



New Material Innovation Initiative Report Finds Investment in Next-Gen Materials More Than Doubled From 2020 to 2021

March 29, 2022 -- The Material Innovation Initiative (MII) issued its second State of the Industry Report on next-gen¹ materials covering 2021 growth and investments. The report offers a valuable introduction to this nascent industry, providing an overview of the key players involved, the driving forces accelerating material innovation, and latest investment data for next-gen materials.

Access to the full report and report graphics [here](#).

Increase in Innovators (see p.10, Table 3.3 in the report for a list)

MII has seen a significant increase in the number of innovators creating next-gen materials within the last 8 years. Key trends include:

- The market is still nascent with a total of 95 next-gen material companies. Of those, 67 focus on biomimicry of animal leather, 12 on silk, 7 on wool, 7 on fur, 6 on down, and 1 on exotic skins.²
- The market is still young, with the majority of the companies established after 2014 (55 out of the 95 total) and 10 established since the beginning of the Covid-19 pandemic.
- Of the 95 next-gen material companies listed, a majority (49) use plant-derived materials as main input, 21 use microbe-derived materials, 9 use blends, 8 use mycelium, 6 use recycled material, and 4 use cultivated animal cells.³

Increase in Capital

MII identified a total of \$2.3 billion invested in next-gen materials since 2015. The investment amount in 2021 more than doubled the investment in 2020. Moreover, dollars invested in 2021 alone was nearly the same as the previous 4 years combined, even amid the Covid-19 pandemic.

"The opportunities for entrepreneurs, scientists, investors, material companies, and brands in next-gen materials continue to rise. There are significant white space opportunities for new companies, innovations, partnerships, and products in this still nascent industry. This industry has ample opportunities for win-wins: not only for financial return but for animals and the environment." – Nicole Rawling, MII's co-founder and Chief Executive Officer.

"The number of deals has not drastically increased from 2020 to 2021 but dollars invested has more than doubled, demonstrating bigger deal sizes are to be expected as companies mature, show proof of concept, and scale." - Elaine Siu, MII's Chief Innovation Officer and Author of the State of the Industry Report: Next-Gen Materials.

Market Projection

MII estimates the global wholesale market size for next-gen materials will be approximately 2.2 billion USD in 2026, representing a 3% share of an addressable market of over \$70 billion.

¹ MII coined the term **next-gen materials** to describe **high performance and more sustainable alternatives to animal-derived materials** including leather, fur, silk, wool, down, and exotic skins.

² Some companies work on more than one category of material biomimicry.

³ Some companies are developing multiple product lines and may use different main input for each.

STATE OF THE NEXT-GEN MATERIAL INDUSTRY AT A GLANCE



Source: Material Innovation Initiative. All data as of Dec 31, 2021.

*Note: Some companies create more than one next-gen material.

**Note: To simplify the broad landscape of formulation and processing approaches for next-gen materials, MII categorizes next-gen innovation by main input (greater than 50%)

Why We Need Next-Gen Materials

Animal-derived materials, especially leather, are widely used in the fashion, automotive, and home goods industries. Production of animal-derived materials is a contributor to climate change, environmental degradation, public health risks, and animal cruelty. If we hope to move rapidly toward a more sustainable materials industry, next-gen alternatives with optimal aesthetics and performance are needed.

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About Material Innovation Initiative

The Material Innovation Initiative is a nonprofit that accelerates the development of high performance, eco-friendly and animal-free materials for the fashion, automotive, and home goods industries. MII serves as a critical connector along the path to market adoption for new materials, partnering with scientists, startups, brands, and retailers to direct the industry toward areas of maximum impact.

Learn more at materialinnovation.org