

Materiality Assessment For Venture Capital

**Identifying ESG Risks and Opportunities for
Due Diligence and Portfolio Management**

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Introduction

Materiality Assessment is a foundational activity for successful ESG Due Diligence and Portfolio Management in venture capital. This workbook provides a guide for how to conduct a material assessment for a seed, early or growth stage venture.

“Materiality is a concept that defines why and how certain issues are important for a company or a business sector. A material issue can have a major impact on the financial, economic, reputational, and legal aspects of a company, as well as on the system of internal and external stakeholders of that company.”

– Datamaran, “Materiality Definitions: The Ultimate Guide”

Why Materiality?

Materiality Assessments provide a clear framework for how to prioritize among the hundreds of ESG issues to find those which a company is most likely to impact and be impacted by. A Materiality Assessment also provides a succinct way for investment teams and company leadership to communicate about how they understand key ESG opportunities and risks and what expectations stakeholders have for the company. Materiality Assessments are a well-established method practiced by sustainability teams at most leading global companies. This workbook provides an introduction to the methodology of materiality assessments and discusses some additional issues investors should consider in the context of venture capital and fast scaling ventures deploying innovative business models and emerging technologies.

Why Materiality Matters for Venture Capital

Materiality assessments can assist venture capital investors to improve:

- **Compliance:** Improve compliance with regulations or Limited Partner mandates to undertake ESG integration and due diligence
- **Investment Decisions and Management:** Make better *investment decisions* and more effectively *manage investments* by having a more comprehensive view of portfolio company risks and opportunities through:
 1. Improving understanding of *product-market fit* by analyzing the expectations of all stakeholder groups and how expectations could evolve to shape the future of an industry

2. Improving *portfolio company strategy & competitiveness* by focusing board engagement on monitoring actions which the company leadership should take to ensure long-term success

- **Firm Reputation:** Protect *firm reputation* by:
 1. Anticipating and preventing potential legal or ethical issues in portfolio companies
 2. Avoiding complaints of '*greenwashing*' or '*impact washing*' in marketing and fundraising materials by focusing communications on actions relating to high materiality issues

How Materiality Assessments Advance Due Diligence

VentureESG has developed a nine-part framework for ESG due diligence for ventures. The VentureESG framework provides high-level questions that cover all industries. Materiality assessments can deepen this analysis by identifying which issues due diligence teams should explore in more depth based on known risks and impacts in an industry. For example, a materiality assessment would reveal that a venture that is designing or selling apparel needs to develop a policy and strategy for how to prevent suppliers from employing child and forced labor. Similarly, a materiality assessment of a health tech venture would reveal the due diligence team should inquire what practices the company has for monitoring and responding to patient adverse health events.

Identifying specific risks early in the investment process can lead to two important outcomes. First it can help investment teams identify potential red flags that could influence the decision whether to make the investment. Second it can help identify material ESG issues which can be addressed post-investment via portfolio support and board engagement to improve long term business outcomes and financial performance. In short, materiality assessments can help make due diligence more precise leading to both better investment decisions and better long-term performance of portfolio companies.






VentureESG: ESG Due Diligence Framework

Section	Topic Coverage
1 Context & General Questions	Stage, Size, Headcount, Industry, Geographies Identification of ESG Risks & Opportunities
2 Diversity & Inclusion	Diversity Data Collection & Benchmarking Anti-Discrimination and Equal Opportunity Diversity Training & Support
3 Team & Working Environment	Compliance with Labor Laws Employee Code of Conduct & Handbook Employee Benefits Coverage Employee Contracts, Working Hours & Flexible Work Arrangements Employee Engagement & Turnover Rates
4 Environmental Management & Impact	Environmental Policy Energy, Water, Pollution, Biodiversity Impacts GHG Emissions: Scope 1,2,3
5 Supply Chain	Supplier Policy Supply Chain Improvement Programs
6 Data Security and Privacy/ Data Practices	Privacy Policy Data Management Practices Cybersecurity Practices
7 Responsible Product Design	Responsible Tech Policy & Inclusive Product Design Stakeholder Inclusion & Impact Assessment Product Integrity Unintended Consequences
8 Legal and Regulatory	Compliance Risk Exposure to Legislative and Regulatory Change Tax Practices
9 Governance	Board Structure, Function, Independence, Diversity Board Oversight of ESG and Risk Management Anti-Bribery & Corruption Financial Controls

Source: Internal VentureESG document.

Materiality Assessment for Ventures vs. Enterprises

This workbook describes a process for materiality assessments for investment professionals in venture capital funds and other financial institutions making direct investments in high-growth companies during Seed, Early- and Growth-Stages. The overall process for materiality assessment is similar to that used by large enterprises. However, there are a few additional issues which venture capital investors should pay attention to including:

	Emerging Technologies : Identifying material issues for Emerging Technologies (AI/ML, Blockchain/Crypto, Web3/AR/VR, Synthetic Biology, etc.) that are not yet fully captured by existing sustainability accounting standards
	Multi-Customer Platforms & Pivots: Expanding the number of industries that are mapped to each company to account for Technology-enabled Solutions and Platform companies potentially serving many industries (and/or the mass public) as customers
	Scaling & Timelines: Building timelines to identify when specific ESG issues will likely become material as companies scale and gain influence and impact in a market
	Pre-Investment Decisions: Communicating material ESG issues in Investment Committee meetings and identifying options to monitor and actively engage on key material issues post-investment
	Post-Investment Engagement Plans: Developing Board Engagement and Portfolio Support offerings to create capacity and accountability in small companies that do not yet have staff covering all necessary areas of expertise to sufficiently identify and manage all material ESG issues

Materiality Assessment vs. Other ESG Analyses

Materiality assessment is one of several analytical techniques used by ESG practitioners. . Materiality assessments have the unique value of identifying which industry-specific ESG risks and opportunities are most relevant to financial outcomes to a company, given its position within an industry and business model. However, materiality assessments don't answer other critical ESG questions regarding how likely a particular risk is to occur, or how to optimize ESG opportunities to drive positive social and environmental change. Practitioners should always use other techniques, including impact assessments and risk assessments, as part of their work to gain a deeper understanding of the full scope of a company's ESG risks and opportunities. Below is a summary of other common techniques used in ESG analysis.

