Participant characteristics
Survey and participant overview

**Background:** GFI invited investors to respond to a survey about their current and planned investments in alternative proteins, as well as their views about the industry.

**Responses:** 125 total responses (not all respondents answered every question in the survey)

**Investor type**
- Venture capital: 40%
- Angel investor: 14%
- Other*: 10%
- Family office: 7%
- Accelerator/incubator: 6%
- Corporate: 6%
- Asset manager: 4%
- Growth equity: 4%
- Investment consultant or service provider: 3%
- Investment bank: 2%
- Foundation: 14%
- Private equity: 4%

**Region of headquarters**
- North America: 42%
- Europe: 25%
- APAC: 20%
- U.K.: 6%
- Middle East: 6%
- Africa: 2%

**A note on selection bias:** Please note that survey participants are more likely to be interested in alternative proteins than the typical investor, due to GFI’s distribution of the survey and it being more likely that such investors would take the time to respond. Nonetheless, we believe the results are indicative of a selection of the more active alternative protein investors, as well as those entering the space, and therefore useful in understanding the current composition of industry investors and the investors who will impact the industry in 2023.

Source: GFI investor survey. As of December 2022. *Other includes responses listed under a specific “other” selection and the following selections: crowdfunding platform, investor group/syndicate, private wealth management, and sovereign wealth fund.
Investor characteristics

**Total AUM of organization**
- $0-$99 million: 67%
- $100-$499 million: 16%
- $500-$999 million: 3%
- $1-$3 billion: 6%
- $3-$5 billion: 2%
- $5-$9 billion: 2%
- $10-$99 billion: 2%
- $100-$999 billion: 0%
- $1 billion+: 0%

Respondents: 125

**Total AUM of funds managed**
- $0-$99 million: 76%
- $100-$499 million: 16%
- $500-$999 million: 4%
- $1-$3 billion: 2%
- $3-$5 billion: 0%
- $5-$9 billion: 1%
- $10-$99 billion: 1%
- $100-$999 billion: 0%
- $1 billion+: 0%

Respondents: 125

**Do you primarily invest in companies or funds?**
- Companies: 75%
- Funds: 22%
- Both: 2%

Respondents: 125

**If you invest in private individual companies, at what stage do you invest? (Multi-select question)**
- Pre-seed: 60%
- Seed: 73%
- Series A: 54%
- Series B: 34%
- Series C+: 21%
- Private-equity / buyout: 10%
- Merger/acquisition: 9%
- Public listing (e.g., IPO, SPAC): 6%
- Public companies: 10%
- N/A, I am not currently invested in alternative proteins: 3%
- Other: 2%

Respondents: 125

Source: GFI investor survey. As of December 2022.
ESG is critical to investors' decision-making, especially the theme of environment & sustainability.

Importance of ESG and impact in investment decision-making

<table>
<thead>
<tr>
<th>Importance</th>
<th>Respondents: 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not important</td>
<td>4%</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>24%</td>
</tr>
<tr>
<td>Very important</td>
<td>40%</td>
</tr>
<tr>
<td>Critical</td>
<td>32%</td>
</tr>
</tbody>
</table>

Most important ESG and impact theme

- Environment & sustainability: 47%
- Animal welfare: 20%
- Multiple: 16%
- Food security: 10%
- Public health: 2%
- Nutrition: 2%
- None: 2%
- Other: 1%
- Poverty: 0%
- Future of work: 0%
- DEI & justice: 0%

Source: GFI investor survey. As of December 2022.
80% of respondents include alternative proteins in their ESG funds’ core mandates.

If you manage or invest on behalf of an ESG or impact fund, are alternative proteins part of your core mandate?

- Yes: 80%
- No, but they are expected to be added in the next year: 11%
- No, and no plans to add them at this time: 8%

Respondents: 96

Source: GFI investor survey. As of December 2022.
Current and planned investments
Vast majority of respondents invest in alternative proteins and expect to continue doing so in 2023.

81% are currently invested in alternative protein companies or funds

Respondents: 84

Current investments in companies

87% expect to make investments in alternative protein companies or funds in 2023

Respondents: 84

Current investments in funds

Expected 2023 investments in companies

Expected 2023 investments in funds

Source: GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.
VCs and asset managers are the most prolific.

Last year, asset managers noted investments in 1-2 or 3-4 companies. This year, most are invested in 15+.

Number of investments in alternative protein companies by investor type

Last year, asset managers noted investments in 1-2 or 3-4 companies. This year, most are invested in 15+.

