

Evaluating H1 2023's Innovation Trends and Key Events



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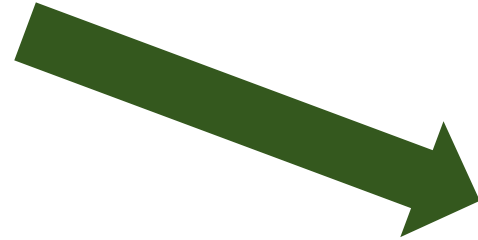
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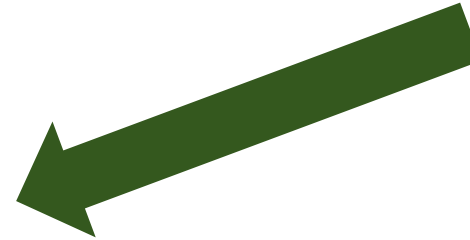
The
Deciding
Factor

How did we pick the events and trends?

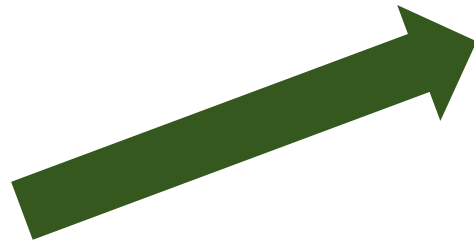
Client interest



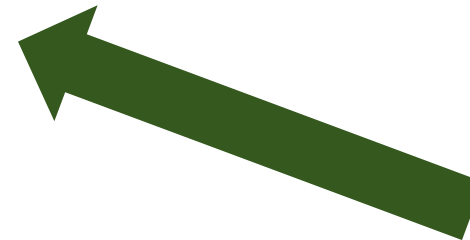
Innovation data



Analyst opinion



Consumer perspective



What is anthropology, and how are we using it?

What is anthropology?

- The study of human societies and culture.
- AI Anthropology at Lux: Studying the language of meaning around topics, trends, and issues in culture.

How do we do it?

- Contextual analysis of millions of consumer conversations to allow for an authentic, observational, and ethnographic analysis of culture.

Why it matters:

- Decode the implicit meanings behind concepts, trends, issues, and ideas.
- Really get to know your consumer beyond a superficial level.
- Ensure research and innovation teams are always asking the right questions.
- Help you solve the right problems!

Generative AI frenzy

Advances in generative AI spark a new speculative bubble

Large language models can generate text, can code, and more.

- Evangelists claim that generative AI will revolutionize every element of business and life, with some predicting a USD 7 trillion economic impact.
- A 4-week-old French startup raised USD 113 million last month.
- Consumers are excited about AI's potential to improve their lives, but ethics concerns are bubbling up.



It's not clear — or even likely — that large language models will continue to improve at the same rate. But there will be big impacts. Watch coding and marketing applications near term.

Key Event: Microsoft invests in OpenAI



Inflation and economic uncertainty

Bank malaise and inflation have not yet created a recession

Rising interest rates have raised the costs of borrowing and caused pain in the banking sector and made finance difficult.

- Silicon Valley bank — which collapsed in March — provided many services to startups that haven't been replaced.
- Rising interest rates have clamped down on highly speculative investments in areas like crypto and synbio.
- These events feed into the public's concerns and doubts about the financial system.



Relative economic weakness has heightened the impact of government funding but increased the specter of trade wars and economic protectionism.

Key Event: Silicon Valley Bank implosion



“Woke capital” and anti-ESG backlash

Both sides have failed to make meaningful impacts

Despite high-flying claims — like GFANZ claiming USD 130 trillion was committed — environmental, social, and governance (ESG) finance has mostly been business as usual.

- ESG standards and guidelines have no consistent meaning, and the benefits to green financing are small.
- Not just a U.S. phenomenon: There has been pushback in the Netherlands and France on sustainability issues.
- The public is broadly supportive of ESG but wants results.



Reactionary backlash is a real risk to the energy transition, but finance is probably not the battleground. Efforts like Texas’ proposed anti-clean-energy bill will be more impactful.

