AusBiotech
AUSTRALIA'S BIOTECHNOLOGY ORGANISATION

A Practical Guide to ESG for Australian Life Sciences Companies

Foreword

AusBiotech is pleased to present the inaugural ESG Guide for Australian life sciences companies, with input from individuals and organisations across Australia's diverse life sciences industry.

This Guide has been developed as a beneficial opportunity to increase the attractiveness of Australia's business environment to international and local investors and collaborators, having been identified in AusBiotech's *Biotechnology Blueprint*, the sector's decadal strategy written by the industry, for the industry. The Guide enables a consistent approach to proactively identifying and reporting on key environmental, social and governance (ESG) factors that are particularly relevant to life science companies.

It is intended to be a pragmatic, easy-to-use resource for small to medium-sized Australian life sciences companies looking to begin or to expand their ESG strategy and approach to communicating progress. It is also intended to be a useful resource for investors as a guide to understanding the priority ESG considerations for life sciences companies, as criteria for assessing their ESG credentials.

Globally, awareness of the importance of ESG factors has grown over the past decade and it is increasingly regarded as an integral aspect of contemporary best practice for companies and for investors.

The life sciences industry is distinctive by virtue of its inherent link to social good as the innovators and advancers of science and technology to deliver potentially life-changing and life-saving therapies, vaccines, diagnostics, devices and digital health solutions that have global significance for humankind.

Australia's life sciences industry currently includes over 1,400 companies undertaking research and development, the majority of which are small to medium sized enterprises (SMEs). Supporting these nascent companies to develop and communicate proactive ESG strategies, policies and practices will enhance the reputation and credibility of our sector, lead to increased investor confidence and attraction, and and assist in delivering timely and innovative health outcomes.

The Guide is designed to be a reference for company executives and boards to highlight the importance of establishing ESG programmes, understand the materiality of factors specific to the life sciences industry and their own individual company, initiate a process to assess strengths and gaps, and provide a starting point for implementation and communication. Irrespective of the level of ESG maturity within a company, a commitment to even the smallest improvements can have a significant impact.

With 93 percent of small cap companies in Australia currently not reporting on ESG[1], there exists an opportunity for companies to differentiate themselves within the market and in the eyes of potential investors and other stakeholders.. It's an opportunity not to be missed.

This Guide forms part of AusBiotech's work to support and grow the life sciences industry, as a key social and economic driver for Australia's future. It has been possible due to the generous contribution of time and effort from many across the sector, most notably the ESG Working Group listed in the Acknowledgements section. I commend this resource to you, as the first of its kind to support sustainability behaviours and reporting for Australian life sciences companies.

Lorraine Chiroiu, CEO, AusBiotech

ESG creates value

The significant influx of investment and the uptick in business performance demonstrates that an effective ESG strategy can support a company's future prosperity. A robust plan that is measured and communicated correlates to higher equity returns, reduced costs, less regulatory and legal interruptions, and increased employee engagement. ESG reporting is relevant to small, medium, and large companies, and offers direct, timely and significant benefits.

"ESG policy, planning and execution is becoming increasingly relevant for small companies. The extent to which a company implements ESG strategy needs to be proportionate to the size of the organisation, but even the smallest startups can start planning an appropriate and cost-effective ESG journey. Not only is it the right thing to do, but in small companies it can provide genuine benefits, such as attracting and retaining talent and broadening the pool of potential investors in the company, as a growing number of people and funds rate ESG as an important consideration when deciding to get involved."

Matthew Hoskin, CEO & MD, Nirtek

"Small, public companies, such as Amplia, need to pay more attention to ESG to align their practices with expectations of the investor community. This ESG guide is a valuable resource to help SMEs like ours to begin incorporating ESG into their business."

Warwick Tong, Chair, Amplia

"As a lean company, raising capital and developing early-stage drug discovery programmes, it is not easy to divert resources to ESG reporting. The AusBiotech ESG guide for Australian life sciences companies is an incredibly useful resource, distilling what you need to know and providing helpful tools for constructing and implementing an ESG strategy. There is no doubt that as awareness and requirements for ESG reporting grow within the investment community and larger corporations, there will be a competitive advantage for those smaller organisations that have started to integrate ESG principles and reporting into their company practices."

Dr Joanne Boag, CEO, Oncology One

"At Cochlear we are focused on integrating sustainability into our corporate strategy. Managing the extensive range of ESG topics that can impact the ability to create long-term value can seem overwhelming. That's why it is so important for all companies – big, small, and in between – to take the foundational step of conducting a materiality assessment. For Cochlear, identifying our most material ESG topics was critical in providing focus and helping us prioritise initiatives."

Brooke O'Rourke, Vice President Government Affairs & Sustainability, Cochlear

"In 2022 we delivered our inaugural ESG performance statement as part of our annual report to shareholders. In preparation for this, we developed an ESG strategy with the support of expert consultants. This enabled us to determine which issues were material for the company and for our stakeholders, how we could add value and how best to mitigate risks, and to embed ESG considerations into our business at both operational and strategy level. With a robust ESG strategy now in place we are well positioned to communicate our progress clearly, and to differentiate ourselves from our peers."

Dr Megan Baldwin, Managing Director and CEO, Opthea

"At Telix, we approach our mission to help patients with cancer and rare diseases, with a sustainability focus. We believe good governance practices, social purpose and responsibility to the environment are the foundations of sustainable value creation for shareholders, and all of our stakeholders. We continue to build on an internal culture that is driven by ethics and values, patient outcomes including access to medicines, the health, safety and wellbeing of our employees, and improving environmental performance. We applaud and encourage our sector partners who are on the same journey."

Melanie Farris, SVP - Global Governance, Risk and Compliance, Telix Pharmaceuticals

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Introduction to ESG

'Environmental, social and governance' (ESG) has become part of the lexicon of global corporate, government and investment communities in recent years. However, it is by no means a new concept nor a clearly-defined one.

While the central tenets of shared value across commerce and community have been part of growing shareholder interest since the 1970s, the term ESG truly came to life through the *Who Cares Wins – Connecting Financial Markets to a Changing World* report of 2004[2]. The subsequent conference in 2005 brought institutional investors, asset managers, buy-side and sell-side research analysts, global consultants and government bodies and regulators together to examine the role of ESG value drivers in asset management and financial research.

Since then, increasing attention from investors, customers, employees and communities has seen ESG evolve from 'nice to have' corporate social responsibility initiatives to programmes that are an essential expression of organisational purpose, strategy and culture.

As the value of life sciences companies can be inherently tied to their positive social impact, the sector is strongly positioned to capitalise on the foundations already in place.

> *"Companies operating in the life sciences and medtech sectors are in a unique position where business foundations are often influenced by a strong purpose that has positive social impact. These companies therefore have an opportunity to infuse ESG into their business operations more organically and allow ESG focus and activity to evolve in natural alignment with company maturation."*
> *AusBiotech, Biotechnology Blueprint, 2022.*

What was once the domain of large ASX-listed companies is now a consideration for all private and public companies. Although mandated or standardised reporting is yet to be established, expectations are growing exponentially, and it's clear that the investment community globally considers ESG strategies and action as critical when making investment decisions.

There are a variety of lenses through which ESG can be viewed:

- Expectations, with reference to investors, employees, and other stakeholders, including community;
- Risk identification and mitigation;
- Compliance with a focus on reporting, targets, addressing performance against standards; and
- Impact, value, opportunity creation.

> *"The reasons why a person will choose to work at a particular organisation and then stay, are more nuanced than they have ever been. A feeling of connection to an organisation's purpose is foundational; a ticket to entry. For many people they also want to see that purpose in action. In biotech, that could mean how a company hears and respects the voices of the people, whose lives their current or future therapies seek to improve, or attention to eco-design of products or reductions in carbon footprint, and more. It's important for companies to have clarity on their ESG agenda and how they are taking action aligned to their purpose – then communicate it! Sharing stories of meaningful social impact with employees, potential future candidates, and stakeholders is a crucial part of talent attraction and retention strategies."*
> *Michelle Zimany, Head of People & Culture at Sanofi Australia & New Zealand.*

A key consideration when starting out is materiality: a process of establishing which specific ESG factors are most relevant at an industry and individual company level.

Once decisions have been made about 'what' should be measured and 'how' a company intends to track progress over time, communicating this progress to internal and external stakeholders is possible.

Designating responsibilities within a company for determining and delivering on its ESG strategy is also critical, not just outlining what actions are required, but articulating who is responsible for oversight and execution.

Ultimately, ESG is a shared responsibility between the board and management team. Investors are firmly focused on board accountability for ESG strategy to be set, supported and enabled. The delivery of ESG activities and outcomes sit with management and is cross-functional. Accountability and ownership depend on the size of the company, the nature of its business, and its level of maturity.

Stakeholders including clinical and patient groups see ESG as critical to partnering and as essential to making a positive contribution to society. Similarly, employee and other interest groups increasingly demand that companies not just serve their commercial interests but also the interests of communities in which they operate. There is recognition that ESG is now integral to talent attraction and retention strategies for organisations of all sizes.[5]

There is a growing desire within Australian investors to support an evolving and maturing approach to ESG credentialling for life science companies. For example, an initiative currently underway within the Australian investment community is the development of an ESG reporting tool for venture capital portfolio companies. Although adoption of this reporting framework is voluntary, it is a significant effort to standardise company metrics, allowing for benchmarking and enabling portfolio companies to track and improve their ESG performance over time.

Investors are not only focused on the ESG credentials of potential portfolio companies, but they must also address their own ESG credentials and disclosures, values-alignment and manage their own stakeholder expectations. Funds are mandated to ensure portfolio companies meet a minimum ESG criteria.

Nearly 80 percent of surveyed investors for PwC's Global Investor Survey: the economic realities of ESG view ESG risks as a major factor in their investment evaluations, and half would divest from companies they believe were failing to deliver on ESG commitments.[4]

The life sciences sector is global in nature and companies need to also consider the ESG expectations in other jurisdictions. The US, UK and the European Union have increasingly active regulators requesting specific ESG disclosures. In addition, global companies operating in Australia are increasingly requiring local suppliers to provide evidence of their ESG reporting, to support their supply chain integrity.

The New Zealand Stock Exchange updated in April 2023 its Corporate Governance Code and ESG Guidance Note establishing a "comply or explain" approach to disclosing eight key principles. It encourages companies to adopt the Code, but requiring them to explain why not if they choose not to. It follows The NZ Government›s legislation passed earlier this year making climate-related disclosures mandatory for some companies.

The anticipated release of the global standards by the International Sustainability Standards Board (ISSB), is scheduled for mid-2023 and is likely to be followed by the introduction of mandatory disclosures for select entities. Commonwealth Treasury has given a strong indication of its intention to apply the ISSB standards and so it is no longer a question of 'if' but 'when' formal regulation will be introduced in Australia. It is therefore important that company executives and board directors are prepared.[3]

ESG offers significant benefits to your company, today

Expectations from employees, stakeholders, investors, and shareholders continue to grow exponentially, and regulatory changes are coming. CEOs, including those of smaller companies and/or with limited resources, are feeling overwhelmed: ESG has a long history, and there is an abundance of information – however, it can be daunting, confusing and overwhelming when considering where to start, and how the information may apply and inform a life sciences company.