Types of Frameworks in ESG Analysis

	Impact Frameworks	Risk or Harm Reduction Frameworks	Materiality Frameworks
Goal	Contribute to solutions and create positive impacts to environment and society "ESG Opportunities"	Prevent and reduce harms occurring to environment and society "ESG Risks"	Identify and quantify ESG issues that have a financial impact on a sector, industry or company "ESG/ Financial Materiality"
Types of Assessments	Impact Management & Assessment	Enterprise Risk Management (ERM) Environmental & Social Impact Assessments (ESIA)	Materiality Assessments
Example Frameworks	Sustainable Development Goals (SDGs) Impact Management Project EU Taxonomy	SFDR 'Principal Adverse Impacts' 'Do No Significant Harm' Principles (DNSH) IFC Performance Standards OECD MNE Guidelines UN Guiding Principles on Business & Human Rights (UNGPs) Ethical AI Frameworks	Sustainability Accounting Standards Board (SASB) Standards/ ISSB Standards

Materiality assessments are a strategy tool used for issue identification – and are not a form of benchmarking, target setting, or outcome measurement. Materiality assessments identify which issues a company should focus on - but they do not measure how well the company is currently performing on an issue, how to set targets, implement improvements, or what specific metrics the company should track and disclosure through reporting.

Common ESG Analytical Techniques

ESG Analytical Technique	Key Questions	Dimensions
Values, Culture & Purpose	<p>What is the company's mission or purpose? Core values? Culture?</p> <p>What value proposition does this company have for its industry or customers?</p> <p>What customers or use cases should this company avoid?</p>	<p>Companies: Mission Statements, Culture Improvement Plans, Employee Handbooks, DE&I Strategy, Terms of Service Policy</p> <p>Investors: Fund Thesis & Exclusion Screening</p>
Stakeholder Assessment	<p>What relationships does this company most closely need to manage? What expectations do different groups have for this company?</p>	<p>Stakeholder Assessment & Management</p> <p>Responsible Product Design & Human-Centered Design</p>
Materiality Assessment	<p>What industry-specific ESG issues does this company most closely need to manage to drive financial outcomes?</p>	<p>Materiality Assessment</p>
Impact Assessment	<p>How can this company drive positive social and environmental change (through its products & services, strategic partnerships, etc.)?</p>	<p>Impact Assessment & Management</p>
Risk Assessment	<p>To which risks is this company most exposed? What is the likelihood & impact of this risk happening? What steps would reduce this risk or mitigate its impacts? How could this company contribute to harms to fundamental rights and freedoms or to vulnerable groups (children, migrants, etc.)?</p>	<p>Risk Assessment & Management* (*includes both ESG and non-ESG risk factors such as geotechnical, geopolitical instability, competitive landscape changes, technological advancement, etc.)</p> <p>Human Rights Due Diligence (HRDD) & Impact Assessment (HRIA)</p>
Advanced Analytical Techniques	<p>What are the long-term, higher order and unintended consequences that could be caused by this company?</p> <p>What trends or situations could happen in the long term (5+ years) that this company could impact or be impacted by?</p> <p>What bad actors or malicious use cases might become associated with this company?</p>	<p>Unintended Consequence Modelling</p> <p>Futures Scenario Modelling</p> <p>Red Team Analysis</p>

Part 1. What is Materiality?

Part 1. What is Materiality?

Definitions

Materiality has multiple formal definitions established by regulatory and standard-setting organizations including²:

- “Material information is that, which is reasonably capable of making a difference to the proper evaluation of the issue at hand.” -Corporate Reporting Dialogue (CRD)
- “A matter is “material” if there is a substantial likelihood that a reasonable person would consider it important.” – U.S. Securities & Exchange Commission (SEC)
- “A substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available.” - U.S. Supreme Court, SC Industries v. Northway, 1976
- “Sustainability-related financial information is material if omitting, misstating or obscuring that information could reasonably be expected to influence decisions that the primary users of general purpose financial reporting make on the basis of that reporting, which provides information about a specific reporting entity. Material sustainability-related financial information provides insights into factors that could reasonably be expected to influence primary users’ assessments of an entity’s enterprise value. The information relates to activities, interactions and relationships and to the use of resources along the entity’s value chain if it could influence the assessment primary users make of its enterprise value. It can include information about sustainability-related risks and opportunities with low-probability and high-impact outcomes.”³ – IFRS Foundation/ISSB, 2022

At the core, all these definitions require developing and documenting a process to understand what types of issues a company might impact and be impacted by in the broader social, cultural, political, legal, economic and environmental context.

²For a list of materiality definitions see: Materiality Definitions: The Ultimate Guide, Datamaran, accessed July 28, 2022, <https://www.datamaran.com/materiality-definition/> IFRS Foundation. “Exposure Draft: IFRS Sustainability Disclosure Standard.” March 2022. paragraphs 56-57, pp. 33-34. ([Available Online](#))

³IFRS Foundation. “Exposure Draft: IFRS Sustainability Disclosure Standard.” March 2022. paragraphs 56-57, pp. 33-34. ([Available Online](#))

Industry-Level Materiality Frameworks

The Sustainability Accounting Standards Board (SASB)⁴ has identified material issues for 77 industries which can serve as starting point for a generating a list of issues. SASB standards are developed through a rigorous process which involves reviewing quantitative and qualitative studies for evidence of impact to financial outcomes and harmonization of regulations, international laws and frameworks, and industry standards. (See Annex A for a list of sectors and industries in the SASB Sustainable Industry Classification System (SICS®). The SASB standards are organized according to the following hierarchy: 11 sectors, 77 industries, 5 sustainability dimensions, 28 general issue categories, 444 industry-specific disclosure topics, 981 accounting metrics.

SASB Sustainability Dimensions and General Issue Categories

Sustainability Dimensions	General Issue Category (GICs)
Environment	<ul style="list-style-type: none"> • GHG emissions • Air Quality • Energy Management • Water & Wastewater Management • Waste & Hazardous Materials Management • Ecological Impacts
Social Capital	<ul style="list-style-type: none"> • Human Rights & Community Relations • Customer Privacy • Data Security • Access & Affordability • Product Quality & Safety • Customer Welfare • Selling Practices & Product Labeling

⁴Note that as of August 2022, SASB Standards are in the process of being incorporated into the IFRS Foundation's International Sustainability Standards Board (ISSB) Standards which will include other frameworks including TCFD, CDSB, Integrated Reporting, and WEF IBC. <https://www.ifrs.org/news-and-events/news/2022/03/issb-communicates-plans-to-build-on-sasbs-industry-based-standards/>
See: SASB Conceptual Framework. 2019. ([Available Online](#))

Sustainability Dimensions	General Issue Category (GICs)
Human Capital	<ul style="list-style-type: none"> • Labor Practices • Employee Health & Safety • Employee Engagement, Diversity & Inclusion
Business Model & Innovation	<ul style="list-style-type: none"> • Product Design & Lifecycle Management • Business Model Resilience • Supply Chain Management • Materials Sourcing & Efficiency • Physical Impacts of Climate Change
Leadership & Governance	<ul style="list-style-type: none"> • Business Ethics • Competitive Behavior • Management of the Legal & Regulatory Environment • Critical Incident Risk Management • Systemic Risk Management

Source: SASB Conceptual Framework. 2019. ([Available Online](#))

