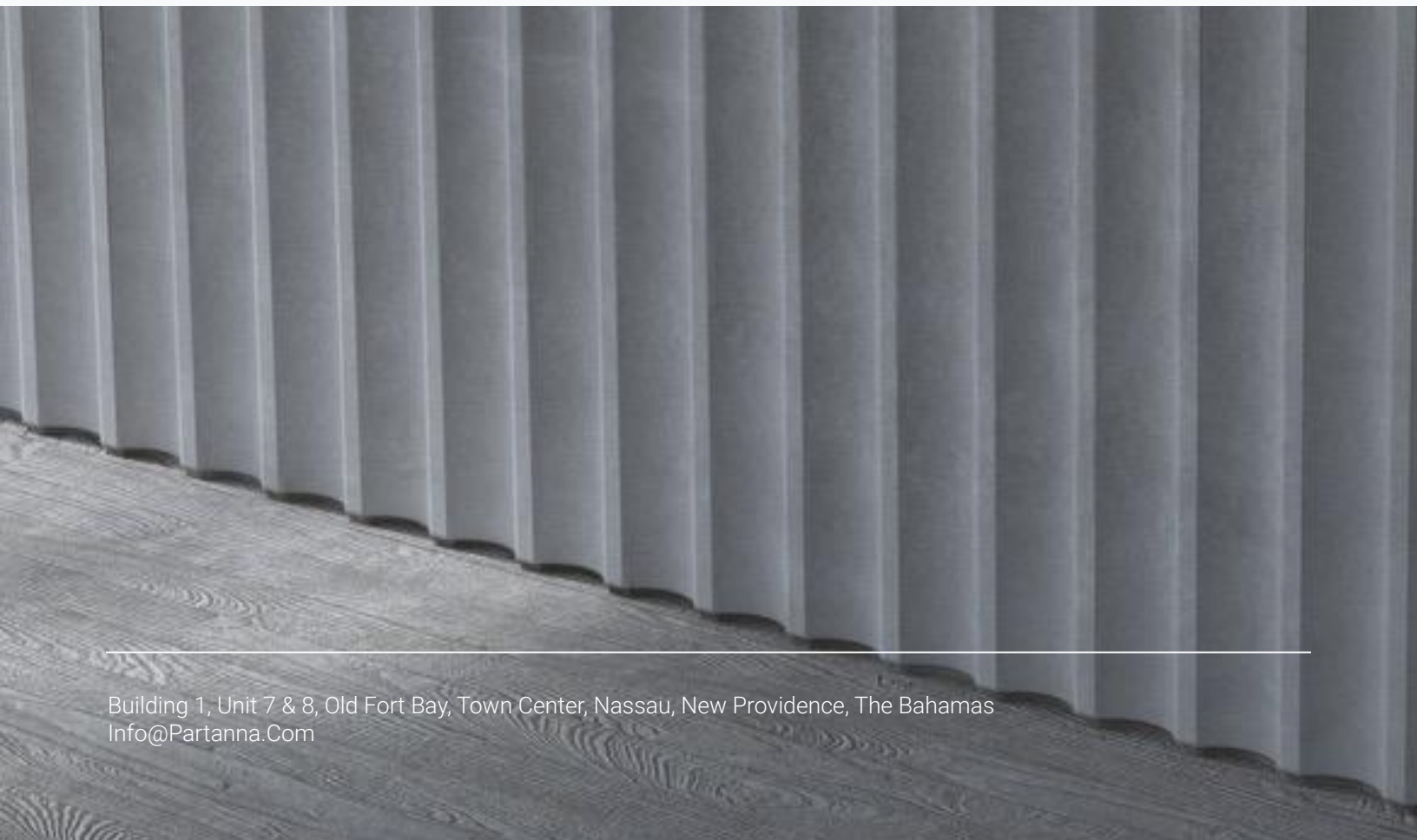


Partanna Cost Effectiveness

2023 Partanna Fact Sheet



Overview

This report demonstrates how our innovative carbon-negative concrete, Partanna, is cost-competitive with traditional cement, offering both financial and environmental benefits. Key factors contributing to Partanna's cost competitiveness include the utilization of locally-sourced recycled components, reduced processing costs, and the generation of carbon credits.

While the pricing of our building materials is contingent upon factors such as location, raw material costs, and prevailing market conditions, our analysis indicates that our products are marginally more economical than conventional cement in the United States and Gulf region. This analysis does not account for the carbon credits associated with our product, which enables us to offer a highly competitive pricing advantage vis-à-vis our competitors.

Carbon credits play a crucial role in Partanna's financial advantage over traditional cement. By offering a high volume of carbon credits, Partanna can effectively undercut the market when factored into our financial model.

Key cost advantages of Partanna over traditional cement include:

- **Waste Material Utilization:** Partanna's primary components are sourced from waste materials available worldwide, reducing raw material costs.
- **Brine Usage:** Our concrete uses brine, eliminating the need for fresh water and providing potential revenue through brine disposal for desalinators.
- **Energy Savings:** Partanna avoids high-temperature processing associated with traditional cement production, reducing energy costs and emissions.
- **Low Transportation Costs:** The majority of Partanna's raw materials can be obtained from brine or sourced locally, minimizing transportation costs.

As Partanna continues its research and development efforts, we anticipate further improvements in cost advantages alongside our product innovation and scalability.

Context Within Carbon Credits

On the question of cost competitiveness, it's important to set the stage within the context of carbon credits and look at why carbon credits exist in the first place. Carbon credits create a monetary incentive for companies to reduce their carbon emissions. Those that cannot easily reduce emissions can still operate, but they must do so at a higher financial cost. Ultimately, carbon credits help level the playing field for new, innovative technologies while they are in the initial stages of innovating, scaling up and optimizing their processes, costs of raw materials and so on.

For example, [carbon credits helped keep Tesla afloat for 17 years](#), while it worked to bring down production costs, and they are still a significant portion of the company's profits today.

At our current stage, Partanna's financial advantage over traditional cement is overwhelmingly from carbon credits. We are entering the market at a very opportune time where we can offer a high volume of credits that meet the criteria for the highest-value pricing. So our potential carbon credit value far overshadows any cost differences that we might observe between Partanna and traditional cement for now. That said, many of the drivers for Partanna's carbon credit advantages translate into cost advantages as well.

General Cost Advantages

As we continue R&D to further improve our product at scale, we expect to improve our cost advantages in parallel. In the meantime, here are the areas where Partanna wins in general on cost competitiveness:

- **Made from waste material:** It's cost effective because it's mostly made from waste material, and the waste material we need is available around the world.
- **No fresh water needed, and potential revenue for brine disposal:** Since we can use brine directly, we not only avoid the costs of some raw materials but also the fresh water. In fact, in some locations we may be able to generate revenue through "disposing" of brine for desalinators.
- **No high temperature processing:** By avoiding the emissions associated with the kilns required in processing Portland cement, Partanna also avoids the energy costs.
- **Low transportation costs:** Most of Partanna's raw materials can easily be obtained from brine. Only granulated blast furnace slag (GGBFS) and aggregate cannot. Aggregates can be sourced locally, leaving slag as the only material that may require long-distance transportation.