Whilst it's important to begin working on ESG reporting to prepare companies for the future, it also provides direct, timely and significant benefits for the company. Company executives and boards across Australia's life sciences sector are seeking ESG strategies today as they recognise the opportunities, not just the risks, from formalised programmes, increased disclosure and market benchmarking.[6]

This Guide is primarily intended as a resource to support those in the early stages of their ESG journey. It includes information, practical tools and links to a range of references that will assist companies to 'get started', accelerate or expand their ESG programmes.

At the time of writing there is no universal standard to guide companies on their ESG programme, given the evolving nature of ESG reporting and regulation, and the level of subjectivity on what's most relevant and important to each company.

This lack of standardisation is why the Guide is intentionally not prescriptive, but rather presents a range of voluntary options for establishing, integrating, measuring and reporting on sector-relevant ESG factors.

Given the pace at which the global ESG narrative is evolving, this Guide is intended as a reference to existing perspectives and suggested approaches for companies wanting to establish their ESG credentials. While every effort has been made to reflect current best practice, it is anticipated that companies will need to continually review and amend their ESG policies in line with the rapidly

Connecting the E, the S and the G

This guide enables the opportunity for SME life sciences companies to begin their ESG journey. E, S, and G are intrinsically connected and support each other, and the following three sections highlight the considerations that companies may choose to include in their strategy.

ESG strategies for SMEs may initially be narrow and focus on the priority areas of relevance.

Nevertheless, there is commonality across all organisations in some aspects of ESG; for example, board diversity, ensuring adequate policy infrastructure to support employee well-being, and minimising operational impact upon the environment are viewed as simply good governance. This Guide provides specific examples or considerations most relevant to life sciences companies.

At the conclusion of each of the following three sections are key questions to guide consideration of what is most applicable to a company, which can be used to determine areas of relevance, and assess level of maturity (basic, advanced). It is acknowledged that not all factors will be relevant to all companies.

In addition to this Guide, there are other external resources that may be useful in reflecting on the principles that form the basis of ESG. For example, the guidance produced by the US Biopharma Investor ESG Communications Initiative (refer Figure 1) , which is led and facilitated by a sector-focused international collaboration network for senior biotech and pharma executives and investors with the aim of driving their sustainability agendas forward[7].

The most recent guidance has identified and described the following high-priority ESG topics for the life sciences sector, and also provided examples of metrics – indicating what investors are looking for – under each of these topics.

Figure I: Shared High-priority ESG Topics for the Biopharma Sector

For companies at a more mature stage of implementing their ESG strategies, B-Corp Certification is a designation that a business is meeting high standards of verified performance, accountability, and transparency on factors from employee benefits and charitable giving to supply chain practices and input materials. While this certification process is complex, resource-intensive and potentially beyond the reach of many SMEs, it is increasingly being seen by some Australian companies as a goal. See the Glossary for more detail.

It is anticipated that companies will need to continually review and amend their ESG policies in line with the rapidly evolving nature of ESG requirements.

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"ESG is a growing focus for our industry, and consideration of these factors can unlock opportunity for biotech companies. At a minimum, all companies should be considering their impact on the environment; the commitments they make to their employees, suppliers and the communities in which they operate; and the measures they have in place to responsibly deliver their products and services. As an active investor, we are committed to helping portfolio companies improve both their impact and ESG performance, which enable long term value creation. We all have a responsibility to shape a sustainable future."
Melissa McBurnie, Partner & Head of Impact, Brandon Capital

Environmental considerations

There is limited consensus on which factors companies should include in their ESG strategies and communications, regardless of industry. In a recent report based on interviews with biotechnology executives and investors in the US market, no specific ESG metrics 'stood out' as being commonly referenced: in the environmental category of ESG factors, CO2 emissions, supply chain management, energy reduction initiatives, waste reduction and the use of natural resources were all noted as factors that companies disclosed (or planned to disclose) in the coming twelve months.[8]

In 2021 the Taskforce on Nature-Related Financial Disclosures (TNFD) was formed, building on the 2017 Task Force on Climate related Financial Disclosures (TCFD).[9] The TNFD has responsibility for a risk and opportunity management and disclosure framework being developed and is due for release in 2023[10]. The TNFD considers the health sector a priority due to the relevance of many nature-related considerations[11].

In a 2023 report the Australian Institute of Company Directors noted the recent Commonwealth Treasury Consultation Paper on Climate Reporting that suggested mandatory climate reporting is imminent, and that Australian directors "need to understand climate and sustainability risks, not just to oversee the preparation of corporate reports, but more fundamentally as responsible stewards of the long term health and sustainability of their business".[12]

Expectations from investors include a strong focus on communicating/reporting efforts to measure and reduce the environmental impact of a company's activities. The global Principles for Responsible Investment initiative (PRI) for example highlights sustainable land use, the circular economy, plastics, water, fracking, methane and biodiversity as priority considerations within the environmental component of ESG.[14]

> *"Our investments in life sciences are, by nature, focused on delivering positive impact for society, as we aim to provide new treatments for patients. Our portfolio companies are working on delivering breakthrough innovations for the largest global unmet needs of patients, and at the same time employ highly-qualified scientists and entrepreneurs that will power the future economy of the countries we operate in. We do so with a careful consideration of minimising our environmental footprint from day one, as we are leading implementation of ESG practices across our portfolio and industry."*
> *Dr Siro Perez, Partner & Head of Life Sciences, IP Group Australia*

Companies may already have environmental and/or sustainability-focused initiatives underway, given global attention on climate change, clean energy and waste management (including efforts to encourage the 'circular economy') in recent years. Undertaking an internal audit of existing policies and procedures may be the first step in documenting the company's 'E' credentials in a future-focused ESG plan or strategy. Company policies and practices that encourage environmental sustainability (for example, remote work, paper-use reduction, recycling in the workplace) may be cited as existing initiatives.

Customers and investors are increasingly expecting companies to have a carbon emissions plan as a foundational business document that can incorporate much of these components.

For some life sciences companies, manufacturing efficiency measures and efforts to reduce waste and energy consumption, including their choices regarding procurement of consumables and broader supply chain considerations, will be well underway. Companies currently involved in manufacturing advise that their considerations include pollution, hazardous waste, water consumption, environmental risks and impacts associated with supply of materials (including logistics). Environmental factors in R&D and design processes may also be considered, not only at each stage of the product lifecycle.

For other life sciences companies, such as those involved in developing digital technologies that do not (yet) have a significant manufacturing profile, not all these environmental considerations may be relevant, or material. For some, the environmental considerations may align more with internal-focused company initiatives, including choices of energy provider for office/laboratory space, travel practices for staff (e.g. carbon offsets for any flights, and/or reducing long-haul travel), laboratory space, waste disposal and policies and procedures relating to consumables (including EVs for staff, packing/laboratory supplies, catering).

Many of these considerations may apply regardless of the size of the company - understanding which environmental factors are most relevant, and what will change over time depending on activities, phase of development and maturity, is key. This emphasises the materiality of the factors to each individual company, rather than trying to cover an extensive list of environmental factors.

Where to start?

Starting with a determination of which environmental factors are most material, and an internal 'audit' of existing initiatives, is useful in documenting which of the 'E' factors are most relevant to each company, what policies and procedures may already be in place that can be included in a forward-looking ESG plan/strategy, and which actions may be prioritised in the short, medium and long term.

Clearly articulating how, for example, climate change risks and opportunities are driving the company's internal business strategy could include metrics quantifying efforts to minimize the carbon footprint of operations, as well as longer term strategies for transitioning facilities due to anticipated climate change impacts. The following topics are framed specifically for life sciences companies (noting the principles apply outside the sector).

Energy and waste reduction

Life sciences companies can consider contributors to high energy consumption related to its operations such as heating, ventilation, cooling, lighting, computing (including use of offsite server/data storage facilities), manufacturing and refrigeration. Energy sources and suppliers can be assessed to understand commitments and initiatives to lowering the impacts of energy consumption. Reduction of waste can be achieved with consideration to recycling, reduction or elimination of single use plastic including take away coffee cups, and separation of organic, landfill and recyclable waste. The disposal or recycling of office equipment can play an important role in reducing landfill.

Consumables and natural resource use

While many life sciences companies have highly-specialised and limited choices of consumables essential to their operations, there are emerging technologies and initiatives that offer choice. Companies may choose to shift from single-use to reusable commodities, consider alternative or reduced packaging materials, or recycle water throughout their operations.

Inputs and components for technologies or products under development may be sourced from locations that experience adverse impact from extraction or production; activities including deforestation, mining, and offshore drilling impact the balance of the environment and can also destroy ecosystems and species. A reconciliation action plan (RAP) should be considered to incorporate the sensitive impact on indigenous peoples relating to the use of natural resources. While these factors are not specific to life sciences companies, they reflect common expectations from stakeholders and could be included in ESG strategies

Pharmaceuticals in the environment

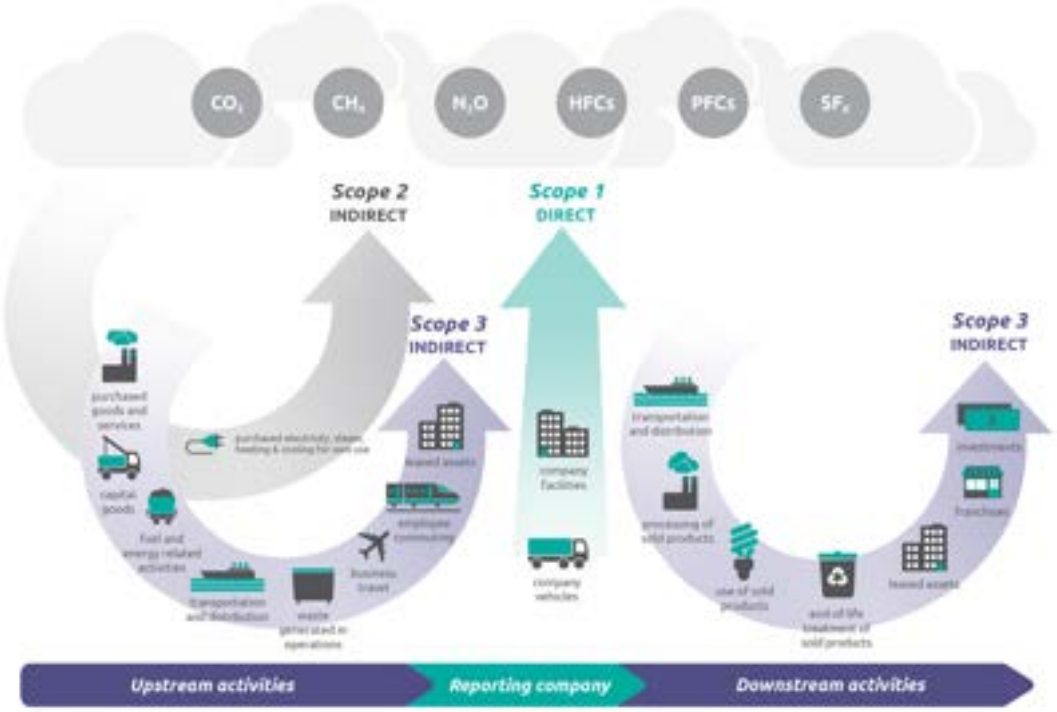
If relevant to the company, consideration of how the risks relating to pharmaceuticals in the environment (including the increasing factors of antimicrobial resistance due to reported levels of material being found in soil, waterways and food production) have been assessed and are being addressed should be included in the preparation of an ESG strategy. Sources of releases of pharmaceuticals to the environment include direct emissions from medicines manufacturing, patient and animal excretion, aquafarming, and inappropriate disposal of unused or expired medicines, in addition to the natural excretion of residue from individual patients. These risks should be assessed across the company's entire operations and supply chain.