SASB Data Structure

Data Schema	Example 1	Example 2
11 Sectors	Technology & Communications (TC)	Transportation (TR)
77 Industries	Software & IT Services (TC-SI)	Automobiles (TR-AU)
5 Sustainability Dimensions	Social Capital	Business Model & Innovation
28 General Issue Categories (GICs)	Customer Privacy	Product Design & Lifecycle Management

Data Schema	Example 1	Example 2
444 Industry-specific Disclosure Topics	Data Privacy & Freedom of Expression (TC-SI-220a)	Fuel Economy & Use-phase Emissions (TR-AU-410a)
981 Accounting Metrics	<p>TC-SI-220a.1 Description of policies and practices relating to behavioral advertising and user privacy</p> <p>TC-SI-220a.2 Number of users whose information is used for secondary purposes</p> <p>TC-SI-220a.3 Total amount of monetary losses as a result of legal proceedings associated with user privacy</p> <p>TC-SI-220a.4 (1) Number of law enforcement requests for user information, (2) number of users whose information was requested, (3) percentage resulting in disclosure</p> <p>TC-SI-220a.5 List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring</p>	<p>TR-AU-410a.Sales-weighted average passenger fleet fuel economy, by region</p> <p>TR-AU-410a.Number of (1) zero emission vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold</p> <p>TR-AU-410a.Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities</p>

Part 2. Conducting a Materiality Assessment

Other Sources of Materiality Information

The SASB Materiality Framework captures known material issues of mature companies in established industries – and provides a strong starting point as well for ventures planning to operate in and interface with these industries as customers and suppliers. For ventures creating technology-enabled solutions, innovative business models or emerging technologies, investment teams need to collect information from additional sources such as news articles, social media, market research reports, NGO reports, country risk assessments and technology assessments to learn about the risks and opportunities in these spaces.

Part 2.

Conducting a Materiality Assessment

The materiality assessment has 5 steps:

Step 1.	Identify Material Issues for Industry & Technology
Step 2.	Identify Stakeholder Expectations & Concerns
Step 3.	Rate Issues by Importance to Business Objectives & Stakeholders
Step 4.	Create a Materiality Matrix

Each step is explained in detail in the following sections.

Step 1. Identify Material Issues

The first step to a materiality assessment is generating a long list of all the issues which might be material for a company operating in a specific industry.

Step 1a. Industry identification: Identify the industries and technologies in which the company interfaces

[SASB Materiality Finder](#) can be used to identify the industries in which a venture interfaces.

Primary Industry:	
Customer(s):	
Supply Chains(s)	

While mature companies can often be categorized well by only their 'primary industry', ventures typically build solutions that span multiple industries. Common situations where ventures map to multiple industries include:

- **Technology-enabled solutions** ventures apply technologies to solve problems of a specific industry or customer. Understanding the material issues for a technology-enabled solutions venture requires reviewing the issue lists for both the primary industry in which technology is developed (Software & IT Services, Hardware, Bio-

technology) and the industry of the customer such as Real Estate Services, Health Care Delivery, Agricultural Products and so on.

- **Platform companies** build technologies that could potentially have commercial use across many or all industries. For example, an artificial intelligence company that is building voice recognition software for chatbots and transcription services would need to analyze the material issues list for its primary industry (Software & IT Services) and for each industry it planned to serve such as Health Care Delivery, Retail, Insurance and so on.

Here are a few examples of industry-mappings for Pitchbook industry classifications used by investors in venture capital (see **Annex B**) to their corresponding Sustainable Industry Classification System (SICS®) industries (see **Annex A**).

Industry Mappings between Pitchbook and SASB SICS®

	Example 1: Ghost Kitchens	Example 2: Bio-manufacturing platform	Example 3: Cryptocurrency trading platform	Example 4: Organic food specialty retailer
Pitchbook Sector	B2C	Health Care Materials & Resources	Finance	B2C
Pitchbook Industry -Emerging Space	Restaurant Tech -Ghost Kitchens	Life Sciences	Fintech -Cryptocurrency & Blockchain	e-Commerce Lifestyles of Health Sustainability & Wellness (LOHAS)
SICS® Primary Industry (-ies)	Software & IT Services (TC-SI)	Biotechnology & Pharmaceuticals (HC-BP)	Security & Commodity Exchanges (FN-EX) Software & IT Services (TC-SI)	e-Commerce (CG-EC) Food Retailers & Distributors (FB-AR)

SICS® Customer(s)	Restaurants (FB-RN)	Agricultural Products (FB-AG) Chemicals (RT-CH) Biotechnology & Pharmaceuticals (HC-BP)	---	---
SICS® Supply Chain(s) & Partners	Road Transportation (TR-RO)	---	---	Processed Foods (FB-PF) Agricultural Products (FB-AG) Non-Alcoholic Beverages (FB-NB)
Technology	Mobile Apps	Synthetic Biology	Blockchain	Mobile Apps

Step 1b. Industry-level Issue Identification: Identify known material issues for each Industry

Next use the [SASB Materiality Finder](#) to create a list of potential material issues for the company's primary, customer(s) and supply chain industries. Here are the Industry-specific Disclosure Topics for a few common industries in which ventures operate:

SASB Material Issues for Selected Industries

Software & IT Services	Biotechnology & Pharmaceuticals	E-Commerce	Agricultural Products
<ul style="list-style-type: none"> Environmental Footprint of Hardware Infrastructure Data Privacy & Freedom of Expression Data Security Recruiting & Managing a Global, Diverse & Skilled Workforce Intellectual Property Protection & Competitive Behavior Managing Systemic Risks from Technology Disruptions 	<ul style="list-style-type: none"> Safety of Clinical Trial Participants Access to Medicines Affordability & Pricing Drug Safety Counterfeit Drugs Ethical Marketing Employee Recruitment, Development & Retention Supply Chain Management Business Ethics 	<ul style="list-style-type: none"> Hardware Infrastructure Energy & Water Management Data Privacy & Advertising Standards Data Security Employee Recruitment, Inclusion & Performance Product Packaging & Distribution 	<ul style="list-style-type: none"> Greenhouse Gas Emissions Energy Management Water Management Food Safety Workforce Health & Safety Environmental & Social Impacts of Ingredient Supply Chain GMO Management Ingredient Sourcing
Road Transportation	Media & Entertainment	Advertising & Marketing	Education
<ul style="list-style-type: none"> Greenhouse Gas Emissions Air Quality Driver Working Conditions Accident & Safety Management 	<ul style="list-style-type: none"> Media Pluralism Journalistic Integrity & Sponsorship Identification Intellectual Property Protection & Media Piracy 	<ul style="list-style-type: none"> Data Privacy Advertising Integrity Workforce Diversity & Inclusion 	<ul style="list-style-type: none"> Data Security Quality of Education & Gainful Employment Marketing & Recruiting Practices

Step 1c. Other Material Issue Identification: Identify other material issues through news searches, market research, and technology assessments.

