



## **Biomimicry, Industrial Design Trends, and Creating with Nature's Genius**

“Biomimicry is the conscious emulation of life's genius” Janine Benyus.

It's incredible to think that the coining of a word such as biomimicry - in the 1997 book of the same name - has led to a world of ingenious design solutions and innovations for sustainability.

For many years, engineering sciences ignored nature's clever designs and creations, seeing them as a means to an end rather than a collective of connected cells and ecological systems that, one without the other, would not survive. This is the basic premise of sustainability; we're finally seeing how each stage of creation, however minute the evolution, has its own purpose and is necessary to maintaining balance and a healthy existence for all.

It's the pioneering efforts of the scientists and ecologists who take a deeper look at our ecosphere, along everything in it, which has helped propel the idea that nature may have the answers to many of our design solutions. They are stripping creation down to the cellular levels and figuratively back-engineering nature to figure out how we can use its unique creativity alongside our own. As our world develops, so too do our ideas and notions, breaking through mainstream ideologies that have been in place for time immemorial.

[Biomimicry](#) designs are a part of the wave for a new future in streamlining industries, systems, engineering, and the design of products, their packaging, and so much more.

We're taking nature's creations and inventing anything and everything; trains inspired by the king fisher's beak for its shape and aerodynamics, systems to renovate phone networks based on the biological behaviour of ants, and let's not forget the gecko's sticky toe pads - with their unique biomechanical design and adhesive, they've been re-invented into a plethora of climbing materials for us humans.

The use of [biomimetic innovations](#) in product design and distribution solutions is also a global phenomenon. With these burgeoning design trends, 2023 will see them begin to truly take hold for the future.

### **Is biomimicry the future of our product packaging design trends?**

2023 sees the beginning of a decade dedicated to taking us into a more sustainable future. Biomimetic designs and creations are proving to be a valuable source of innovation, aiding governments, industries, and businesses in their bid to keep up with society and consumer demands for eco-conscious solutions.

Every part of every process of a product's inception, creation, branding, distribution, installation, and waste management has to be held accountable for sustainability. Transparency is key for industries, businesses, and professionals in order to win consumer confidence.

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It's the designers, engineers, product developers, and buyers whose passion for the environment and the future of design that are bringing biomimetic solutions to the table. These are the people proving that eco-sustainability is achievable without compromising the visual appeal and aesthetics of their industrial designs.

Biomimicry in design is enabling outside-the-mainstream-box conceptions to become a part of our current reality and future, getting back to Mother Nature and all she can teach us. This is opening up new doors and idea streams for the creators of our product packaging solutions. Why? Because the ingenious industrial designers in industries such as [paper/board](#) have embraced such ideologies. Products are now being developed using biomimicry to create strong, durable, versatile, flexible, extremely lightweight, eco-friendly, and cost-effective substrates.

### **Biomimetic, eco-sustainable, industrial design**

Finding inspiration from nature's organic structures and forms - mimicking their designs and uniting them with your own dreams and concepts - is affording industrial designers, product developers, and creators with uncompromising solutions, especially for the packaging industry.

Paper/board solutions such as [PH \(Paper Honeycomb\)](#) have been around for a while, but never before have they been so important in meeting our cause for a sustainable future, our eco-packaging needs, and upcoming design trends (2023 and beyond!)

These lightweight, exceptionally strong, sustainable solutions can be used for a magnitude of applications. If we consider the pressure we're under to procure new eco-solutions for B2B protective packaging solutions (due to changes in global markets and online shopping), the use of biomimetic substrates like PH seem to be one of the ideal answers to your weight reduction issues.

Paper honeycomb is produced using recycled paper/board pulp and is 100% recyclable - now that's one of your boxes ticked! Due to the biomimicry in design (the giveaway is in the name), it's exceptionally strong, lightweight, and can be used in a multitude of applications, from product and [protective packaging](#) to [interior design](#) and [building materials](#). It also has the unerring support of organisations such as [EMPHA](#) (European Manufacturers Paper Honeycomb Association), enabling industries and professionals across the globe to experience, innovate, and benefit from paper/board sustainable solutions.

It seems plainly clear that biomimicry in design is having a massive impact on how we view and create within our world. This will be a continued asset to the future of design, giving us exceptional solutions to meet our sustainability goals across the globe, within industries and businesses, and through professionals and consumers alike. It is the continued use and support by industrial designers, engineers, and product developers of these ingenious creations using nature's building blocks that will cement it in your design trends, 2023 and beyond!

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