Sustainable workplace initiatives

There are a range of initiatives available to companies that are not necessarily specific to life sciences, including responsible procurement, travel practices, recycling, initiatives to encourage cycling or carpooling or the use of EVs for company fleet vehicles. Office facilities, laboratories, manufacturing facilities and supply chain partners could be included.

Emissions reduction

Greenhouse gas (GHG) emissions are categorised into three groups or 'Scopes'[13] by the most widely-used international accounting tool, the GHG Protocol. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

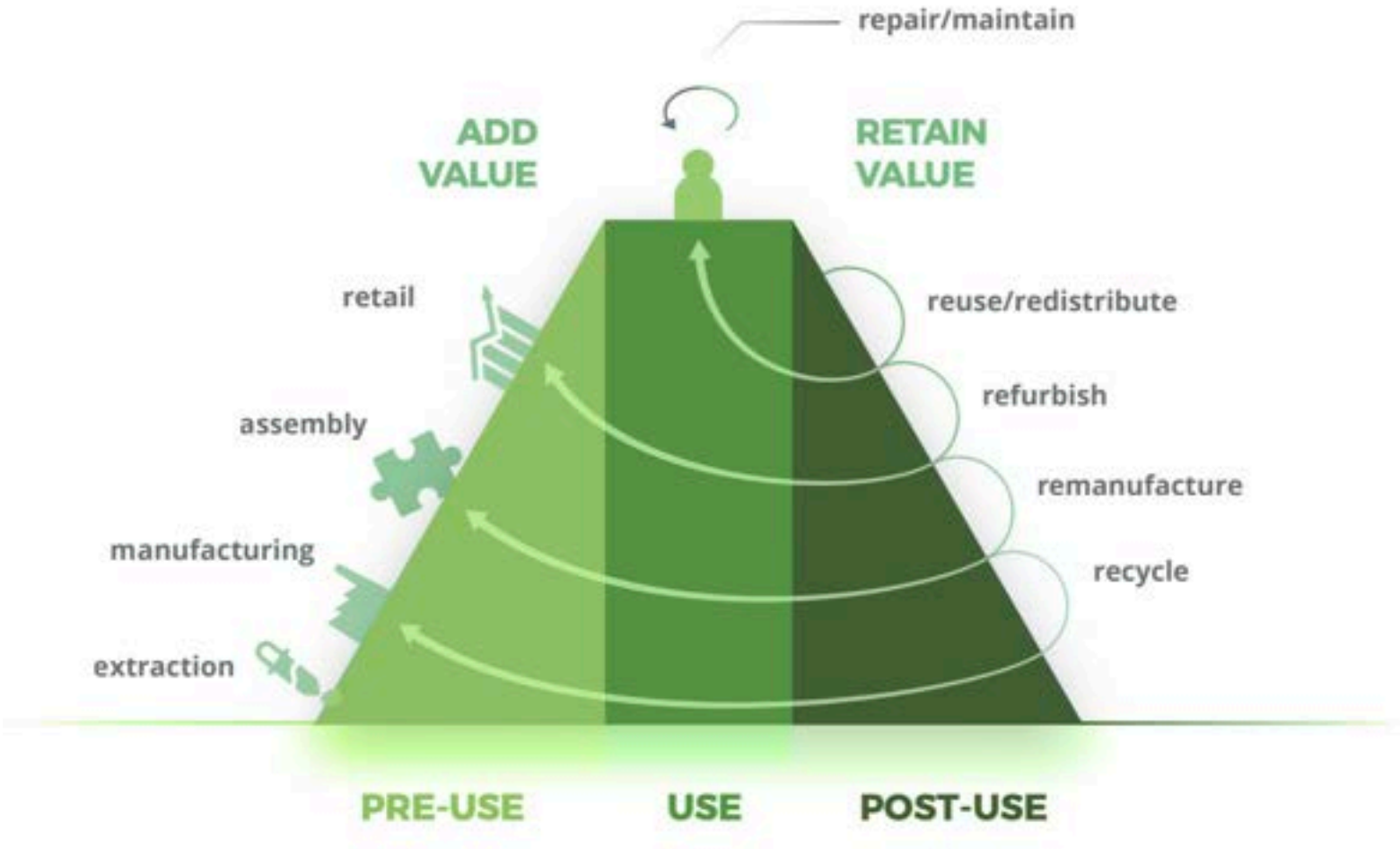


Source: WRI/WBCSD Corporate Value Chain (Scope 3) Accounting and Reporting Standard

There are several benefits associated with measuring Scope 3 emissions. For many companies, the majority of their GHG emissions and cost reduction opportunities lie outside their own operations. By measuring Scope 3 emissions, organisations can:

- Assess where the emission hotspots are in their supply chain;
- Identify resource and energy risks in their supply chain;
- Identify which suppliers are leaders and which are laggards in terms of their sustainability performance;
- Identify energy efficiency and cost reduction opportunities in their supply chain;
- Engage suppliers and assist them to implement sustainability initiatives
- Improve the energy efficiency of their products
- Positively engage with employees to reduce emissions from business travel and employee commuting.

There are specialist 'carbon accounting' software and online tools that companies may choose to deploy to accurately measure and report on consumption and emissions, and generate reports to guide action towards lowering their carbon footprint. Examples can be found in this Guide's resources page.



A circular economy seeks to maintain materials, products and services at their highest value for as long as possible, to be less resource intensive, and to recapture "waste" as a resource to manufacture new materials and products.

Key questions for life science companies when developing ESG plans

Climate change	Basic	Advanced
Have opportunities to minimise or offset the company's impact upon climate change been integrated into operations and planning?	✓	
Are climate related factors routinely included in reporting, and does the company reference the TCFD in its routine financial reporting framework?	✓	
Does the company have internal and external statements endorsing and encouraging climate change related action?	✓	
Is the company currently measuring its Scope 1 and 2 GHG emissions? How are metrics being gathered across the entire supply chain?	✓	
Is the company currently measuring its Scope 3 GHG emissions? How are metrics being gathered across the entire supply chain?		✓
Have current and planned operational considerations incorporated the impact of climate change (eg location of physical company facilities, planned expansions, upgrades of facilities to include technology such as energy-generating opportunities)?		✓
Energy & wase reduction initiatives		
What criteria are used to select energy providers (consider office, laboratory, manufacturing sites where relevant)?	✓	
What policies & procedures does the company have in place to encourage energy saving measures?	✓	
What policies & procedures does the company have in place to encourage waste reduction?	✓	

Consumables & natural resources use	Basic	Advanced
What criteria are used to select consumable providers?	✓	
How does the company reduce procurement and use of single-use items (where appropriate)?	✓	
What initiatives are in place to reduce natural resource consumption eg water use? Are offices, laboratories, manufacturing facilities and supply chain partners included in this assessment?	✓	
Are supply chain partners included in your assessment of reducing natural resource consumption?		✓
Has the company assessed its operations' impact (direct and indirect) on factors including deforestation or mining? Is the company's operations adversely impacting the indigenous landowners of that location?		✓
Pharmaceuticals in the environment		
Has the company considered potential impact on communities when deciding the location of manufacturing facilities?	✓	
What measures are in place to monitor and reduce the impact of inappropriate disposal of product waste (including wastewater) during manufacturing?		✓
Sustainable workplace initiatives		
How does the company promote and encourage recycling in the workplace (include consideration of offices, laboratories, manufacturing sites as appropriate)?	✓	
Does the company have policies & procedures in place to encourage staff to cycle, car-pool or other sustainable-travel related initiatives?	✓	
Does the company explicitly endorse or promote sustainable travel practices (eg carbon-offsetting flights, remote work instead of flying to meetings, use of EVs as company fleet vehicles)?	✓	

Social considerations

At a time when tackling complex environmental problems is receiving heightened global attention, stakeholders are increasingly demanding that social implications of a company's activities are also considered. A people-centered approach can make a real difference in the lives of employees, customers, and partners, as well as the communities where companies operate. While this imperative is no different for life sciences companies, this Guide aims to distill the commonly referenced 'S' factors with specific relevance to the life sciences sector.

"At OneVentures, we are committed to responsible investment practices that prioritise the greater good of society. We recognise that our investment decisions not only contribute to positive social and health impact but also present exciting business opportunities. In the case of biotech, we seek out companies that address significant unmet medical needs and we embed the principles of responsible investment into every stage of our screening and decision-making processes."
Dr Michelle Deaker, Managing Director & Founding Partner, OneVentures

The global Principles for Responsible Investment Initiative (PRI) highlights diversity, equity, inclusion, modern slavery and labour rights, human rights, COVID-19 and the impact of a 'just' economic transition as priority considerations within the social component of ESG for all industries.[15]

Life sciences companies have an inherent advantage in their ability to leverage an often strong social purpose focused on improving the well-being of humankind. Beyond the stated purpose of a company and its intrinsic connection to positive societal impact, specific areas of consideration include:

- Human rights
- Patient safety
- Equity of access
- Marketing of products
- Human genetic material
- Toxicology and biocompatibility
- Employees
- Business ethics and supply chains
- Governance of reporting and disclosure
- Community engagement

Social impact factors such as human rights are often noted in ESG reports, reporting standards and metrics. While it can appear overwhelming for a small company to consider how to identify, define, measure and track progress against human rights, there are some entry points worth noting. As an example, eligible Australian entities (those with annual consolidated revenue in excess of $100 million) must describe the risk of modern slavery in their operations and supply chains, and the actions taken in the reporting year to mitigate, in line with Commonwealth legislation. Companies that are not obligated to undertake this reporting may still elect to become a signatory to the Australian Government's online register for Modern Slavery Statements, and ensure commitment to human rights concepts are integrated into other policies and procedures including Codes of Conduct.

Aspects of social responsibility are already governed by regulatory authorities and are encoded in existing aspects of the industry's ethics, regulatory and approval processes. As an example, for digital health companies, adherence to the existing SASB standard on Health Care Delivery is important, which includes a focus on patient privacy and electronic health records, and social gains from delivering greater affordability and access to healthcare.[17]

Human rights

Human rights considerations are an important aspect of ESG reporting, as they relate to a company's values, operational principles, and impact on people and communities.