SASB Materiality Finder offers a guide to common material issues for established industries. Yet depending on a company’s exact technology, product, business model, geography of operations, customer segments, and key stakeholders there may be other issues that may be material that are not listed. These issues can be discovered through sources such as:

- 1. News Articles & Social Media:** Web searches can uncover more details about issues in a specific product family or business model by searching terms together such as “GHG emissions AND music streaming” or “gig worker labor rights AND digital platforms”
- 2. Market and Industry Research:** When available, market research reports can be an insightful source into understanding specific needs and concerns of specific groups. Market research can include commercially available studies, industry and professional association reports, as well as company-sponsored focus groups and customer feedback surveys.
- 3. NGO and Country Assessments:** Social and environmental NGOs provide detailed reports about specific issues and geographies. Country risk reports can also provide details on geographic-specific risks such as legal requirements, political conditions, conflict, corruption, environmental degradation and human rights.
- 4. Technology Assessments:** For ventures building emerging technologies including AI/ML, blockchain, and synthetic biology, due diligence teams should seek additional analysis provided by technologists, ethicists, and regulatory specialists to identify potential material issues. Below are examples of issues that were identified via technology assessments.

Material Issues of Selected Technologies⁶

Software*	Artificial Intelligence & Machine Learning (AI/ML)	Synthetic Biology
Truth, Disinformation & Propaganda Addiction & Dopamine Economy Economic & Asset Inequalities Machine Ethics & Algorithmic Biases Surveillance States Data Control & Monetization Implicit Trust & Understanding Hateful & Criminal Actors	Accountability Safety & Security Transparency & Explainability Fairness & Non-Discrimination Human Control of Technology Professional Responsibility	Biodiversity Impacts & Invasive Alien Species Containment & Lab Safety Practices Biosecurity & Bioterrorism Consumer Knowledge & Product Labelling (GMOs) Regulatory Gaps

* Software includes Enterprise Software, Social Media, Gaming, Mobile Apps, GovTech, etc.

⁶ Issue lists were derived from: Software: Omidyar Network. 2018. Ethical OS Checklist ([Available Online](#)), AI/ML: Fjeld, et al. 2020. Principled Artificial Intelligence, Harvard Law School ([Available Online](#)), O’Leary et al. 2020. Synthetic Biology: Technology Factsheet: Synthetic Biology, Harvard Belfer Center ([Available Online](#))

1d. Timeframe: Classify issues as material at current or future stage of investment

Once the list of issues is generated, classify each issue as material at the current stage of funding, at a future stage of funding, or low influence/out of scope. Below is an example of how to identify material issues in an early-stage venture fundraising for Series B for a mobile app for restaurant delivery services.

Example of Timeline for Material Issues

	Industry 1: (Primary) Software & IT Services	Industry 2: (Customer) Restaurants	Industry 3: (Partner/Supply Chain) Road Transportation
SASB Material Issues	<ul style="list-style-type: none"> Environmental Footprint of Hardware Infrastructure Data Privacy & Freedom of Expression Data Security Recruiting & Managing a Global, Diverse & Skilled Workforce Intellectual Property Protection & Competitive Behavior Managing Systemic Risks from Technology Disruptions 	<ul style="list-style-type: none"> Energy Management Water Management Food & Packaging Waste Management Food Safety Nutritional Content Labor Practices Supply Chain Management & Food Sourcing 	<ul style="list-style-type: none"> Greenhouse Gas Emissions Air Quality Driver Working Conditions Accident & Safety Management
Other Material Issues		<ul style="list-style-type: none"> Fees charged to restaurant owners On time deliveries Ratings, Complaints & Feedback 	<ul style="list-style-type: none"> Parking & Tickets Vehicle Insurance Order Cancellations Fees Traffic Congestion

Legend:
 Material at Current Stage
 Material at Future Stage
 Low Influence or Out of Scope

When does an issue become material?

- Material at Current Stage** issues are those that will be critical to the company’s business success in the current funding stage or managing immediate stakeholder expectations. For a Series B restaurant delivery app company to have a successful launch, this could mean managing customer data privacy, setting fair and competitive rates and policies for consumers, restaurant owners and delivery drivers, and having a mechanism to ensure food safety (spoilage) and responses to driver vehicle infractions and road accidents.
- Material at Future Stage** issues are those that are not critical to success in the current stage of the company but may become important as the company scales, enters new markets, gains influence, and ultimately has a larger impact on society and the environment. For example, as this company scales it may have increased impact on GHG emissions as delivery cars idle and contribute to traffic congestion that stakeholders will expect the company to address. Consumers may have increased expectations for food labelling for nutritional content or to filter menus searches by dietary preferences.
- Out of Scope or Low Influence** issues are those that are material for other companies in the same industry but are out of scope for this company. Alternatively, these issues may be important to company stakeholders currently but it is not likely the company will have significant influence to act on the issue until it gains more market power. For example, a venture launching a new restaurant delivery app likely does not have significant influence over the energy and water management, packaging container materials or labor practices of its restaurant partners. However, it may have stakeholder expectations (and ability) to influence such practices if it becomes a major industry player someday – or if it pivoted its business model to operate ghost kitchens where it had management oversight of food preparation workers and operations. These issues are worth including in the materiality assessment at early-stage to monitor over time for signs of increased importance to stakeholders and ability to influence.

Step 2. Identify Stakeholders

The next step is to identify who the company’s major stakeholders are and what issues or concerns they might have about the product, business model, or operations. Stakeholders⁷ are defined as

“any group or individual who can affect or is affected by the achievement of the organization’s objectives”⁸

Common stakeholder groups for companies include:

Primary Stakeholders (Transactional)	Secondary Stakeholders (Influencing)
<ul style="list-style-type: none"> · Customers · Investors · Employees (Direct Employees and Contract) · Suppliers/Partners 	<ul style="list-style-type: none"> · Communities · Regulators · Legislators & Political Candidates · Industry & Professional Associations · Media, Journalists & Bloggers · Lobbying Organizations · Activists & NGOs

A **Stakeholder Assessment** can help define the various stakeholder groups and their expectations. ⁹ To conduct a rapid assessment of stakeholder concerns for due diligence purposes, consider what each stakeholder group might have as a concern or expectation for the company. Due diligence teams should flag any issues where they need further clarification from desk research or questions to company leadership. Here are some common expectations for stakeholders.

