

This table shows a list of topics identified as relevant by different stakeholder groups. They can be considered as stakeholders' suggestions or requests for topics to be monitored or disclosed by organizations.

Additional information about the project can be found at <https://www.globalreporting.org/reporting/sector-guidance/Topics-Research/Pages/default.aspx>

46 – Pharmaceuticals, Biotechnology and Life Sciences

36 Topics

Companies primarily engaged in the research, development, manufacturing and/or marketing of products based on genetic analysis and genetic engineering. Includes companies specializing in protein-based therapeutics to treat human diseases. Companies engaged in the research, development or production of pharmaceuticals. Includes veterinary drugs. Companies enabling the drug discovery, development and production continuum by providing analytical tools, instruments, consumables & supplies, clinical trial services and contract research services. Includes firms primarily servicing the pharmaceutical and biotechnology industries.

Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
Environmental	Materials sourcing	Sourcing standards for collection of wild plant populations and species	<p>More and more people demand “natural” products made from wild collected plants. Such products may be used in different ways; mainly they are used in the food industry, in the pharmaceutical industry or in the cosmetics industry.</p> <p>However, the excessive collection of wild plants often leads to a decrease of these plant species, a process called “over collection”. Some species may become endangered or disappear altogether. Consequently, collectors have to walk further and further or cannot</p>	176, 259	Civil Society Organization



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			<p>collect the requested quantities any more. In order to enable continuous collection and therewith to ensure continuous income for collectors, it is important that plant populations remain vital and productive. Sustainable collection methods ensure that plant populations and species are maintained over the long-term.</p> <p>WWF: It aims to maintain wild plant resources, prevent negative environmental impacts from collecting activities, respect customary rights to plants and ensure benefits to local communities and require fair treatment of collectors, including limiting the use of child labor. http://wwf.panda.org/about_our_earth/all_publications/?194868/New-standard-offers-more-protection-for-wild-medicines-and-collectors</p>		
	Materials sourcing and use	Plastic products	<p>Plastic, a valuable material, can generate significant positive, or negative, impacts on economy, environment and society. Plastic should be treated as a resource and managed judiciously.</p> <p>A disclosure on management approach for plastics, including governance, strategy, risks, opportunities, considering: opportunities for product redesign, increasing recycled content, implementing reclaim and/or reuse which could attract economies, brand loyalty, investment, employee goodwill, and; risks to the business, stakeholder health, environment and society (including reputational/social license to operate, regulatory, investor, insurer, and liability risks) for</p>	353, 367	Civil Society Organization



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			<p>plastics that are directly harmful to stakeholders, or indirectly through plastics being wasted/littered. Performance indicators regarding the types and volumes of plastics being used, collected and/or distributed downstream; the portion that is made of post-consumer-recycled, bio-based, biodegradable, compostable, and/or oxobiodegradable material; the ratio of expected life-span of plastic products/packaging in contrast to the duration of their intended use; these volumes broken down by end of life disposition.</p> <p>Most of this disclosure can be captured through the existing GRI framework (e.g. GRI G3 EC9, EN1, EN2, EN22), but commentary is needed to ensure disclosers appreciate the materiality of plastic; other questions can be added to the framework. Refer to the Plastic Disclosure Project (www.plasticdisclosure.org) for more details on the suggested questions. PDP will align its questions to GRI G4 to assist disclosers.</p> <p>Plastic are in high use in these "activity groups", and can have significant positive, or negative, impacts on the economy, environment and society: Economics: There are significant cost savings available to organisations that treat plastic as a resource (e.g. through redesign, use of recycled content, reclaiming, etc.) and risks of increased direct costs (regulation, liability, cost of capital, insurance) to organisations that do not lead in this area as well as indirect economic costs to impacted industries (e.g. food production, tourism). Environment: Plastics that are wasted or littered become extremely harmful to</p>		



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			<p>the environment, which will have a material effect on biodiversity and the global food chain, both nearby and far outside the local area of operations. Society: Some plastics are harmful to stakeholders during manufacture, use and/or disposal (e.g. due to phthalates, BPA), impact the wellbeing of society (e.g. effect of litter on community spirit and their interest in sustainability).</p> <p>While a valuable invention, which benefits society in many ways, the negative impacts associated with society's growing use of plastic are not fully recognised. Roughly 85% of plastic used in products and packaging is not recycled, and most plastic produced in the last 60 years still remains in the environment today. Discarded plastics persist in the environment for dozens or hundreds of years, accumulating across the globe, often out of sight of the producers and users. The direct physical impacts of plastic are significant to the organisation in increased costs or missed opportunities, and related economies (e.g. over \$1.2bn in annual damages to ocean-related industries in Asia-Pacific), the environment through harming habitats and species, and to stakeholders health when exposed to the chemical ingredients; and are magnified if fragmentation of the plastic occurs, making it available for ingestion to additional species, who adsorb the chemical ingredients and/or the toxins carried on the plastic. These negative impacts could be avoided and turned into positive impacts, if plastic was treated as a resource to be managed judiciously (e.g. the US economy lost \$8.3bn</p>		