Some of the key factors companies should consider include:

1. Labor rights: including fair wages and safe working conditions;
2. Non-discrimination and equal opportunity: ensuring that all employees and stakeholders are treated fairly, regardless of their race, gender, sexual orientation, or other factors;
3. Considering human rights across the entire supply chain, including safeguarding against potential exploitation; and
4. Community engagement, including with patient advocacy groups.

Patient safety

Patient safety is particularly important when therapies are not yet approved, for example in clinical trials. As clinical trials are strictly regulated in Australia and most international jurisdictions, the social and ethical factors serve only as a summary of the key areas companies consider in their ESG programmes.

It is intended to prompt companies to articulate their approach to patient safety in a transparent, complete, and easily understood way, throughout the period in which patients are being engaged.

This informs investors, shareholders and the broader community's perspective on the company's ESG credentials.

Equity of access

There is a growing focus on equity of access to clinical trials, and healthcare services and treatments to diverse populations. Greater equity in clinical research can stem from engagement with underrepresented groups, establishing protocols, metrics, and standards to enable diversity and inclusion of participants, and implementing programmes aimed at making treatments available to greater populations once approved.

Marketing of products

The ethical marketing of therapeutics, medical devices, and diagnostics is essential for protecting the health and well-being of patients and is largely regulated by organisations such as the Australian Therapeutic Goods Administration (TGA), the US Food and Drug Administration (FDA), and the European Medicines Agency (EMA). Beyond regulation of safety and efficacy, ethical marketing includes promoting fair pricing, equitable access,

responsible use of therapies, and maintaining public trust in therapeutic goods. Ethical marketing ensures that patients and healthcare professionals are provided with accurate and truthful information about the benefits and risks of emerging products and technologies.

Human genetic material

The rapid pace of medical science has created a conundrum. There is strong public support for medical breakthroughs and improved treatments for disease, and the use of genetic material is central to many research and development efforts. However, there are factors including loss of privacy, potential discrimination and the ability to regulate fully as methods of collection move from point of care to remote and in-home collection of samples.

The collection, storage, use and disclosure of genetic samples and information held in human tissue collections are regulated by a mixture of legislation, guidelines and standards[18]. Outside of these, life science companies should consider policies and procedures to protect patient identity, ensure protection and security of medical data, and provide patient transparency regarding the use and protection of medical data.

Toxicology and biocompatibility studies

A key consideration for companies operating in medical research is the requirement for toxicology and biocompatibility studies as a precursor to clinical trials in humans. For most medicines and many medical devices, the regulator sets the requirement, however as alternatives are developed, regulators are responding, and the result is some choice being offered to companies. For example, a recent US law has eliminated the requirement that medicines in development must undergo testing in animals before being given to participants in human trials.[19]

The use of animals in scientific research has long been guided by the principles of the 3Rs (replacement, reduction, and refinement), first described in 1959 in a publication called *The Principles of Humane Experimental Technique*[20]. The goal of the 3Rs is to find alternatives to animal testing (replacement), to optimise the amount of information obtained from fewer animals (reduction), and to adopt methods that alleviate distress (refinement).

Where choice is available, 'replacement' may be considered. There are a growing number of Australian-based SMEs now providing these alternatives. New non-animal options are still limited in their ability to predict outcomes in humans. These include: computational modelling, "organs on a chip" or 3D cell cultures - thumb-sized microchips that can mimic how organs' function are affected - testing cells and tissues in test tubes (invitro) or cell cultures; non-invasive diagnostic imaging; and research involving people.

The 3Rs can be applied as guiding principles to improve the quality of both the science and animal welfare. It should be considered during the design stage of toxicological and biocompatibility studies and involve those with specific expertise. When the use of animals is unavoidable, or required by regulation, companies undertaking or contracting such research should consider that the principles of refinement and reduction are applied as part of supply chain assessment.

Employees

Employee related metrics for ESG are readily achievable with a focus on business ethics, diversity and inclusion, employee health and safety, and transitional workforces.

For most companies operating in line with community expectations, there are likely to be policies and procedures already in place that specifically or overtly cover these areas, however measurement can be more nuanced.

Developing a diverse and inclusive workplace through concerted efforts for stronger representation of women, particularly in senior roles, is an effort strongly supported and advocated by many. Beyond gender, companies need to consider other measures of diversity including race, ethnicity, sexuality, and age. And most importantly, diversity needs to be matched with culture and behaviour to create an environment of respect and belonging.

The workforce is no longer one entrenched in physical workspaces with COVID enabling hybrid models. Areas to consider include training and career development, physical and mental health protection, supporting work/life balance, and building community affinity.

Business ethics and supply chains

Assessing a company's supply chain as part of an overall ESG strategy includes consideration of the social responsibility of suppliers and contractors, for example, evaluating their practices and policies relating to labour rights and ethical business conduct. Companies should consider requesting information and documentation to assess alignment. Additionally, undertaking due diligence via third parties or researching suppliers and contractors prior to engagement may be an option.

Community engagement, including patient advocacy groups

There is growing expectation that life sciences companies contribute to communities directly related to their business, as well as society at large. Positive engagement with community and patient advocacy groups can be achieved through open communication, collaboration in research, providing education and resources, supporting patient-centric initiatives, advocating for public policies, fostering diversity and inclusion, supporting local communities, and measuring and reporting impact transparently. Where possible, consulting patient advocacy groups on how best to involve patient communities in defining patient-relevant ESG factors can lead to positive relationships and outcomes.

Societal impact

Companies engaged in the research, development and marketing of products and services that aim to improve human health have an intrinsic focus on the potential impact upon individuals and society more broadly. This component of a company's ESG strategy could include considering the potential impacts – positive and detrimental - of a particular medicine or medical device as well as access limitations. Transparency regarding research and development results, and engaging with stakeholders such as patients, community members, and policymakers, are important considerations. The building of social capital and ensuring that a company is accountable to the wider public could be included in this pillar of a company's ESG strategy.

Key questions for life science companies when developing ESG plans

Human rights	Basic	Advanced
Labour rights: do company policies and practices align with international labour standards and local laws?	✓	
Non-discrimination: do company policies and practices promote a culture of diversity and inclusion?	✓	
What are the human rights risks in the supply chain, such as exploitation, forced or child labor?	✓	
What processes are in place to ensure individuals' right to privacy, and that any personal data collected is used and protected in accordance with relevant laws and best practices?	✓	
Are there strategies in place to minimise any negative impacts of operations at a community level?		✓
Patient safety		
Did the data collection and handling comply with SASB standard on Health Care Delivery?	✓	
Was there a conscious effort made to exclude vulnerable subjects from clinical studies?	✓	
Was early access considered for certain patient populations?	✓	
Has there been appropriate engagement with patient advocacy groups informing, for example, study design, language used in the trial and/or recruitment of trial participants?	✓	
Was there special consideration made for pediatric patient populations (if appropriate to product)?		✓
Was the trial design protective of participants and conforms to the three key ethical codes for clinical trials (Nuremberg Code of Informed Consent, the Declaration of Helsinki by the WMA and the Belmont Report)?		✓

Marketing of products	Basic	Advanced
Has there been proper disclosure to doctors and patients of all relevant data on the safety and efficacy of the product?	✓	
Has the product been priced to allow for access whilst not enabling overuse?	✓	
Was the marketing process ethical, eliminating potential conflicts of interest by eliminating use based on financial reward of doctors and healthcare professionals?	✓	
Has there been proper updates on relevant data post-market approval?	✓	
Is there a system in place to ensure expeditious distribution of new safety and efficacy data post market approval?	✓	
Human genetic material		
Was the human genetic material used ethically and in the interest of all stakeholders (employees, partners and society)?	✓	
Was there fair control and access to genetic information for the ethical use and dissemination of genetic data?	✓	
Was the genetic material used in modifying germ lines?	✓	
Was the generic material used for the ethical development of disease treatment as opposed to genetic enhancement?	✓	
Are controls in place to prevent personal health hazard in the use of genetic material and development of genetic treatments?	✓	
Has the company set a clear framework for ethical, social and human rights considerations relating to the use of genetic material, including human embryonic material?		✓
Toxicology and biocompatibility		
Has there been an assessment of whether replacement for animal research is allowed by the relevant regulator? And if so, is a viable option available?	✓	
Has there been an application of the principles of refinement and reduction?	✓	
Has there been an assessment of the supplier conducting the research that the proper controls are in place to ensure that testing complies with ethics approvals and regulatory requirements?		✓
Employees		
Are recruitment practices developed to attract the best talent, irrespective of gender, race, age, sexuality, or disability?	✓	
Who is rewarded and how is performance recognised? Are there clear ESG related metrics in place for performance?	✓	
What practices are in place to maintain/improve the health and holistic wellbeing of employees?	✓	
How does the company ensure that employees have a safe work environment? Are all workplaces compliant with relevant policies, laws and standards?	✓	
Does the company have any systems in place to foster ethical conduct with transparency and honesty? Are all staff provided training in ESG-related matters?	✓	
Does the company have a whistleblower policy?	✓	
What is the role of shared values when recruiting the best candidates?		✓

Supplier and contractors	Basic	Advanced
Is the entire supply chain included in the company's ESG strategy, and is data from across the supply chain included in metrics and reporting?		✓
Have all appropriate policies and expectations developed within the company been shared with contractors/suppliers to ensure consistency?		✓
Societal impact		
What are the societal impacts of inappropriate data usage by the company? Does the company have sufficient controls in place to prevent these?	✓	
How does the company contribute to innovation and collective knowledge?	✓	
Does the company have a policy on responsible usage of resources and how does this fit in with the issues within the community?		✓
Does the company have a policy regarding corporate giving and philanthropy?		✓
What are the company's policies in relation to product development? Is the impact on society considered when programmes are developed?		✓
What way will the company's products benefit the health and wellbeing of different communities?		✓

Governance considerations

Governance is a broad concept covering how a company is managed, where oversight and decision-making is located, and considers the interests of its stakeholders in making decisions at all levels of the company. It includes consideration of the structures, relationships, policies and processes a company puts in place to manage and guide its operations and strategic approach. As with above sections, many 'good governance' practices are not specific to life sciences companies, and it is anticipated that many companies will already have established policies and practices that address governance factors in an ESG strategy, along with established data collection practices.

> *S&P Global noted, "Governance data, unlike environmental or social data, has been compiled for a longer period of time and the criteria for what comprises good governance and its classification has been more widely discussed and accepted."*[21]

Ethics and integrity influence the modern business taxonomy and capture the environment in which society can thrive. The standards a company sets and holds its people to account is an important component with consideration to policies on anti-bribery, anti-corruption and anti-competitive behaviour, avoiding conflict of interest, transparency over donations to patient groups, and sales and marketing practices. And increasingly, the ability to be able to substantiate ESG claims with the consequences of greenwashing increasing.

This aligns with the global Principles for Responsible Investment Initiative (PRI), which also highlights corporate purpose, director nominations, whistleblowing, executive pay, cyber security, tax fairness and responsible political engagement as priority considerations within the governance component of ESG regardless of industry.[22]

The 2022 Fenwick report notes US biotechnology executives most commonly reference considerations such as data security, compliance, board structure, ethical business practices and corporate philanthropy.[23]

Governance is a key driver in establishing and embedding a company's values and culture, building stakeholder confidence, and underpins a company's ability to address many of the factors in the above environmental and social factors sections. It is foundational to the social license or level of acceptance or approval that stakeholders and communities extend to a project, company, or industry.