Rapid Stakeholder Assessment Checklist

Stakeholder Group	Common Expectations or Concerns	Analyst Notes
Employees	Competitive Wages & Benefits Flexible Work Arrangements Positive & Inclusive Workplace Culture Strong Company Values, Ethical and Sustainable Business Practices	
Customers	Fair Pricing & Terms Quality & Safe Product Accurate Labelling & Instructions Good Purchase Experience & User Experience Good Customer Service & Complaint Resolution Protect Data Privacy Company Values & Sustainability Practices (B2C) Comply with Supplier Code of Conduct (B2B) Contribute to ESG Commitments (B2B)	
Suppliers & Partners	Fair Payments & Terms Enable Safe & Fair Working Conditions Protect Intellectual Property Protect Company Reputation	
Investors	Competitive Return on Investment Compliance with Laws & Regulations Good Governance & Ethical Business Conduct Contribute to ESG Commitments (Diverse Management, GHG Reduction, etc.) Accurate Reporting & Transparent Information	
Other: (Civil Society, etc.)		

⁷ For a list of stakeholder definitions see: Stakeholdermap.com ([Available Online](#))

⁸ Freeman, E. 1984. *Strategic Management: A Stakeholder Approach*.

⁹ See [Stakeholdermap.com](#) for the steps and worksheets for a comprehensive stakeholder process.

Step 3. Rate Issues by Importance

The next step is to rate each issue by its overall importance to the company’s specific product, business model, and customer types. There are two dimensions by which an issue is assessed for financial materiality : **importance to business and importance to stakeholders.**¹⁰

1) Assess Importance to Business

Importance to business in the context of public companies is typically assessed by quantitative studies measuring how specific ESG performance indicators correlate to financial and operational KPIs in an industry. In the context of venture capital, such studies typically are not available and a qualitative approach is taken.

To assess importance to business, consider:

- **Business Opportunities:** How important is it for this company to manage this issue well to realize its most important business KPIs such as market share, growth rate, customer satisfaction, employee retention, etc.?
- **Business Risks:** How costly will it be if the company mismanages this issue in terms of lost revenue from customers, increased operating costs, fines and lawsuits, brand reputation damage? How likely is it this risk will materialize given the company’s proposed business model, customers, geography, etc.?

2) Assess Importance to Stakeholders

To assess importance to stakeholders, consider:

- **Stakeholder Power:** How much power does this stakeholder group have to influence the business outcomes of this company?
- **Stakeholder Interest:** How much interest does this stakeholder group have in the activities of this company?
- **Company Ability to Influence:** How much power does this company reasonably have to influence the market on this issue at its current stage of growth?

3) Rate each material issue as High, Medium, Low and as relevant to Current or Future Stage of investment

Create a chart and score each issue on a scale of 1 (Low) to High (5) of importance to business and importance to stakeholders. Once the list of issues is generated, classify each issue as material at the current stage of funding, at a future stage or out of scope.

Here are examples of issue ratings for an ad tech and an e-commerce venture:

Example of Materiality Ratings for Seed and Early-Stage Ventures

Company Type	Issue	Importance to Business	Importance to Stakeholders	Stage of Relevance	Analyst Notes
Ad Tech (Series B)	Data Privacy & Data Practices	High (5)	Medium (3.5)	Current	The resale of data from customer browsing sessions (cookies) is critical to company's business model. Consumer surveys show a medium level of concern for data resale for the purpose of targeted advertising for consumer products
e-Commerce: Specialty Food Retailer (Seed Stage)	Ingredient Sourcing	High (4.5)	High (5)	Future	Company's unique value proposition is its screening for certification of organic ingredients and non-toxic additives. Customer willingness-to-pay price premiums for groceries is dependent on accurate screening and labelling for quality of ingredients

¹⁰ Emerging definitions of materiality also include *Impact Materiality* or *Double Materiality*. It is likely in future years that materiality assessments will have another dimension looking at overall impact a company has on a particular social or environmental issue. (The current *Financial Materiality* approach looks only at interest level or stakeholders and importance to business objectives.) See an overview on impact materiality in: BSR. 2022. "Impact-Based Materiality: Why Companies Should Focus Their Assessments on Impacts Rather than Perception." ([Available Online](#))

A Note on Dynamic Materiality: What can Cause a Materiality Rating to Change?¹¹

Materiality ratings are not set in stone. Several factors can drive changes in a company's materiality ratings over time including:

External Environment

Stakeholder expectations on an issue can change quickly. An issue that previously received little attention from stakeholders can quickly become highly material in a matter of weeks. Common triggers that increase the materiality of an issue include:

- 1. Political campaigns:** A political figure brings heightened media attention to a particular issue (Offshoring and Job Loss, Living Wage)
- 2. Crisis:** A peer company is involved in a major scandal or crisis that brings attention to the entire industry (Rana Plaza Factory Collapse in Bangladesh and working conditions in garment industry, BP Oil Spill in Gulf of Mexico and environmental impacts of oil drilling and shipping, Cambridge Analytica at Facebook and data privacy)
- 3. Economic conditions:** A change in market conditions shifts priorities or power dynamics among stakeholders (Great Recession and job security, COVID19 and wages and flexible work arrangements)
- 4. Activism:** Activists achieve a sufficient level of public awareness towards a particular issue resulting in increased pressure for action and transparency across all industries (climate change, transgender rights)

Pivots, Growth & Scaling

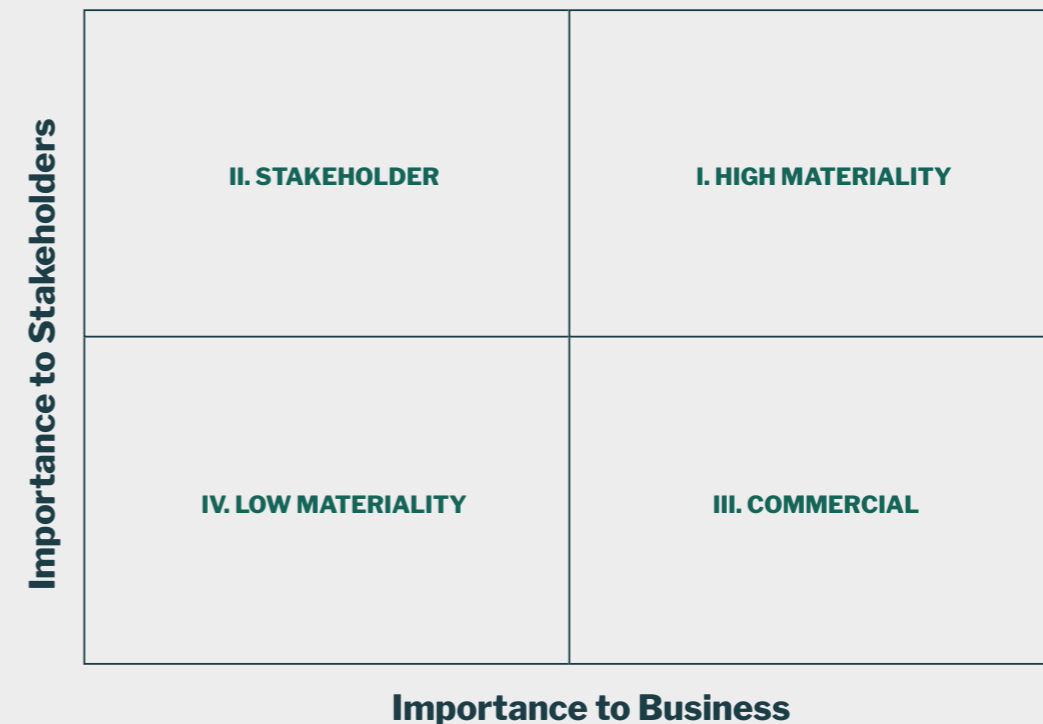
Company leaders should review their ratings of material issues annually and note any changes in priorities in business goals or stakeholder expectations. Low materiality issue can become more material if a venture:

