

Biomimicry

What is Biomimicry? The natural world is full of processes and living things that have survived and adapted for thousands of years. These adaptations are tried and tested and have been proven successful by the simple fact that they exist. Biomimicry looks to these successes for inspiration in solving human problems in a more sustainable way.

Israeli Examples

Seevix (<http://seevix.com/>)

An Israeli company that produces high-strength, biocompatible spider silk fibers, which are identical to natural fibers. It is very elastic with strength comparable to steel, which makes it more durable than other synthetic fibers.

Tipa Compostable Packaging (<https://tipa-corp.com/>)

Inspired by orange peels, Tipa packaging is fully compostable yet has similar properties to traditional plastics. It meets all regulations for food contact in the US and Europe.

Key Principles

1. Nature as a model: study nature's models and emulate these forms, processes, systems, and strategies to solve human problems
2. Nature as a measure: use an ecological standard to judge the sustainability of our innovations
3. Nature as a mentor: view and value nature not based on what we can extract from the natural world, but what we can learn from it

Biomimicry and Circular Economy

In nature, nothing is wasted. When something reaches its end of life, it decomposes and its nutrients used to support something else.

Biomimicry aims to reproduce this process with systems and products that produce less waste and reuse when possible.

Links

[Ted Talk on Biomimicry](#)

[The Israeli Biomimicry Organization](#)

[Ideas on biomimicry](#)

Building to Shape

Current manufacturing processes create a lot of waste and products must travel long distances to reach consumers. 3D printing technology allows products to be created with significantly less waste. In addition, as 3D printers become more widely available, products can be produced locally, effectively eliminating energy consumption from transportation. [Read More Here](#)