Companies with adequate resourcing available may consider actions such as establishing formal, dedicated ESG board and/or executive committees accountable for developing, monitoring, and reporting on ESG metrics. This is increasingly seen as important, as stakeholders want companies to be able to demonstrate how ESG strategy is integrated and implemented across the business.

Governance considerations specific to life sciences companies

Life sciences research, products and services can have profound consequences for human health, society, quality of life, and the natural environment. As a result, governance at all stages and levels from clinical/individual, to corporate/organisational to regulatory/ governmental are typically given high priority.

Australian life sciences companies often rely on social license.

The social license to operate is made up of three components: legitimacy, credibility, and trust. [24]

- **Legitimacy:** this is the extent to which an individual or company plays by the 'rules of the game'. That is, the norms of the community, be they legal, social, cultural, formal or informal in nature.
- **Credibility:** this is the individual or company's capacity to provide true and clear information to the community and fulfil any commitments made.
- **Trust:** this is the willingness to be vulnerable to the actions of another. It is a very high quality of relationship and takes time and effort to create.

Life sciences is already a highly regulated sector, due in part to the potential for profound impact and consequences upon human health, and so the ability of companies to understand rules and implement processes to ensure compliance is critical to commercial viability and ongoing success. Integrating existing policies and procedures with additional measures, such as those outlined below, can further articulate a company's ESG credentials.

Investment in life sciences research often carries elevated risk with many years of significant investment without commercial return, due to typically lengthy R&D and commercialisation pathways. Investors need to be patient and have confidence in the company's ability to act responsibly while creating the best chance of commercial success. While not guaranteeing success of innovation, good governance contributes significantly to investor confidence.

Corporate governance

The focus of corporate governance is on the systems and procedures in place that enable a company's Board of Directors to have appropriate control and oversight responsibilities. For listed companies, this information is required under the ASX Listing Rules and is contained in the Corporate Governance Statement. For unlisted companies, the same principles apply. This directs operations from compensation, risk management, and employee treatment to reporting unfair practices, dealing with impact on the climate, and more.

In considering the company's governance structure, composition, knowledge, roles, and remuneration, companies should pay particular attention to policies, procedures and metrics to track factors such as the inclusion of strategic ESG measures or objectives as a key performance measure in executive remuneration.[25]

Risk and crisis management

Risk and crisis management form an important part of any company's overall governance approach as critical to ensuring companies proactively identify, assess and mitigate where possible, to protect against serious and adverse events. Ensuring ESG-related risks are identified, monitored and communicated should form part of a company's strategy. Areas of relevance to the life sciences industry include clinical trial conduct and outcomes, cyber security, and capital management. A Company's risk register provides an important framework for the identification, tracking, management and mitigation of risks.

Procurement and supply chain governance

Supply chains are essential to the success of almost all businesses in the life sciences and are often complex and global. They can be overly complex even for smaller companies with supply chains spanning many geographical locations and can include suppliers and partners operating at multiple levels.

Given supply chains can often fall outside a company's direct management control, they can expose a company to unexpected and potentially uncontrolled risks. Examples include ESG considerations already mentioned elsewhere in this Guide, such as modern slavery and other human rights factors, different cultural expectations and behaviours, and environmental impacts.

It is important to note that in addition to potential risks, a company's supply chain can also offer significant ESG opportunities through the ability to use buying power to generate social value or achieve social or environmental objectives. For example, a company can select its service providers to ensure Aboriginal and Torres Strait Islander businesses are considered when making purchasing decisions; or select providers who agree to adhere to a common code of conduct or level of accreditation that aligns with the company's stated position.

Providing clarity on expectations through a comprehensive procurement policy and obtaining the same from suppliers can provide a good understanding of expectations. Whether an ESG risk or opportunity, these factors can significantly impact the operation, reputation and financial performance of a company, and are worthy of documenting and reporting on to demonstrate commitment and progress.[26]

Governance of reporting and disclosure

ESG reporting "is the disclosure of performance in relation to material ESG risks and opportunities, both qualitatively and quantitatively, to explain how these material topics inform a company's strategy and overall performance".[27]

While there are high expectations for current global efforts to harmonise ESG metrics and reporting requirements such as the imminent release of the ISSB standards, Australian life sciences companies should continue to consider the following general principles in relation to reporting and disclosure:

- Ensure ongoing compliance with any regulated or mandatory reporting requirements – for example, compliance under existing clinical trial and TGA regulatory frameworks; ASX requirements for listed companies under continuous disclosure rules (ie any material exposure to environmental or social risks); or requirement to publish a modern slavery statement under the Modern Slavery Act (2018).
- Understand the perspectives of key stakeholders - while codification of ESG reporting is not yet consistently in place within Australia, stakeholder expectations are increasingly clear. For life sciences companies receiving investment for example, there may be investor-specific ESG reporting requirements that guide the selection of metrics.
- Reference best practice and international standards as appropriate for the size and nature of the company, particularly when selecting metrics. Benchmarking against similar companies may be useful in differentiating ESG performance in market.
- Ensure that the highest governance structures in the company have oversight of ESG reporting, and a visible role in communicating commitment and progress.

Key questions for life science companies when developing ESG plans

Corporate governance	Basic	Advanced
Does the company have a skills and competencies matrix for the board that is reviewed annually that includes ESG?	✓	
Does the company have ESG-specific targets that it is actively working towards?	✓	
Do executive KPIs include strategic ESG measures or objectives?	✓	
Do company policies include ESG factors such as a commitment to minimising environmental impact or respecting human rights? Does this extend throughout the company's supply chain?	✓	
Are there board sub-committees that oversee the organisation's impact on the environment and people/society? Is it clear who has been designated as responsible for ESG oversight and reporting?		✓
Is ESG integrated into the company's operational and strategic business planning?		✓
Have executives and employees been trained in meeting ESG commitments?		✓
Risk and crisis management		
Is there a risk framework that is regularly reviewed, that includes specific ESG considerations?	✓	
Is there a crisis management/response plan that includes explicit reference to ESG-related factors?	✓	
Is there a committee or individual charged with overseeing ESG-specific risk management strategies?		✓
Procurement and supply chain management		
When engaging suppliers and vendors, are ESG factors taken into consideration?	✓	
Are supply chain ESG risks documented, monitored and managed as part of the company's overall ESG strategy?	✓	
Is the company's procurement and selection of supply chain partners leveraged as an opportunity to drive ESG outcomes?		✓
Is there a supply chain risk management framework in place?		✓
Are business conduct clauses incorporated into supplier contracts/agreements?		✓
Is there a supplier code of conduct, with specific ESG relevant content?		✓
Reporting and disclosure		
Does the company comply with all mandatory/regulated reporting requirements? Is ESG routinely included?	✓	
Are there additional ESG-related reporting measures that are reported?		✓
Are there best practice industry, domestic or international standards that are monitored and/or reported, that reflect the company's commitment to ESG?		✓

What to measure: Metrics

Measuring and reporting enables a company to both demonstrate its ESG credentials and track performance over time, across factors that have been determined to be material to them and the industry in which they operate.

A common challenge for companies in the early stages of developing an ESG strategy is the lack of universal standards for which ESG metrics should be tracked and how these should be reported. ESG standards have been evolving over the last several decades through a number of global initiatives and as expressed in goals from global entities, such as the United Nations Sustainable Development Goals.

Other ESG initiatives reference the World Economic Forum ESG Framework, GRI and SASB.

Setting or referencing clear targets or goals will guide what the company is seeking to achieve for any metric and establishes a visible commitment that can be communicated to stakeholders. For example, the metric carbon emissions may have a target or goal of *net zero emissions* by a certain date. A company may choose to articulate their commitment to this goal in a variety of ways.

Reporting of ESG metrics is rapidly evolving with an increasing number of listed companies reporting against ESG key performance indicators. An increasing proportion of companies also choose to publish ESG progress on short, medium and long term goals. There is however significant scope for further improvement in reporting.

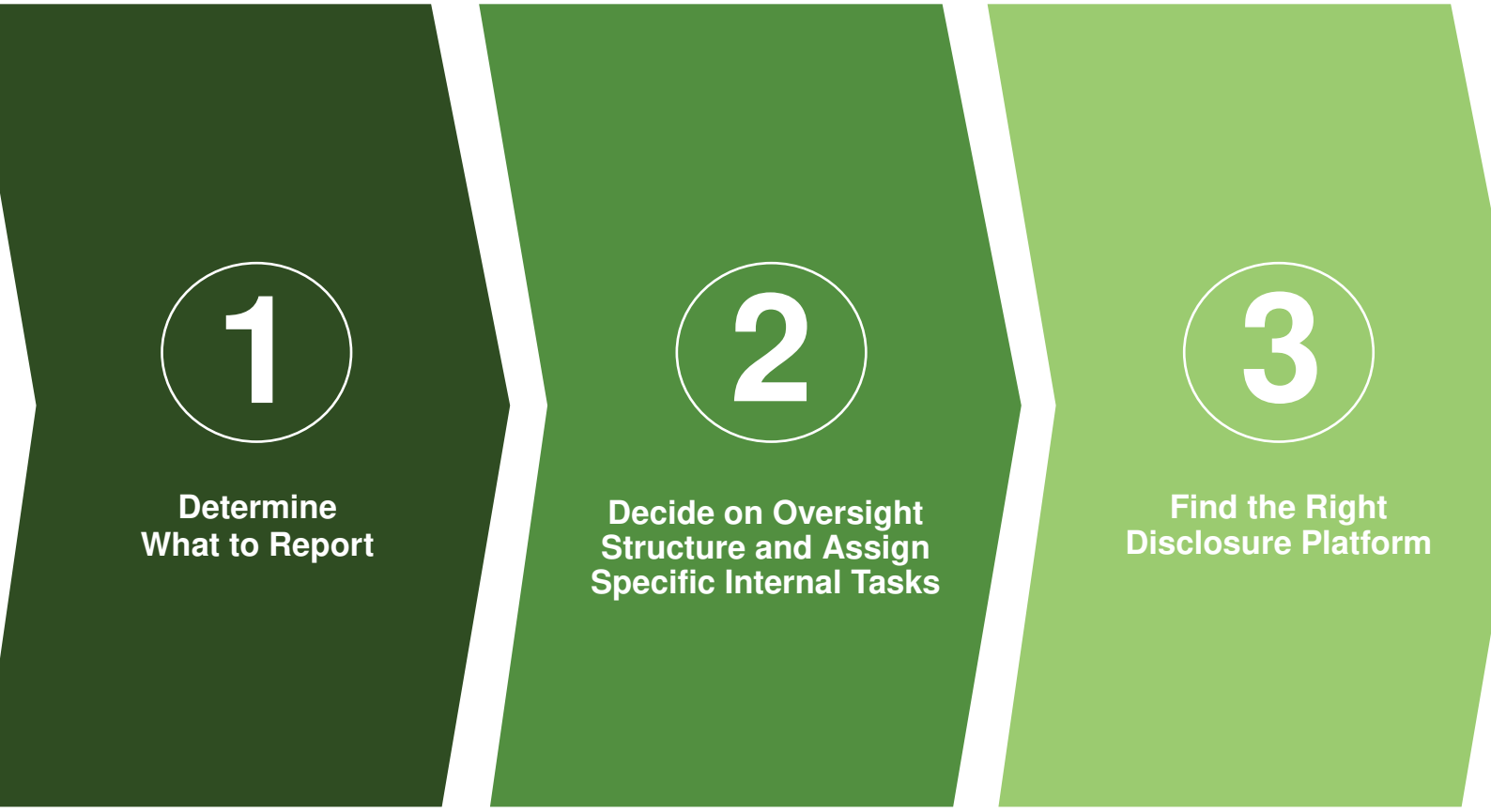
Unclear metrics or those without timeframes, a lack of internal resources, the cost to gather data and produce disclosures, and not believing that ESG is relevant to SMEs have all been identified as obstacles to mandating ESG disclosures.[29] While there are challenges for SME life sciences companies in developing and implementing ESG reporting, it is potentially a rewarding action recommended for attention.