1. Creates a new product or adds new features to an existing product
2. Enters a new geographic market
3. Expands services to include a new industry or customer segment
4. Experiences a significant change in the external environment such as a political or activist campaign, economic crisis, or a scandal occurs involving a similar company
5. Scales to a degree it has sufficient market power to influence an issue

¹¹ See more details on Dynamic Materiality in: World Economic Forum. 2019. "Embracing the New Age of Materiality" ([Available Online](#)) and BSR. 2021. "Dynamic Materiality: How Companies can Future-Proof Materiality Assessments." ([Available Online](#))

Step 4. Create a Materiality Matrix

The next step is to plot each rating on a 2x2 materiality matrix.¹² The purpose of the matrix is to provide a quick snapshot of what the most important issues are for a company to manage. (See examples from Bank of America and Unilever below for ideas on how to design a matrix.)



The matrix has four quadrants which correspond to importance:

- **High Materiality Issues** are both critical to achieving business goals and to meeting stakeholder expectations. These issues require extensive consideration in product design, business model, company policies and on-going operations. These issues should have clear action plans and KPIs for monitoring and external reporting.
- **Stakeholder Issues** are not critical to achieving business goals but have high importance to stakeholders. The company may be expected to manage and report on progress on these issues to fulfill ESG expectations set by investors, customers, governments or civil society actors. The company should develop an action plan and clear external communications plan for these issues.

¹² For additional guidance on how to build a materiality matrix see: NYU Stern. 2019. "Sustainability Materiality Matrices Explained." ([Available Online](#))

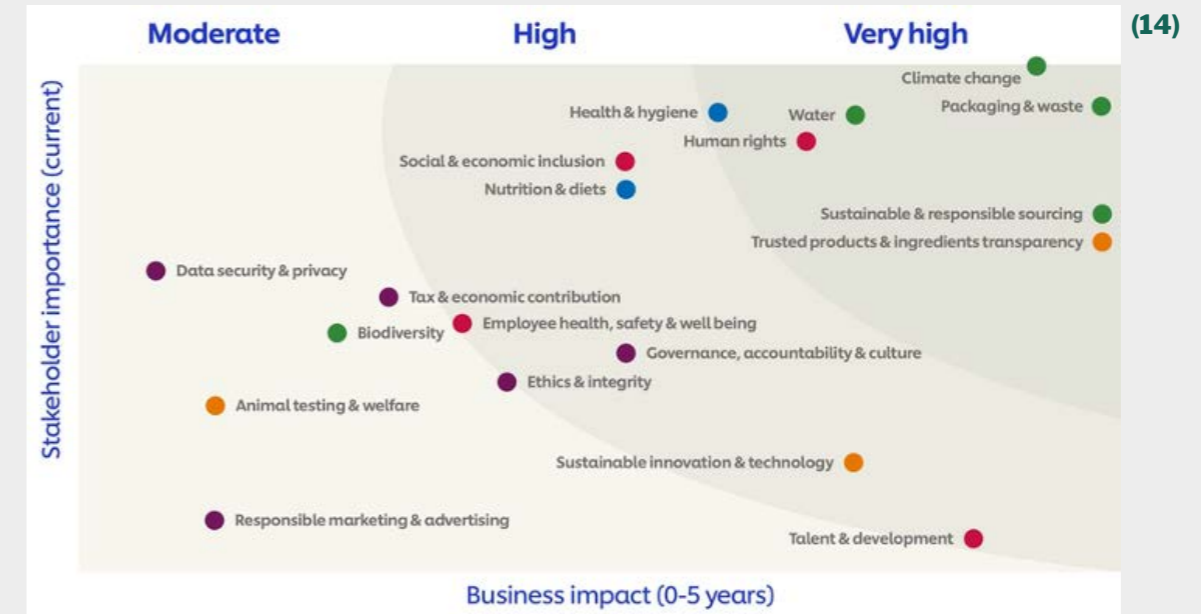
- **Commercial Issues** are important to achieving business goals but do not (currently) garner much stakeholder interest. Company leaders will need to manage these issues well for commercial success but likely will not be asked to communicate activities externally to stakeholders.
- **Low Materiality Issues** may have high importance in other companies in the same industry but are lower in priority compared to other issues for this company at this time. This may be because the issue is out of scope for the company's products and operations or because the company has low ability to influence these practices among its customers or supply chain. Low materiality issues should be monitored over time for increasing importance to stakeholders or business goals.

Example 1: Bank of America: ESG Materiality Matrix¹³



¹³ Bank of America. ESG Materiality Map. Accessed June 3, 2022 at: <https://about.bankofamerica.com/en/making-an-impact/materiality>

