB Invest | Financial Reality and Projections

- **Investment vs. Profits**

IV. Investment and Market Entry

- I. The initial investment required to start production and enter the market is €2,50M. The revenue forecast is based on conservative growth in dwelling sales, with steady increases in market share anticipated over time.

V. Investment Overview

- I. An overview of different investment scenarios (in €1,000 units) will provide a clear understanding of potential financial requirements and returns based on varying levels of market performance.



Business Plan

NEXOFAB Invest | Financial Reality and Projections

- **Cashflow**

- I. **The free operational cashflow**

- I. The cashflow after deduction of the necessary capital to cover the operational production costs and customer's credit.



Business Plan

NEXOFAB Invest | Financial Reality and Projections

- **Net Present Value (NPV)**

- I. **The Net Present Value**

- I. The NPV is calculated at a discount rate of 3% and an economical lifetime of 5 years. For an investment of 5 130 K .

- II. **Investment Payback**

- I. Payback of the initial investment is after 3 years. In reality we have to invest further on, but the capital gain based on the net profit can be used to invest further.

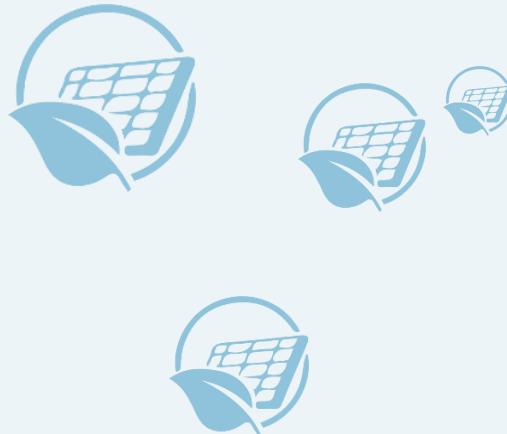


Business Plan

Why Should You Invest?

- **Why NEXOFAB™?**

- I. Addressing Global SDGs (Sustainable Development Goals)
- II. Sustainable Construction Innovation
- III. Scalable Modular (Prefab) Solution
- IV. Global Housing & Resilience Needs
- V. Advanced Energy Efficiency & Generation
- VI. Strategic Global Reach & Accelerated Scale
- VII. Maximized Impact



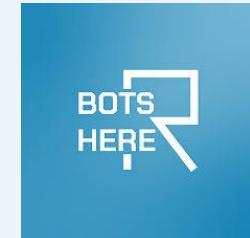
In summary:

- NEXOFAB Invest BV represents a powerful investment opportunity for those looking to support sustainable development while achieving high returns.
- With our focus on innovation, sustainability, and scalability, NEXOFAB™ is primed to play a pivotal role in shaping the future of construction and infrastructure worldwide.



Business Plan

Consultants & Subcontractors





NEXOFAB
ENERGETIC PREFAB ELEMENTS

Join the revolution!

Together, we'll redefine construction for a sustainable future.



SCAN ME



Explore more: www.NEXOFAB.eu