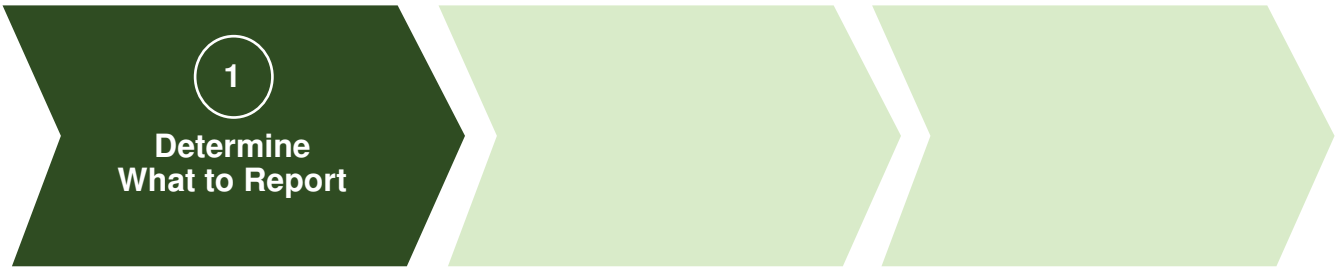
The increasing requirement for ESG reporting for larger companies will flow through to small and medium sized life science companies along the value chain.

Companies do not need to wait until they have all the resources to undertake comprehensive ESG reporting or wait until they score highly on all measures to begin documenting and tracking their ESG related actions.

Companies should endeavor to measure and report on metrics that are material to the company – selecting those priority considerations within each domain – and be consistent and track their performance over time. There are consultants and organisations that specialise in ESG rating systems, all use overlapping but different methodologies and metrics: investing time in establishing what is material for each unique company's circumstances is a great place to begin.

Companies could consider the following action steps when establishing ESG reporting:





There is a plethora of potential metrics and reporting frameworks and standards (see the Resources section of this Guide for further reading). The following illustration is a non-exhaustive list of metrics relevant to life sciences companies across the three domains, compiled after reviewing several global frameworks, together with publicly available company ESG reports.

Environmental

Land use	Sites in or adjacent to protected areas and/or key biodiversity areas	**Hectares**	Report the number and area (in hectares) of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas (KBA)
	Trees planted	**# Trees**	Total number of trees planted by the organisation and its employees
	New woodland created	**Hectares**	Number of hectares of new woodland created
Water usage	Litres of water used	**Megalitres**	Total number of litres of water used by the organisation.
	Water withdrawn, consumed, and amount in regions with high water stress	**Megalitres**	Megalitres of water withdrawn, megalitres of water consumed and the percentage of each in regions with high or extremely high baseline water stress, according to WRI Aqueduct water risk atlas tool
Emissions *Note: Figures for emissions can be normalised to per FTE to allow for growing companies*	Amount of Scope 1 & 2 greenhouse gas emissions	**tCO2e**	For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F-gases etc.), report in metric tonnes of carbon dioxide equivalent (tCO2e) GHG Protocol Scope 1 and Scope 2 emissions.
	Amount of Scope 3 greenhouse gas emissions	**tCO2e**	Estimate and report material upstream and downstream (GHG Protocol Scope 3) emissions where appropriate.
	Years to net-zero greenhouse gas emissions	**Years**	Years remaining until net-zero greenhouse gas emissions achieved across the company.
	Reduction in Scope 1 and 2 emissions intensity	**%**	Percentage reduction in global Scope 1 and 2 emissions intensity current year vs prior year
	Tonnes of CO2 captured	**Tonnes**	Tonnes of CO2 captured
	Zero emissions vehicle used by employees	**%**	% of employees using zero emissions vehicles
	Zero emissions company vehicles	**%**	% of company fleet vehicles with zero emissions
	Employees riding to work	**%**	This could be the percentage or total number of days riding compared to total days worked across all employees in the organisation
	Employees taking public transport to work	**%**	This could be the percentage or total number of days taking public transport compared to total days worked across all employees in the organisation
	Electricity use	**kWh**	Electricity use across the organisation
	Electricity used this year vs prior (kWh)	**%**	Electricity used this yr vs prior (kWh). May also be normalised against number of employees or similar metric.
	Sustainable electricity use	**%**	% of electricity used from sustainable suppliers / renewable sources
	Onsite electricity generation	**kWh**	Amount of electricity genrated by onsite solar panels (or other)
Waste	Landfill waste generated	**Tonnes**	Total amount of landfill waste genrated
	Reduction in landfill waste	**%**	Percentage reduction in landfill waste this year vs prior
	Recycling waste generated (amount and as % of total waste)	**Tonnes & %**	Total amount of recycling waste generated
	Hazardous material waste generated	**#**	Hazardous material waste generated
	Reduction in hazardous material waste	**%**	Percentage reduction in hazardous material waste this year vs prior
	Reduction in packaging	**kg or %**	Reduction in packaging for goods sold
Other	Fines for breach of environmental standards	**# & $**	Total number and amount of fines for breach of environmental standards
	Contracts with sustainability criteria included	**%**	% of procurement contracts with sustainability criteria included

Social

Diversity, inclusion, equity	Employee diversity	**%**	Percentage of employees per employee category, by age group, gender and other indicators of diversity (e.g. ethnicity). Report per level of management (Board, Executive, Senior Management, Management, All Employees)
	Salary and remuneration by employee category	**ratio or %**	Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality: women to men, minor to major ethnic groups, and other relevant equality areas.
	Entry level wage compared to local minimum wage.	**ratio or %**	Ratios of standard entry level wage by gender compared to local minimum wage.
	CEO vs employee compensation	**ratio or %**	Ratio of the annual total compensation of the CEO to the median of the annual total compensation of all its employees, except the CEO.
	Diversity of participants in clinical trials	**%**	Show the mix of diversity for patients included in clinical trials by age group, gender, other indicators of diversity and region.
Employee wellbeing & wealth generation	New employee diversity hires	**# & %**	Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region.
	Employee turnover	**# & %**	Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.
	Absenteeism	**%**	Average employee absentee days
	Employee access to EAP	**# & %**	Employees with access to an EAP by age group, gender, other indicators of diversity and region.
	Parental leave taken by gender	**Hrs**	Average number of hours of parental leave taken, by gender
	Economic value generated and distributed (EVG&D) –Revenues –Operating costs –Employee wages and benefits –Payments to providers of capital –Payments to government –Donations to charities, research foundations, community purposes, etc. –R&D –Tax Paid	**$** **$ & %** **$ & %** **$ & %** **$ & %** **$ & %** **$ & %** **$ & %**	Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations, ideally split out by the categories listed below:
	Employee scholarships awarded	**#**	Employee scholarships awarded (include gender mix and % to minorities)
	Community awards received	**#**	Number of community awards received
	Employee training time	**Hrs/ person/ category**	Average hours of training per person that the organisation's employees have undertaken during the reporting period, by gender and employee category (total number of hours of training provided to employees divided by the number of employees)
	Employee training spend	**$/person**	Average training and development expenditure per full time employee (total cost of training provided to employees divided by the number of employees)
Suppliers	Use of local suppliers	**# & %**	Number of local suppliers (and as % of total)
Customers	Patients positively impacted	**#**	Number of patients positively impacted (eg diagnosed, treated, etc)
	Breaches of regulations	**#**	Breaches of marketing and labeling regulations
	Fines for breach of regulatory compliance	**# and $**	Total number and amount of fines for breach of regulatory compliance
Community	Volunteer hours	**Hrs**	Total number of hours of community service spent by employees of the company over the past year
	Community initiatives	**#**	Number of community based initiatives engaged in by the organisation or its employees

Governance

Policies	Formal ESG policies	**#**	Number of formal policies related to ESG frameworks (anti-bullying, anti-corruption, anti-sexual-harrassment, diversity, code-of-ethics, cybersecurity & data handling etc.)
Anti-corruption	Anti-corruption policies and procedures training	**%**	Total percentage of governance body members, employees and business partners who have received training on the organisation's anti-corruption policies and procedures, broken down by region.
	Incidents of corruption in previous year	**#**	Total number and nature of incidents of corruption confirmed during the current year, but related to previous years
	Incidents of corruption in current year	**#**	Total number and nature of incidents of corruption confirmed during the current year, related to this year
Independence & diversity of directors	Independent board members	**# & %**	Number & percentage of independent board members
	Diversity of board members	**# & %**	Mix of gender and minorities on board of directors
OHS	Fatalities, injuries and near-misses	**#/unit time**	The number and rate of fatalities as a result of work-related injury; high-consequence work-related injuries (excluding fatalities); recordable work-related injuries; main types of work-related injury; and the number of hours worked. Report incidents plus near misses.
	Lost time injury frequency rate (LTIFR)	**Hrs**	Work hours lost due to injury per 1 million hours worked
	Safety & Quality audits conducted	**#**	Total number and type of audits conducted
Data security	Number of data breaches	**#**	Number of incidents of breaches, and/or number of people impacted or potentially by data breach.

The Biopharma Investor ESG Communications Guidance 4.0 provides the following guidance in selecting specific ESG metrics:

"While each company must weigh the selection and compilation of metrics according to their own priorities as appropriate for their business model and strategy, the biopharma investor dialog led to a short list of fundamental principles (criteria) to guide the process (Table I)."