Example 2: Unilever: ESG Materiality Matrix¹⁵



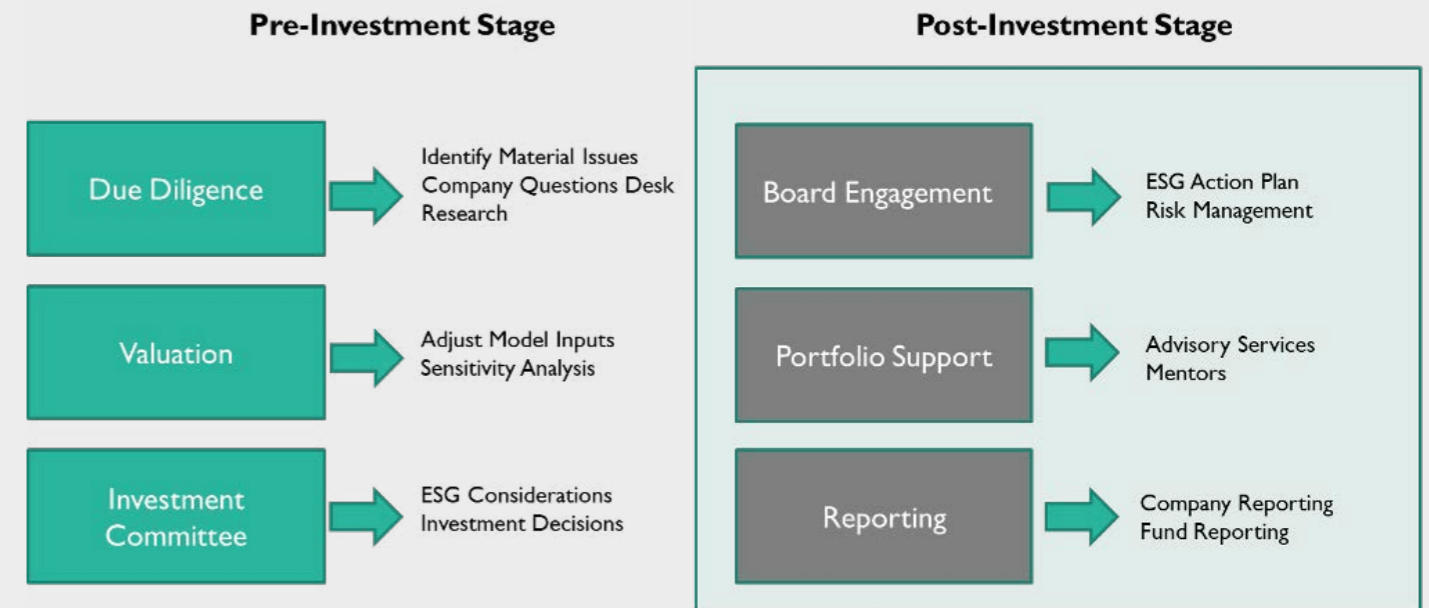
¹⁵ Unilever. "Our Material Issues." Accessed June 3, 2022 at: <https://www.unilever.com/planet-and-society/sustainability-reporting-centre/our-material-issues/>

Part 3. Materiality across the Investment Lifecycle

Part 3. Materiality Across The Investment Lifecycle

The findings from a materiality assessment can be integrated into each stage of the investment lifecycle.

Materiality Across the Investment Lifecycle



Pre-Investment Stage Due Diligence

To complete the due diligence process, investment teams can use the findings of the materiality assessment to flag any additional desk research, company questions, or expert consultations that may be needed.

- **Desk Research** are questions the investment team should conduct internet-based research to learn more about such as: What is the current expectation for fair fees and terms for third-party delivery drivers? Is the business model this company is proposing in line with those expectations?

- **Company Questions** are questions to ask company leadership to clarify current practices or plans to address an issue such as: Do you have a data integrity checklist and who is responsible for seeing it is followed?
- **Expert Consultations** are questions that require an expert to answer such as regulatory affairs expert to provide an opinion: Will this product likely require regulatory approval prior to launch? What amount of time might this process take? What is the probability of success?

Valuation

Investment teams can incorporate findings from the materiality assessment to identify which assumptions in financial models might need to be adjusted or tested for sensitivity to disruptive scenarios¹⁶:

- **Model Input Assumptions:** The team can review the list of material issues and discuss what assumptions were made regarding each issue in the financial model. For example, a materiality assessment for a digital platform company for home-based care services for the elderly would reveal that labor rights and working conditions, occupational health and safety, and patient safety are high financial materiality issues. The team may explore why wages for this type of work are currently so low and whether they will likely remain so over the long-term or whether this type of work arrangement will continue to be classified as self-employment in the long-term. They may then adjust the expected labor costs in future years accordingly. The materiality assessment would also flag other use case-specific risks that may need to be quantified such as legal costs due to medical errors or elder neglect and abuse.
- **Sensitivity Analysis:** The team can choose a few high materiality issues and estimate the likelihood and financial impact if a major disruption were to happen. For example, if a biometric recognition company is proposing half its revenue will come from use of its technology in privately-operated surveillance cameras in EU countries, the team should estimate a likelihood that the use of the technology might be substantially restricted or prohibited and the impact to valuation and other key financial metrics if that were to happen.

¹⁶ For more detailed case studies on incorporating material issues into financial analysis see: SASB. 2020. "Integrating ESG Holistically In Private Equity: A Strategic Approach," <https://www.sasb.org/knowledge-hub/integrating-esg-holistically-in-private-equity-a-strategic-approach/>

Investment Committee

Investment teams can summarize the high materiality issues (Quadrant I) and current company plans to address the issues in a short table for inclusion in the Investment Committee Memo. They may also choose to provide specific recommendations to the Investment Committee if they believe actions could be taken pre- or post-investment on any material issues to improve likelihood of company success. The types of actions they might recommend include:

- **Do Not Invest:** The committee should seriously consider not investing in this company due to high likelihood of significant societal or environmental harm that cannot reasonably be prevented or mitigated
- **Term Sheet Clause:** Include a clause that the company use funds to hire a new executive who will be responsible for managing a specific issue such as a Head of Cybersecurity
- **Board Engagement Plan:** If taking a board seat, suggest a few action items or KPIs management should report to the board such as safety incident rates or diversity of new hires

Post-Investment Stage Board Engagement & Portfolio Support

Materiality assessments can be used to guide active management with portfolio companies. For boards, they can guide on which issues are most financially material at the current stage of investment that may require risk oversight from the board such as clarifying any regulatory gaps of a product prior to launch. For portfolio support, investors can provide mentors and advisors to company leadership teams to support developing a long-term plan for ESG action. Company leadership teams can use materiality assessments to identify material issues looking several years in the future. They can then use that to develop an action plan for how they will address each material issue including:

- **What:** What specific steps do we need to take to manage this issue?
- **By When:** By which specific milestone should this action be achieved? (For example: pilot test launch, go to market, expansion to international market, etc.)
- **By Whom:** Who will be responsible for ensuring this action happens? What new hires will we need in future funding rounds to ensure we have capacity to adequately manage this issue on an on-going basis?

Here is an example of a SaaS company currently in Series A mapping how they will develop their data privacy and management practices:

Example of ESG Action Plan

Issue	Level	Actions (What?)	Timeframe (By When?)	Individual Responsible (By Whom?)
Data Privacy	I. High Materiality	1. Develop Data Privacy Policy & Informed Consent	Launch of Pilot Study (Series A)	Chief Product Officer with inputs from Senior Software Engineer and General Counsel
		2. Develop Data Resale Policy	Launch of Go-To Market (Series B)	
		3. Develop Data Use & Management Plan	Growth Stage (Series C)	Lead Data Scientist (New hire with Series C funding)

NOTE: Materiality action plan items should be fully integrated into annual work plans for each department and not be a standalone exercise.

Materiality assessments may also help identify specific areas where the team may need immediate short-term support, where investors may add to their portfolio support services, such as providing an adviser to support in developing an Ethical AI framework for a new use case.