Key Event: Anti-ESG legislation



BlackRock®

Nuclear energy reenters the spotlight

Growing government support will need to be sustained

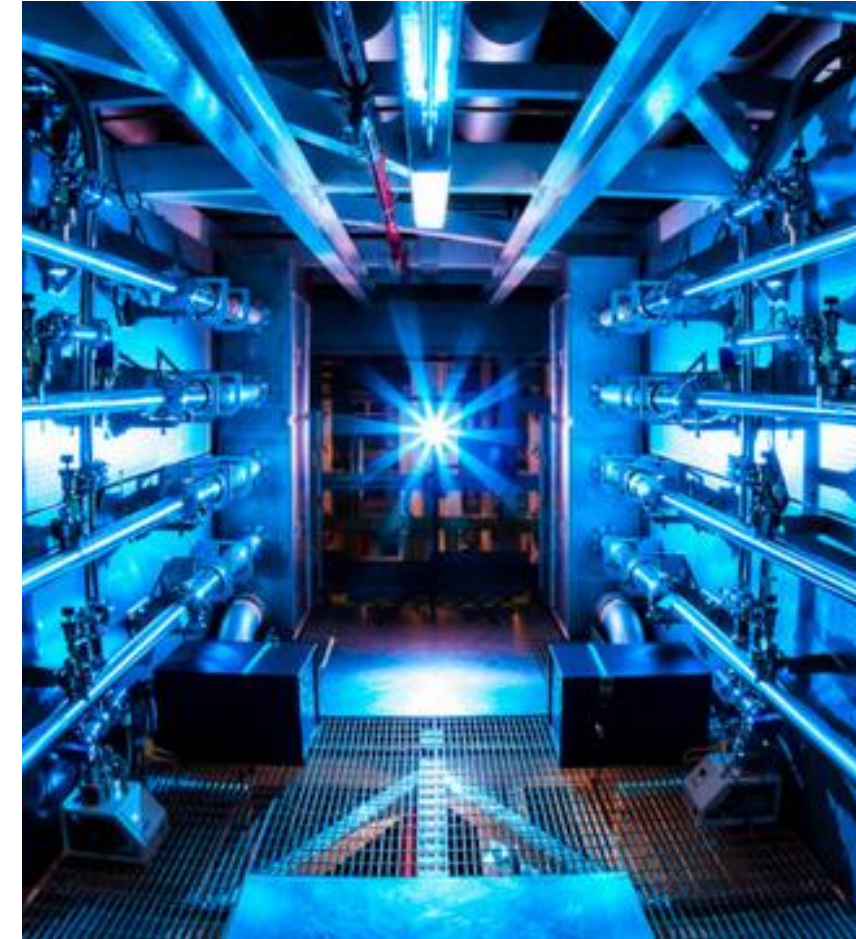
Nuclear power is the black sheep of the energy transition. But in the past few years, many governments have warmed to it.

- Innovations in small modular reactors and fusion have driven interest, but deployment is years away.
- Many governments (like Germany's) are deeply committed to anti-nuclear policies.
- The public is currently renegotiating its understanding of nuclear power.



Public perception of nuclear is reforming, making now the time for innovation. However, there's still lots of risk — big stories could easily flip public perception one way or the other.

Key Event: DOE* fusion milestone



U.S. DEPARTMENT OF
ENERGY

The battery supply chain arms race moves into high gear

Private and public capital are pouring into the space

Innovation, consumer demand, and policy are creating a perfect storm of investment.

- Gigafactories are the highest-profile type of investment, but resources are also streaming into lithium and nickel.
- Fears of a U.S.-China trade war are high, but policy in Argentina, Chile, and Indonesia will also be critical.
- Consumers are worried about the ethical and sustainability impacts of this scale-up, especially in mining and metals.



Strong investment is helping curb the risk of long-term shortages of batteries or critical minerals, but **trade war tensions could derail progress.**

Key Event: DOE lends BlueOval SK USD 9 billion



BlueOval SK

Chemicals and bioeconomy policy begins to solidify

Public policy will determine the fate of emerging technologies

Targeted bioeconomy, PFAS,* and circular economy policy will reshape chemicals and plastics production.

- Recycling policy could limit the impact of plastic pyrolysis while forcing design changes on packaging players.
- The bioeconomy has struggled to scale so far — so government support will be crucial.
- Public support for action is growing rapidly — and doesn't favor the chemicals industry.



The **chemicals industry is likely to face a harsh regulatory environment** as it seeks to meet its sustainability goals. Restrictions on plastics are likely.

Key Event: UN INC meeting in June



Consumers and innovators seek clean-label ingredients

Health and transparency concerns drive activity in this space

This trend is occurring across all consumer sectors, including food, cosmetics, and apparel.

- Animal-free meat and dairy have seen the most activity this year, but there are also investments in cosmetics ingredients.
- Government policy around chemicals of concern is driving demand for alternatives to PFAS.
- Consumers value transparency: They want to understand what's in their products and recognize the ingredients.