Table I: Principles for selecting, compiling and presenting metrics

Selection Principle	**Highly Prioritized (often termed Material)** Select and prioritize those metrics and information that are of high priority for biopharma companies and investors alike. This includes metrics that go beyond strict financial materiality to address topics that substantively affect value creation or value destruction in the short, medium and long term.		
Compilation and Presentation Principles	**Accurate** Metrics and information sufficiently detailed to allow investors to adequately assess performance	**Aligned** Metrics and information clearly linked to targets and company business strategy, that address the 12 ESG high-priority topics and are being monitored and managed internally	**Assurable** Information with supporting evidence (records) that has been compiled following specific standards and principles; assurance verifies the information and the process for compiling it
	Comparable Metrics and information that allow comparison over time and comparison within (or even across) the industry	**Consistent** Metrics and information presented in a consistent manner from year to year, regarding principles, methods, practices and procedures. Changes should be highlighted, with information on how changes might have affected past performance data	**Timely** Metrics and information presented on a regular schedule and in time for investors to make informed decisions

Note:

The ISSB is developing global industry standards that are due for release mid-2023. These standards aim to be cost-effective, decision-useful and market informed and will build on the work of market-led investor-focused reporting initiatives, including the Climate Disclosure Standards Board (CDSB), the Task Force for Climate-related Financial Disclosures (TCFD), the Value Reporting Foundation's Integrated Reporting Framework and industry-based SASB Standards, as well as the World Economic Forum's Stakeholder Capitalism Metrics. Australia's Commonwealth Treasury Department has indicated that Australian standards will be based on these ISSB standards, and that mandatory reporting for select entities (large, public, and/or heavy emitters) is likely to be introduced as early as the 2024/25 financial year[30].

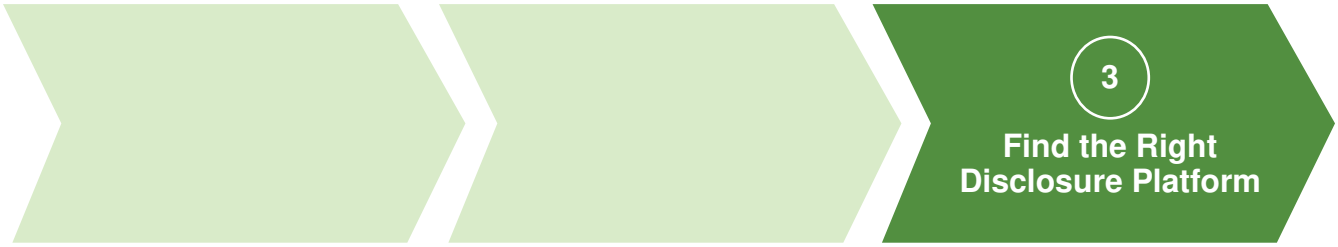
2 Decide on Oversight Structure and Assign Specific Internal Tasks

A key governance factor in implementing ESG reporting is determining the best structure for oversight of ESG activities and disclosure (see also section 5.3). For larger companies or those companies more advanced in their ESG reporting, this may involve setting up relevant multidisciplinary committees or even hiring a designated ESG lead.

However, these measures are not proportional or relevant to most small and mid-sized life sciences companies. In such companies, it is recommended that oversight be held by the board or an existing committee. For example, a company's remuneration and nomination committee may be best positioned to oversee employee diversity factors, and the audit committee could more appropriately assess a company's ESG-related financial controls.

It is critical that irrespective of structure and company maturity, that ESG is a partnered commitment between the Board and Management. A company may also begin including ESG reporting as a standing agenda item for committee and board meetings. As the company's ESG activities and reporting evolve over time and with the maturity and size of the company, oversight may devolve to a specialised team and/or committee.

Regardless of structures, stakeholders are likely to expect company CEOs to be well-versed in ESG matters, including the ability to describe what actions the company is undertaking (and planning) to address its most material factors, progress towards targets, and the rationale underpinning policies and procedures. This can be supported by ensuring ESG is included in investor updates, embedded in routine reporting and public facing digital assets including the company website and social media channels.



In determining the most appropriate platforms for disclosing ESG data, a company may utilise its current public disclosure channels in line with existing requirements and/or consider a supplementary communication strategy. Many publicly listed Australian companies, for example, have chosen to incorporate ESG metrics and qualitative measures outlining their progress in quarterly and annual reporting to the ASX, in addition to content on their websites or via publicly available policies.

For SMEs early in their ESG journey, disclosure of progress towards targets may require a more 'phased' approach, with clear milestones for the sharing of data scheduled within a defined period. It is not likely to be realistic for any company to establish comprehensive ESG reporting immediately: demonstrating a commitment to expanding its coverage of metrics, and achieving tangible change in key areas of concern, are likely to be seen positively by stakeholders. These commitments, when disclosed publicly, encourage accountability.

The World Economic Forum Stakeholder Capitalism Metrics, published in September 2020, suggests beginning with reporting on the recommended core metrics where relevant and possible in mainstream corporate disclosures (annual reports to investors, for example). Addressing ESG metrics within a company's annual report highlights that consideration of material ESG factors is part of the company's overall corporate governance approach

For private companies that do not have ASX disclosure requirements, ESG reporting may be included on the company website and other digital assets such as social media updates or included within investor documents.

In some cases, companies may be required to report to Australia's corporate, financial markets and financial services regulator ASIC (the Australian Securities and Investments Commission), and/or report in line with the Australian Accounting Standards. Careful consideration of both required and voluntary channels for disclosure of ESG related data should be undertaken.

How to measure: Tools

Once a company has decided which ESG related metrics are most appropriate and material to measure and report, choosing the right tools to accurately track and communicate progress in a meaningful way is important. Care should be taken in the selection of factors, metrics and tools to enable consistent reporting over time.

It is also worth noting that most investors, including many of the Australian venture capital firms active in Australian life sciences, have their own approach to ESG due diligence, monitoring and reporting. In some cases, there may be tools, surveys or reporting standards that are in-house to specific investors, and the preference for alternative or off-the-shelf tools may differ between investors. While there are efforts underway to harmonise ESG reporting efforts it is recommended that companies consult their major investors and stakeholders to clarify expectations before commencing with baseline metrics and selection of reporting tools.

Whilst investor guidance is valuable, companies ultimately need to make their own decisions on ESG materiality and relevance. They must design their ESG programmes, decide on appropriate metrics and select the tools required to measure.

Undertaking an internal audit of the company's existing policies and procedures is a useful first step in determining which of the defined priority considerations are already being addressed and can be reported on (including as and when they evolve over time). As an example, a common governance consideration such as having an employee well-being or diversity policy in place, may be an easy win. Is the company already communicating the existence of such policies in its periodic reporting and/or social media communications? Does the company have, or could it develop, employee well-being/ recruitment/retention policies?

Mapping out a phased approach to ESG reporting is likely to be the most appropriate for SMEs early in their ESG journey. Managing expectations about existing internal capacity to move from developing an initial ESG strategy through to future routine sophisticated and complex data capture and reporting, is important. Investors are unlikely to expect a company to move from zero to 100 percent within a short timeframe – but indicating serious commitment to improving ESG measurement and reporting is key.

> *"An enterprise's ability to responsibly manage human and natural resources is now visible by our collective attention to ESG. The reason investors focus on an investee companies ESG credentials is that businesses that incorporate processes to drive ESG outcomes ultimately become better and more sustainable than the alternative. Its less about scorecards and metrics and more about building businesses right from the beginning."* Dr David Atkins, Managing Partner, BioScience Managers.

Understanding the priority expectations from your investors' perspectives is an important consideration – what are they expecting their portfolio companies to measure and report on? In some cases, investors may have tools or checklists that they are willing to share – several examples can be found in the resources section of this guide, such as the globally-recognised VC ESG Tool for early-stage companies. Having insight into which of the many environmental, social and governance related factors your investors are interested in – and are likely to ask the company to articulate its position on – is a useful starting point.

ESG_VC, a steering group of funds and industry bodies from across UK, US and Europe, has developed a venture-ready ESG measurement framework, which asks early-stage companies to answer 48 measures against ESG objectives. Designed to provide an entry to ESG scoring, the framework can be easily implemented from Seed to Growth stage, across companies spanning B2B and B2C sectors, resulting in a tangible ESG score and a list of key areas to address to improve ESG performance.

For some companies, engaging the services of an experienced consultant or specialist advisory firm to lead the development of tailored ESG tools and reporting metrics may be the most efficient way to begin. Acknowledging that for many small life sciences companies this may be outside the scope of available resourcing, some links to existing (free/publicly available) tools for measuring ESG related factors are included below. Please note this list is not exhaustive, and care needs to be taken by each company to carefully evaluate its own specific circumstances, and which metrics it is choosing to document and report.

Benchmarking a company's performance on ESG factors to others within the industry most relevant to its operations may provide useful insights. Company executives and boards may find it valuable to share approaches with peers: what are other companies in the sector reporting? How are they tracking/measuring/reporting ESG factors? What targets are they using? Is there an emerging consistent industry 'standard' that can be used as a benchmark? What off-the-shelf policies or tools have others found useful?

The resources listed throughout this Guide are intended as examples and general guidance only. Information was collected via online searching of publicly available content. While every care has been taken in producing this summary, AusBiotech makes no endorsement (given or implied), nor guarantees the accuracy of information, and does not recommend one resource over another.]

Tools for measuring ESG metrics – some suggested resources:

Measuring carbon footprint – The Carbon Trust:
https://www.carbontrust.com/our-work-and-impact/guides-reports-and-tools/a-guide-carbon-footprinting-for-businesses

EDCI metrics – ESG Data Convergence Initiative (https://www.esgdc.org/metrics/)

Social Suite – ESG measurement software (https://www.socialsuitehq.com/)

The UK ESG VC framework (https://www.esgvc.co.uk/)
Persefoni – online carbon accounting platform (https://persefoni.com/product)

CDP Scores (Formerly Carbon Disclosure Project). The CDP is a not for profit which created a global disclosure system for environmental information, providing detailed data to help guide decision-making. CDP employs questionnaires with a sector specific approach. The questionnaires are aligned with the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations. As of 2021, more than 14,000 entities use CDP to report their environmental impacts.
(https://www.cdp.net/en)

Persefoni (www.persefoni.com)

Watershed (https://watershed.com)

There are a range of commercial and non-commercial ratings, benchmarks and indices provided by global index and financial research and analytics organisations for example:

S&P CSA (S&P Global Corporate Sustainability Assessment):
https://www.spglobal.com/esg/csa/

FTSE Russell ESG Ratings
https://www.ftserussell.com/data/sustainability-and-esg-data/esg-ratings

DJSI World (Dow Jones Sustainability World Index)
https://www.spglobal.com/spdji/en/indices/esg/dow-jones-sustainability-world-index/

FTSE4Good Index Series
https://www.ftserussell.com/products/indices/ftse4good

ISS (Institutional Shareholder Services) ESG Ratings and Rankings
https://www.issgovernance.com/esg/ratings/

The MSCI ESG Universal Index
(https://www.msci.com/esg-metrics)

Sustainalytix – a Morningstar company, rates companies on their ESG performance
(https://www.sustainalytics.com)

Glossary

This section contains explanations of key terminology, concepts and acronyms commonly used in ESG reporting and communications, as well as listing the major global stakeholders involved in current initiatives to harmonize standards and metrics. Given the pace at which ESG related efforts are evolving, companies are advised to undertake their own research to ensure their ESG strategies are referencing the most up-to-date information available. While every care has been taken in the production of this Guide, the information contained within is correct at the time of writing and may be superseded.