Number of expected 2023 investments in alternative protein companies by investor type

Source: GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.

*Other includes responses listed under a specific “other” selection and the following selections: crowdfunding platform, investor group/syndicate, private wealth management, sovereign wealth fund...
Investors who consider ESG factors very important or critical are significantly invested in alt proteins.

Number of investments in alternative protein companies by importance of ESG factors

Number of investor participants
- 1-2
- 3-4
- 5-9
- 10-14
- 15+

Number of expected 2023 investments in alternative protein companies by importance of ESG factors

Number of investor participants
- 1-2
- 3-4
- 5-9
- 10+

Source: GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.
Investors are diversifying their alternative protein holdings.

Current and expected 2023 investments in alternative protein companies by protein category

<table>
<thead>
<tr>
<th>Protein Category</th>
<th>Current Investments</th>
<th>Expected Investments in 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant-based</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Fermentation-derived</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Cultivated</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Multiple</td>
<td>30</td>
<td>33</td>
</tr>
</tbody>
</table>

Respondents: 55

Source: GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.

Investors have reduced interest in investing solely in plant-based companies, in favor of investing across protein categories, with a particular interest in fermentation.

Current and expected 2023 investments in alternative protein companies by business model

<table>
<thead>
<tr>
<th>Business Model</th>
<th>Current Investments</th>
<th>Expected Investments in 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B / ingredients &amp; equipment</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>B2C / consumer facing</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Both</td>
<td>31</td>
<td>30</td>
</tr>
</tbody>
</table>

Respondents: 57

Investors are particularly interested in B2B / ingredients & equipment business models.
No major changes in expected round types.

Current and expected 2023 investments in alternative protein companies by round type

Number of investor participants, multi-select question

Source: GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.
Interest in plant-based is dwindling while interest in other product types—especially fermentation and novel cultivated product types—grows.

Current and expected 2023 investments in alternative protein companies by product type

Number of investor participants, multi-select question

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Current Investments</th>
<th>Expected Investments in 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant-based meat</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>Plant-based seafood</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Plant-based dairy</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Plant-based eggs</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Cultivated meat</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td>Cultivated seaweed</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Cultivated dairy</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Precision fermentation</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Biomass fermentation</td>
<td>33</td>
<td>32</td>
</tr>
<tr>
<td>Alternative fat (plant-based)</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Alternative fat (cultivated)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Alternative fat (fermentation-derived)</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Ingredients and equipment, other than alternative fat (plant-based)</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Ingredients and equipment, other than alternative fat (cultivated)</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Ingredients and equipment, other than alternative fat (fermentation)</td>
<td>23</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: GFI investor survey. As of December 2022. Respondents only included if they answered about both current and expected practices.
Investors plan to increasingly invest across most regions, with particular interest in LatAm and the U.K.

Regional location of current and expected 2023 investments in alternative proteins

Number of investor participants, multi-select question

<table>
<thead>
<tr>
<th>Region</th>
<th>Current Investments</th>
<th>Expected Investments in 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>38</td>
<td>39</td>
</tr>
<tr>
<td>Latin America</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Europe</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>U.K.</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>APAC</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Africa</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Middle East</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Respondents: 53

Source: GFI investor survey. As of December 2022. Respondents only included if they answered about both current and expected practices.
Investors have a home bias, but plan to diversify their investments to other regions in 2023.

**Location of current alternative protein investments by HQ country**

*Number of investor participants, multi-select question*

- North America
- Latin America
- Europe
- U.K.
- APAC
- Africa
- Middle East

**Location of expected 2023 alternative protein investments by HQ country**

*Number of investor participants, multi-select question*

- North America
- Latin America
- Europe
- U.K.
- APAC
- Africa
- Middle East

**Source:** GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.
Roughly half of investors are exposed to emerging markets, and over half plan to invest in 2023.

Currently invested in alternative protein companies based in emerging markets

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, a moderate or large number</td>
<td>9</td>
</tr>
<tr>
<td>Yes, a small number</td>
<td>18</td>
</tr>
<tr>
<td>I am invested in alternative protein companies, but not based in emerging markets</td>
<td>28</td>
</tr>
</tbody>
</table>

Plan to invest in alternative protein companies based in emerging markets in 2023

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30</td>
</tr>
<tr>
<td>Unsure</td>
<td>16</td>
</tr>
<tr>
<td>No, I view such companies as too risky</td>
<td>1</td>
</tr>
<tr>
<td>No, emerging markets are outside my mandate</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: GFI investor survey. As of December 2022. Responses were only included if investors responded to questions about both current and expected practices.
Most investors plan to invest in alternative protein companies via private equity, but other asset classes are also of interest.