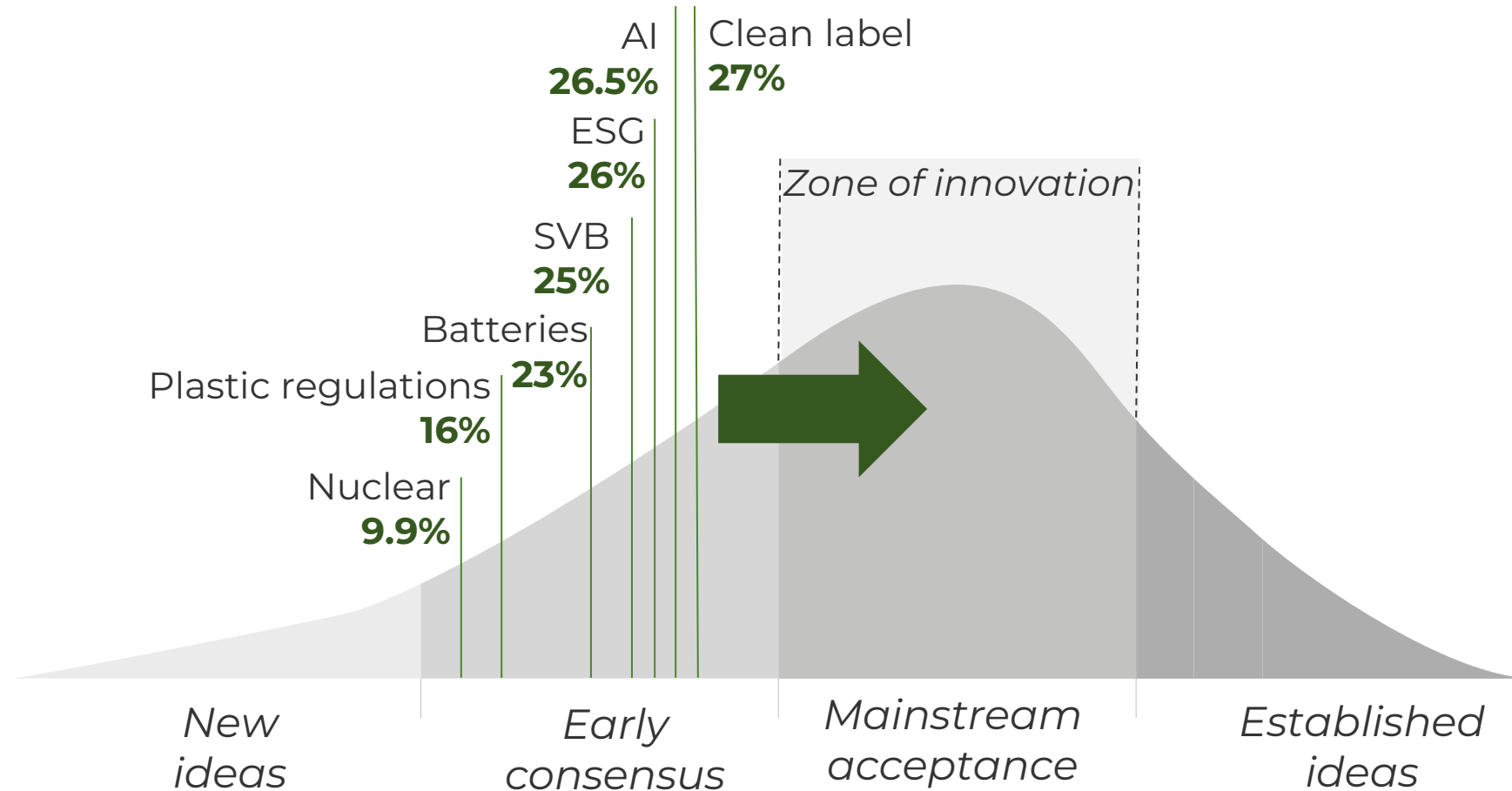


Clients should **lock in partnerships and supply chains now** as many new technologies commercialize. Look to functional ingredients for personal care as the next big area for new tech.

Key Event: USDA* OKs lab-grown meat



Many of these trends are poised to move into the zone of innovation in the next 6 to 18 months



The maturity curve tells us how much agreement or consensus there is among a population about the meanings behind a topic or trend under examination.

Key Takeaways

1 Policy is driving innovation at nearly every level

Even in AI, the geopolitical tensions around chips are already beginning to shape the future state of the technology.

2 Public perspective is still forming on a lot of key issues

From ESG to nuclear to clean label, areas that might be viewed as settled matters of public opinion are, in reality, shifting quickly.

3 It's a good time for innovation despite uncertainty

Maturing innovations, government support, and consumer demand are combining to make the next six months a good time for technology launches.

Thank you

A link of the webinar recording will be emailed within 24–48 hours.

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AUGUST 8

[ChatGPT: The Emerging CXO](#)

AUGUST 15

[Evaluating Technologies for CO₂ Removal and Building a Robust Carbon Offset Strategy](#)



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