Reporting

Finally, materiality assessments can be used to guide ESG disclosure both for companies and for venture capital funds by identifying a list of high materiality and stakeholder issues (Quadrants I, II) that will ensure investor and stakeholder needs for information are being met.

Annex

Annex A. Sustainable Industry Classification System (SICS®)

Consumer Goods

Apparel Accessories and Footwear
Appliance Manufacturing
Household & Personal Products
Building Products & Furnishings
E-Commerce
Multiline and Specialty Retailers & Distributors
Toys & Sporting Goods

Extractives & Minerals Processing

Coal Operations
Construction Materials
Iron & Steel Producers
Metals & Mining
Oil and Gas Exploration and Production
Oil and Gas Midstream
Oil and Gas Refining and Marketing
Oil and Gas Services

Financials

Asset Management & Custody Activities
Commercial Banks
Consumer Finance
Insurance
Investment Banking & Brokerage
Mortgage Finance
Security & Commodity Exchanges

Food & Beverage

Agricultural Products
Alcoholic Beverages
Meat Poultry and Dairy

Non-Alcoholic Beverages
Processed Foods
Food Retailers & Distributors
Restaurants
Tobacco

Health Care

Biotechnology & Pharmaceuticals
Health Care Delivery
Health Care Distributors
Managed Care
Medical Equipment & Supplies
Drug Retailers

Infrastructure

Electric Utilities & Power Generators
Engineering & Construction Services
Gas Utilities & Distributors
Home Builders

Real Estate
Real Estate Services
Water Utilities & Services
Waste Management

Renewable Resources & Alternative

Energy

Biofuels
Forestry Management
Fuel Cells & Industrial Batteries
Pulp & Paper Products
Solar Energy Technology and Project Developers
Wind Technology & Project Developers

Resource Transformation

Aerospace & Defense
Chemicals
Containers & Packaging
Electrical & Electronic Equipment
Industrial Machinery & Goods

Services

Advertising & Marketing
Casinos & Gaming
Education
Hotels & Lodging
Leisure Facilities
Media & Entertainment
Professional & Commercial Services

Technology & Communications

Electronic Manufacturing Services & Original Design
Manufacturing
Internet Media & Services
Semiconductors
Software & IT Services
Telecommunication Services
Hardware

Airlines
Air Freight & Logistics
Automobiles
Auto Parts
Car Rental & Leasing
Cruise Lines
Marine Transportation
Rail Transportation
Road Transportation

Annex B. Pitchbook Industry Classification

Pitchbook Sectors (7)

Health Care Finance IT	Business to Business (B2B) Business to Consumer (B2C)	Energy Materials and Resources
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Pitchbook Industry Verticals (50+)¹⁷

Adtech Advanced manufacturing Agtech Artificial intelligence and machine learning (AI/ML) Audiotech Augmented reality (AR) Autonomous cars B2B payments Beauty Big Data Cannabis Carsharing Cleantech Climate tech Cloudtech and DevOps	Construction technology Cryptocurrency and block-chain Cybersecurity Digital health Ecommerce Edtech Ephemeral content eSports Femtech Fintech Foodtech Gaming Healthtech HRtech Impact investing	Industrials Infrastructure Insurtech Internet of Things (IoT) Legal tech Life sciences Lifestyles of Health and wellness Manufacturing Marketing tech Micro-mobility Mobile Mobile commerce Mobility tech Mortgage tech Nanotechnology	Oil and gas Oncology Pet tech Real estate tech Restaurant tech Ridesharing Robotics and drones Software as a service (SaaS) Space tech Supply chain technology Technology, media and telecommunications (TMT) Virtual reality (VR) Wearables and quantified self 3D printing
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Source: SASB. 2022. Understanding the SASB Standards. ([Available Online](#))

Pitchbook Emerging Spaces (85+)¹⁸

3D printed buildings	Contract management automation	Lithium extraction technology	Service mesh
3D printed foods	Conversational banking	Livestock health	Sleep tech
4D printing	CRISPR diagnostics	Low-code and no-code development platforms	Small modular reactors
AI-enhanced learning	Crowdsourced testing	Low-Power Wide-Area Networks (LPWAN)	Small satellites
AI in food tech	Database sharding	Medical exoskeletons and prosthetics	Smart clothing
AI-powered drug discovery	Desalination tech	Medical robotics	Smart grid
AIOps	Decentralized finance	Mental health tech	Smart home assistants
Air taxis	DevSecOps	Microinsurance	Smart jewelry
Alternative battery tech	Digital avatars	Microweather	Smart locks
Alternative home financing	Digital freight brokerage	Mining tech	Smart mirrors
Anti-aging	DNA data storage	Modular construction	Smart packaging
Art trading platforms	Edge computing semiconductors	Nanomedicine	Smart waste management
Assistive tech	eDiscovery platforms	Natural disaster preparedness and response	Social audio
Auto commerce	Electric vehicle charging stations	Neurotechnology	Space tourism
Autonomous delivery	Electric vehicle platforms	Next-gen network security	Sports tech
Autonomous flight	Election tech	NFTs	Supersonic travel
Autonomous shipping	Electric flight	Ocean data collection	Sustainable fashion
Autonomous trucking	End-of-life planning	Pandemic travel	Sustainable packaging
Autonomous vehicle simulation	Energy storage	Passwordless authentication	Sustainable tourism
Banking as a service	Fertility tech	Payment facilitator enablers	Swarm AI
Batteryless IoT sensors	FinOps	Post-quantum cryptography	TinyML
Blockchain real estate	Food service robots and machines	Psychedelics	Urban planning tech
Cannabis beverages	Fusion energy	Quantum computing	V2X
Cannabis breathalyzers	Generative AI	Real estate crowdfunding	Virtual events
Carbon capture and removal	Gene therapies	Reforestation	VR health
Cashierless checkouts	Ghost kitchens	Regenerative agriculture	Warehouse management tech
Cellular agriculture	Graph databases and analytics	Renewable ocean energy	Waste-to-energy
Clean meat	Hydrogen energy	Resilient PNT	Youth banking
Climate risk modeling as a service	Hyperloop	Robotic process automation	
Cloud gaming	Income share agreements (ISA)	Security deposit alternatives	
Cloud workload protection	Education	Security orchestration, automation and response (SOAR)	
Cognitive computing	Indoor farming		
Commercial space launch	Indoor mapping		
Computational storage	Industrial workplace safety		
Concentrated solar power	Insect-based foods		
Connected fitness equipment	In-space manufacturing		
Construction robotics	IoT security		
	LiDAR		
	Lithium ion battery recycling		

¹⁸ Pitchbook. What are Emerging Spaces? Accessed June 6, 2022 at: <https://pitchbook.com/blog/what-are-emerging-spaces>