

Executive Summary

HoweJones concludes the current system of house-building is inefficient, expensive and incompatible with future needs. Notwithstanding commercial endeavours, the industry remains without adequate technology to expedite change and increase production volume. Since 2004, we have observed 'house-design' in its many forms and functions with the ambition of deriving transformative technology as relating to *decarbonisation*, *affordability* and *modern methods of construction* (MMC). Through practical experience and diligent design we developed VPAC (*Versatile Prefabricated Architectural Construction*) as a viable solution to the widespread housing crisis and associated environmental & societal impacts. VPAC integrates the necessary architectural, economic, engineering, environmental and societal factors to establish disruptive commercial technologies within construction. Key objectives and focus align to;

- Holistic application of design and systems to offer housing solutions to the developed, developing and displaced communities.
- *Modernity* design philosophy to create a technologically advanced, energy efficient and aesthetically pleasing dwelling(s) to transcend a demanding and growing global market.
- Environmentally conscientious materials, manufacturing techniques and life cycle awareness.
- Wellbeing for both the contractors and occupiers in regard to physiological and mental health.
- SMART technology UX & UI integration to enhance occupant wellbeing and product utility.
- Value and supply chain derived product for market entry, exponential growth and longevity.
- Integrated robotics and AI technologies to advance lean manufacturing, logistics and assembly.
- Brand establishment and longevity by aligning core values, key stakeholder contribution and societal impacts as guided by pre-emptive engineering analysis (PeA).

By summer 2026, HoweJones aims to achieve Minimum Viable Product (MVP) status as denoted by;

- Conceptual building and structural component prototypes
- Defined systems and strategic protocols
- Market and economic-risk analysis (*PMF*)
- Tangible investment forecasts (capital, cash flow and expenditure)
- A pursuant IP application
- A scalable-company framework

Thereafter, HoweJones will continue detailed design to further product development and manufacturing processes as demonstrable to small scale production, market entry and 'Seed/*Series A*' investment criteria. Brand vision will underpin all stages of R&D, with our core values communicated to potential clients and partners within the construction, financial and manufacturing sectors.

HoweJones is exploring investment opportunities to align business acumen, skill sets, experience and shared values. We seek the right partners to ensure relationships and responsibilities are established at infancy. Project strategy, corporate structure and transparency are vital to success.

To conclude; affordable, economically viable and efficient homes coupled with environmental and societal integration is the hallmark of a 'sustained' built-environment and yet, to date, a pragmatic and satisfactory balance remains to be found. Parallel to commercial experience, HoweJones has undertaken a detailed level of due-diligence and research to devise an alternative solution that benefits the industry, the economy and the environment and people who live within it. The *status-quo* of housing designs and construction techniques are inefficient, energy intensive and simply do not represent 21st century aspirations nor achieve target housing quotas. Therefore, notwithstanding environmental impact, the social and economic undertones are an undeniable and objective concern for all nations. HoweJones proposes holistic and pragmatic solutions to complex problems.

To note; The UK construction industry is set to become Europe's largest construction sector by 2026 with the global construction industry expanding to circa \$15.5 trillion/year by 2030*. Residential construction (including the manufacturing of cementitious-products), operational energy usage and poor life-cycle capabilities contribute to circa 30-35% of global Co2 emissions**. Approximately 23% of total UK GDP/GVA output comprises construction related activities (construction;8%, RE;15%) - of which circa 50% is residential construction***.