B Corp certification
Certified B Corporations, or B Corps, are businesses that meet high standards of social and environmental performance, accountability, and transparency, documented via an assessment checklist that can be submitted for verification, developed and administered by the not-for-profit group B Labs (https://bcorporation.com.au).

CDP
Formerly known as the Carbon Disclosure Project (www.cdp.net/en), CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. For over 20 years the project has developed a system used by the global economy as a 'gold standard' of environmental reporting. In 2021, the latest five-year strategy was launched: Accelerating the Rate of Change [hyperlink]

CDSB
The Climate Disclosure Standards Board (www.cdsb.net) was consolidated into the International Financial Reporting Standards (IFRS) Foundation in January 2022 to support the work of the newly established International Sustainability Standards Board (ISSB). Please see below.

Double materiality
A broader definition of 'materiality' (see below) that encompasses not just consideration of the environmental and social risks that affect a company and its operations, but also includes how a company impacts the environment and social context in which it operates.

ESG
Environmental, social and governance related considerations, usually in the context of disclosure and reporting for companies on how they have prepared for these risks, mitigated their impact, and the policies and procedures applied to the company's operations to ensure alignment with contemporary stakeholder expectations.

GIIN
The Global Impact Investing Network (https://thegiin.org) is a non-profit organisation dedicated to increasing the scale and effectiveness of impact investing. The GIIN builds critical infrastructure and supports activities, education and research that help accelerate the development of a coherent impact investing industry.

Greenwashing
Defined by the Oxford dictionary as "disinformation disseminated by an organisation so as to present an environmentally responsible public image", greenwashing in an investment context can be defined as providing the public and/or investors with misleading or false information about the environmental impact or credentials of a company's operations or products. This can involve making unsubstantiated claims, exaggerated claims, or over-playing the sustainability of a company's products or processes to hide the company's involvement in environmentally damaging practices. The Australian Securities and Investments Commission (ASIC) defines greenwashing as "the practice of misrepresenting the extent to which a financial product or investment strategy is environmentally friendly, sustainable or ethical".

GRI
The Global Reporting Initiative (www.globalreporting.org) provides the world's most comprehensive and widely used set of sustainability disclosure standards. Established in 1997, the GRI exists to "help organisations be transparent and take responsibility for their impacts so that we can create a sustainable future". The Universal Standards were revised in 2021, while the rollout of sector-specific standards is underway with priority given to high-impact industries (note: health, biotechnology, life sciences are not yet on the priority list).

IBC
The International Business Council of the World Economic Forum (WEF) is an annual meeting of global leaders, to discuss and examine global political and economic factors, exploring key areas for action to deliver sustainable growth and prosperity for all. The IBC originated in 2007, positioned itself as "the foremost global summit on innovation, science and technology, promoting entrepreneurship in the global public interest" - the effects of climate change and social inequality are increasingly central concerns to the IBC.

IFRS
The International Financial Reporting Standards (www.ifrs.org) are globally accepted accounting and sustainability disclosure standards, creating consistent language for financial reporting and providing investors with access to transparent and comparable information. Over 100 countries globally require companies to use IFRS standards. Standards are developed by the International Accounting Standards Board (IASB) and the newly created ISSB.

IIRC
The International Integrated Reporting Council (www.integratedreporting.org), now part of the IFRS Foundation (since June 2022), is a global coalition of regulators, investors, companies, standard setters, the accounting profession, academia and non-government organisations, and has recently transitioned into the IFRS Foundation's Integrated Reporting and Connectivity Council (IRCC).

Impact investing
Impact investing is commonly used to refer to a strategy that aims to generate specific and measurable positive social and/or environmental benefits in addition to financial gain. Socially responsible investing, ethical investing, social impact investing, ESG investing, and Corporate Social Responsibility (CSR) investing are all related concepts and terminology is often used interchangeably. As noted by the Rockefeller Foundation, impact investing appeals to many potential investors because it "balances commerce and compassion". Impact Investing Australia has a vision that "every dollar invested builds a better world" and enables a growing market for investments that deliver measurable social and environmental benefits alongside financial returns.

IRCC
The Integrated Reporting and Connectivity Council is an advisory body to the IFRS Foundation, the IASB and ISSB, and provides guidance on how reporting required by the IASB and the ISSB could be integrated.

ISSB
The International Sustainability Standards Board was established in 2021 by the IFRS Foundation to meet the demand from international investors with global investment portfolios who are increasingly calling for high quality, transparent, reliable and comparable reporting by companies on climate and other ESG matters. The intention is for the ISSB to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market stakeholders with information about companies' sustainability-related risks and opportunities. The ISSB is responsible for the Sustainability Accounting Standards Board (SASB) standards (see below).

Materiality
Factors that may have an impact on the long-term value and sustainability of a company or asset, or that are reasonably likely to impact the financial or operational performance of a company (and are therefore most important to an investor), are considered material.

Materiality in the context of ESG refers to the effectiveness, impact and/or financial significance of a specific measure as part of a company's overall ESG analysis. Material factors are financial or operational factors deemed fundamental to the long-term success of a company's ESG strategy. The GRI issued step-by-step guidance on determining material topics in 2021 (hyperlink).

The term 'materiality' throughout this ESG Resource is used in a less prescriptive sense, primarily intended to highlight the need for each individual company to determine which of the ESG factors are ***most relevant*** to their specific circumstances. What is material to one company may not be material to another.

Metrics
Data and disclosures that convey information on a company's ESG performance and risks and represent a way to quantify a company's commitment to ESG over time towards a target or goal. Metrics may be quantitative or qualitative in nature. See section 6.0 Metrics – what to measure? for further discussion and information.

MSCI
MSCI is a research and advisory firm, and its ESG ratings are often cited as benchmarks within global financial and investment sectors (www.msci.com/). The MSCI ESG Ratings model identifies the key factors that are most material to a sub-industry or sector and aims to measure a company's management of financially relevant ESG risks and opportunities. Based on over 13 years of data, the model has been refined to identify the E, S, and G Key factors, which are mostly material to a range of specific industry groupings (note: biotechnology or life sciences is not included as a specific industry). Companies are scored as 'leader,' 'average' or 'laggard' under the MSCI ESG Rating system.

SASB
With a focus on how sustainability affects value creation, the Sustainability Accounting Standards Board's standards (www.sasb.org) vary by industry, based on the different sustainability risks and opportunities within 77 key industries. SASB standards guide the disclosure of financial material sustainability information by companies to their investors, identifying the subset of ESG factors most relevant to financial performance in each industry. Effective August 2022, the SAS are under the oversight of the ISSB (see above).

SDGs
The United Nations' Sustainable Development Goals (www.sdgs.un.org) were set in 2015, to be achieved by 2030: a set of 17 inter-related targets that call for action by all countries, developed and developing, in a global partnership. The SDGs recognise that ending poverty and other deprivations must go together with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. In the absence of any global or standard ESG targets, the UN SDGs are often referenced in ESG-related communications and reporting frameworks, and in some instances, inform metrics.

TCFD
The Taskforce on Climate Related Financial Disclosures (https://www.tcfdhub.org) is a global initiative created by the Financial Stability Board (FSB) to develop recommendations on the types of information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing a specific set of risks—risks related to climate change.

TNFD
The Taskforce on Nature-Related Financial Disclosures was launched by the G20 in June 2021, to introduce a new framework for disclosure of 'nature-related' or 'natural' risks, complementing the work of the climate-focused TCFD. Modelled on the TCFD, the TNFD will develop standards, metrics and targets to enable companies to disclose their nature-related risks such as access to raw materials, and biodiversity.

Tilting
The phrase 'ESG tilting' has been used to describe the weighting of securities in an index to 'tilt' or maximise the exposure of those companies maintaining a strong ESG profile or improving their ESG performance.

UNPRI
The United Nations Principles for Responsible Investment (https://www.unpri.org/about-us/about-the-pri) is an independent non-profit body that encourages investors to use responsible investment to enhance returns and better manage risks. Established in 2006 via a group of the world's largest institutional investors, UNPRI considers itself the world's leading proponent of responsible investment, with many known investors and funds as signatories (currently approximately 4,000 worldwide). It works to understand the investment implications of ESG factors; and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions.

WEF
The World Economic Forum (www.weforum.org) is an independent international organisation committed to improving lives through public-private cooperation. Established in 1971 the Forum strives to model world-class corporate governance: membership includes entrepreneurs and leaders from the global business community, academia, public and private organisations and civil society. Annual meetings are held in Davos-Klosters, Switzerland, and shape the emerging global, regional and industry agendas.

The Forum launched the *Measuring Stakeholder Capitalism Initiative* in August 2019 in collaboration with Deloitte, EY, KPMG, and PwC to improve the ways in which companies measure and demonstrate their performance against ESG indicators and track their positive contributions towards achieving the UN Sustainable Development Goals on a consistent basis. The Initiative has developed a set of 21 core and 34 expanded metrics and disclosures (the *Stakeholder Capitalism Metrics*, published September 2020), catalysing movement towards an international system for consistent and comparable global ESG metrics and disclosures.

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Additional Useful Resources

Australian Cybersecurity Centre, Information Security Manual (www.cyber.gov.au/acsc/view-all-content/ism). The manual outlines a cybersecurity framework that companies can apply using their own risk management framework.

Australian Government Modern Slavery Act: https://www.legislation.gov.au/Details/C2018A00153 and online register for Modern Slavery Statements (https://modernslaveryregister.gov.au)

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MSCI ESG Now (podcast) - free of charge. A series of discussions and interviews on ESG issues and trends.

National Greenhouse and Energy Reporting (NGER) Framework (www.cleanenergyregulator.gov.au/NGER) for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and more.

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Socialsuite - platform for disclosing social impact and reporting ESG https://www.socialsuitehq.com

Sustainalytics podcast – series of discussions and interviews that focus on ESG investing, sustainable finance, trends and insights.

The Taskforce on Climate Related Financial Disclosures (TCFD) knowledge hub: https://www.tcfdhub.org ; including the TCFD 2022 Status Report

UN Sustainable Development Goals (SDGs) https://sdgs.un.org/goals

UNPRI, Cybersecurity Guidance https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues/governance-issues/cyber-security

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AusBiotech ESG Working Group (established September 2022):

- Joanne Boag, CEO, Oncology One
- Michelle Burke, Non-executive director, Cell Therapies
- Rebekah Cassidy, Deputy Head of Corporate Affairs, Australia/NZ, Sanofi
- Lorraine Chiroiu, CEO, AusBiotech
- Helen Fisher, CEO & MD, Bio Capital Impact Fund
- Maria Halasz, CEO, Stride Equity
- Matthew Hoskin, CEO & MD, Nirtek
- Rhiannon Jones, COO, Amplia
- Brooke O'Rourke, Vice President Government Affairs & Sustainability, Cochlear
- Karen Parr, Director, Communications & Policy, AusBiotech
- Siro Perez, Partner & Head of Life Sciences, APAC, IP Group Australia
- Lisa Renkin, Director, Investment, AusBiotech
- Rebecca Wilson, EVP International, WE Communications

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Disclaimer

Level 33, 477 Collins Street
Melbourne, VIC, 3000
www.ausbiotech.org

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