Planned investments in alternative protein asset classes

Number of investor participants, multi-select question

- Equity (private): 93%
- Equity (public): 13%
- Debt (private): 18%
- Debt (public): 6%
- Project finance: 6%
- Other: 1%

Respondents: 67

Planned investments in alternative protein asset classes by investor type

Number of investor participants, multi-select question

Venture capital: 30
Angel investor: 10
Family office: 5
Accelerator/incubator: 5
Corporate: 3
Other*: 2
Asset manager: 2
Growth equity: 2
Investment consultant or service provider: 2
Investment bank: 2
Foundation: 2
Private equity: 2

*Other includes responses listed under a specific “other” selection and the following selections: crowdfunding platform, investor group/syndicate, private wealth management, sovereign wealth fund

Source: GFI investor survey. As of December 2022.
Motivations and views
ESG/impact is the largest driver of investor interest in alternative proteins and leads to more prolific investing.

Source: GFI investor survey. As of December 2022. Responses were only included on two right graphs if investors responded to questions about both current and expected practices.
Specific deal terms & valuations and concerns about return potential were top reasons for passing on an investment.

**Reasons for passing on a specific alternative protein investment last year**

*Percent of investor participants, multi-select question*

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I didn’t like the terms of the deal and/or the proposed valuation</td>
<td>52%</td>
</tr>
<tr>
<td>I was concerned about the investment’s return potential</td>
<td>46%</td>
</tr>
<tr>
<td>The company did not share adequate technical validation</td>
<td>31%</td>
</tr>
<tr>
<td>The company did not share adequate financial projections and analysis</td>
<td>23%</td>
</tr>
<tr>
<td>Other</td>
<td>17%</td>
</tr>
<tr>
<td>The investment fell outside of my investment mandate</td>
<td>16%</td>
</tr>
<tr>
<td>I was concerned about the investment’s nutritional characteristics</td>
<td>15%</td>
</tr>
<tr>
<td>I didn’t feel I had the expertise to properly diligence the investment</td>
<td>14%</td>
</tr>
<tr>
<td>The investment was too small to be worthwhile</td>
<td>12%</td>
</tr>
<tr>
<td>N/A, I did not evaluate and pass on any alternative protein investment over the past year</td>
<td>10%</td>
</tr>
<tr>
<td>The industry falls outside of my investment mandate</td>
<td>2%</td>
</tr>
</tbody>
</table>

Companies should prioritize technical validation and detailed financial projections in investor communications.

Source: GFI investor survey. As of December 2022.
Majority are making meaningful investments in alternative proteins. For others, perceived risk and uncertainty are barriers.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent of Investor Participants, Multi-Select Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A, I am making meaningful investments in alternative proteins</td>
<td>56%</td>
</tr>
<tr>
<td>Investments are too high risk / there is too much uncertainty</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
</tr>
<tr>
<td>Expected returns are too low to meet my cost of capital</td>
<td>10%</td>
</tr>
<tr>
<td>Difficulty diligencing investments due to their technical nature</td>
<td>8%</td>
</tr>
<tr>
<td>Difficulty diligencing investments due to inadequate industry research and data</td>
<td>8%</td>
</tr>
<tr>
<td>Difficulty sourcing deals</td>
<td>7%</td>
</tr>
<tr>
<td>I’m a public markets investor and there are few public companies</td>
<td>4%</td>
</tr>
<tr>
<td>The industry falls outside of my investment mandate</td>
<td>2%</td>
</tr>
<tr>
<td>Most deal sizes are too small for me</td>
<td>1%</td>
</tr>
<tr>
<td>I do not expect the shift to alternative proteins to be a long-lasting trend</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: GFI investor survey. As of December 2022.
If investments did slow, market and economic conditions were stated as the top reason.

### Reasons for alternative protein investments slowing down in 2022

**Percent of investor participants, multi-select question**

- Yes, due to the broad market and economic conditions: 46%
- No, they did not slow down: 45%
- Yes, due to specific concerns about alternative proteins (sales-related): 12%
- Yes, due to specific concerns about alternative proteins (other): 6%
- Yes, due to specific concerns about alternative proteins (nutrition-related): 3%

Respondents: 69

Source: GFI investor survey. As of December 2022.
Investors are optimistic about the prospects of alternative proteins, especially in the long-term.

“I am optimistic about the alternative protein industry over the short/long term”

Percent of investor participants

Source: GFI investor survey. As of December 2022.