

Material Innovation Initiative Issues the State of the Industry Report: Next-Gen Materials

June 22, 2021 -- The Material Innovation Initiative (MII) issued a first-of-its-kind State of the Industry Report on next-gen¹ materials. The report gives an introduction to this nascent industry, an overview of the key players involved, considers driving forces accelerating the development of next-gen materials, and provides market projections of the global wholesale market for next-gen materials. It is a valuable resource for material innovators, entrepreneurs, investors, and brands considering entering the space.

Here is access to the full report.

Driving Forces and Market Projections

MII found that the acceleration of the next-gen materials industry is fueled by recent advancements in science and technology, changes in consumer preference, and regulatory trends. Those who are quick to adapt have the opportunity to reap massive financial benefits by staking their claim on the materials industry of the future. 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.

"As we face potentially dire climate change, the next-gen material industry must be accelerated. Significant investments, partnerships, and additional material companies and scientists tackling the issues facing the industry are desperately needed. Collaboration on sustainable innovation will result in both a prosperous future for successful material companies, brands, investors, and a liveable future on Earth." - Nicole Rawling, MII's co-founder and Chief Executive Officer.

Key Players

MII has seen a significant increase in the numbers of material companies ("innovators"), investors, and industry brands entering the next-gen materials industry but says the market is still nascent, and there is significant room for more players.

Innovators (for a list, see p. 19. Table 4.1 in the report)

MII has seen a significant increase in the number of innovators creating next-gen materials within the last 7 years. Key trends include:

- The market is still nascent with a total of 74 next-gen material companies. Of those, 49 focus on biomimicry of animal leather, 9 on silk, 7 on wool, 6 on down, 5 on fur, and 1 on exotic skins.
- The market is still young, with the majority of the companies established after 2014 (42 out of the 72 total) with the majority of the new companies focused on leather biomimicry (30).
- Plants or plant-derived materials have historically been the main input for leather alternatives, but recently more new companies are using mycelium and microbe-derived materials to create their next-gen leather in order to better replicate the performance and esthetic of animal-based leather.
- Innovators looking to enter the space should consider next-gen silk, wool, down, fur and/or exotic skins where there is currently significant white space in the industry.

Investors (for a list, see p. 29, Table 5.1 in the report)

MII identified a total of \$1.29 billion invested in next-gen materials since 2015 with 95 unique investors. The investors vary from individual investors, to venture capital, private equity, banks, foundations, and even fashion companies. MII sees significant investment interest in next-gen materials but not enough viable deals. There is significant money available for the right start-ups. Key findings include:

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.

- 1.29 billion USD invested in next-gen material companies since 2015 up to May 14, 2021.
- 504 million USD raised in 2020 alone, despite the pandemic, nearly the same as the previous 4 years combined.
- There have been 95 unique investors in the space since 2015 with 35 deals made.
- The largest funding round in 2020 was 293 million USD with 599 million USD total raised by this innovator.
- By mid-May 2021, 4 of the top 10 funded innovators successfully raised new rounds.

"We see the next-gen materials industry as 5-10 years behind the alternative proteins industry. The market size for alternative proteins was approximately 2.2 billion of a global meat market of 1.7 trillion in 2019; we estimate the next-gen materials industry will grow at a faster rate and reach approximately 2.2 billion of a global animal-based material market of \$70 billion USD in 5 years." - Elaine Siu, MII's Chief Innovation Officer and Author of the State of the Industry Report: Next-Gen Materials.

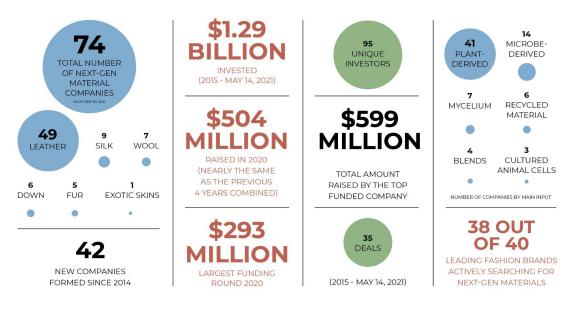
Industry Brands (see p. 38, Table 6.1 in the report)

MII has seen significant interest from brands in using next-gen materials. Even after the publication of the MII report and before this press release, Gucci <u>announced</u> its own internally developed next-gen leather. We expect to see more and more of these announcements.

"Fashion brands recognize the trend toward more sustainable and animal-free materials. We have met with 40 fashion, automotive, and home goods brands, and all but two are actively searching for next-gen materials to integrate into their supply chains." - Jacqueline Kravette, MII's Chief Brand Officer.

Brands play multiple important roles in the next-gen materials ecosystem, including funding innovation initiatives, switching to next-gen raw materials and collaborating with innovator startups to create new products. There are a number of major brands using or investing in next-gen materials such as Kering, Hermes, Gucci, Adidas, Lululemon, Stella McCartney, Ralph Lauren, and Allbirds who each have the infrastructure, capital and distribution networks that startups need to scale their ideas and bring materials to market.

STATE OF THE NEXT-GEN MATERIAL INDUSTRY AT A GLANCE



Source: Material Innovation Institute

*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