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			worth of plastic packaging in 2010) - "It is not good business practice to throw away valuable resources".		
	Biodiversity	Genetic engineering (GE) risks	<p>GE varieties have also demonstrated new susceptibility to pests and diseases. Genetically engineering plants to resist insects also has an impact upon pest populations, since troublesome new pests - that require heavy use of insecticides – can emerge as a result.</p> <p>The genetic mechanisms of these disease and insect susceptibilities are not understood. It is clear, however, that they are related to genetic engineering because in both cases conventional parent varieties of GE plants do not show the same susceptibility as the GE types. All major field crops are threatened by not just one but many pest species. These threats are unevenly distributed; a major pest in one region may be of little concern elsewhere, and vice versa. GE crops do not incorporate complex transgenic traits that allow plants to respond to changing pest threats and to resist a wide variety of their enemies. Thus, even if successful at controlling a target pest species, other pests (called 'secondary pests') may then emerge as more prominent threats to the plants, resulting in crop loss and the need to apply additional pesticides.</p>	237	Civil Society Organization
	Biological waste management		<p>Healthcare waste is a by-product of healthcare that includes sharps, non-sharps, blood, body parts, chemicals, pharmaceuticals, medical devices and radioactive materials</p> <p>Poor management of healthcare waste exposes</p>	593	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			healthcare workers, waste handlers and the community to infections, toxic effects and injuries		
Social	Labor conditions	Human capital management	Biotechnology companies use technologies based on biological systems to develop medical, agricultural and industrial products and processes. The sector is characterized by extensive R&D efforts and a high risk of failure in product development. Innovation and intellectual property are key drivers that make highly qualified employees and effective human capital management important success factors.	460	Financial Markets & Information Users
	Occupational health and safety	Safety information related to hazardous materials	Safety information relating to hazardous materials - including pharmaceutical compounds and pharmaceutical intermediate materials - shall be available to educate, train, and protect workers from hazards	436	Business
	Occupational health and safety management	Exposure to chemical, biological, physical hazards and physically demanding tasks	Suppliers shall protect workers from over exposure to chemical, biological, physical hazards and physically demanding tasks in the work place and in any company provided living quarters	436	Business
	Access to medicines	Generic medicines - Knowledge sharing	Innovative medicines can help control increasing costs within a healthcare system. When appropriate to specific conditions, the Research & Development companies can share technology and know-how with qualified partners around the world that can produce high-quality generic versions of innovative products. In other cases, a company might prefer to transfer technology to a subsidiary and produce locally some of	296, 568	Business



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			<p>its innovative products; positive externalities for local partner companies can enhance social and economic development.</p> <p>Additionally, factors such as unnecessary mark-ups, taxes, tariffs and additional charges by middlemen can substantially raise the final price over the manufacturer's base price. Transportation, storage, staff salaries and stock losses all factor into the final cost of pharmaceutical products. In some countries, wholesale mark-ups can range anywhere from 2% to 380%, while retail mark-ups can range from 10% to 552%.⁵³ For populations living on the edge of poverty, these additional mark-ups can partially or even completely impede patient access to medicines and vaccines.</p>		
		Pricing structure	<p>Product Pipeline</p> <p>Revenue potential of new products in phase I, phase II, phase III and in the registration process as a percentage of total revenue</p>	153	Financial Markets & Information Users
		Pricing, research priorities, and intellectual property rights	<p>Pharmaceutical companies typically patent new medicines to recoup their research and development investments. New medicines are, however, often expensive for patients, particularly in circumstances where public pharmaceutical benefit schemes do not exist or where private health insurance is unavailable. This poses challenges in relation to people's access to medicines and raises questions over the appropriate allocation of responsibility for the health care of poor people in developed and developing countries.</p>	66	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			Amidst ongoing debate over the effects of patents, research priorities, tiered pricing models and the extent to which lower prices would ensure health care for people living in the world's poorest or remotest regions, research-based pharmaceutical companies continue to face criticism over alleged efforts to stave off generic competition to their patented medicines.		
			Medical (red) biotechnology companies face concerns about pricing and reimbursement of their products as well as global patent protection and drug safety issues.	460	Financial Markets & Information Users
	Biosafety and laboratory biosecurity		This concerns to the implementation and strengthening of measures and procedures to: minimize the risk of worker exposure to pathogens and infections; protect the environment and the community; and protect, control and account for valuable biological materials (VBM) within laboratories, in order to prevent their unauthorized access, loss, theft, misuse, diversion or intentional release Good research practices ensure a safe and secure laboratory environment, and reduce any potential risks of accidents or deliberate misuse	587	Mediating Institution
	Biotechnology product safety	Safety assessment of genetically engineered (GE) crops	One of the challenging issues that countries have faced in recent years is the assessment of the safety of products derived from modern biotechnology, as genetically engineered crops are increasingly cultivated worldwide and as human foods and animal feeds derived from such crops are being marketed	418	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			Modern biotechnology also applied to trees, animals or micro-organisms might lead to an increased trade of such products in the future. At the same time, products of modern biotechnology are rigorously assessed by governments to ensure that they meet standards that ensure human food, animal feed and environmental safety.		
	Clinical trials	Free consent of trial participants	Article 7 states that “no one shall be subjected without his free consent to medical and scientific experimentation”. Several companies and research bodies have faced media and legal scrutiny over consent processes used in clinical trials, irrespective of their medical success or failure	66	Mediating Institution
		Transparency on trial results	A 2004 controversy surrounding GSK blockbuster Paxil led to claims that the industry was publishing biased results about clinical trials. Based on a review of empirical data, it was established by the NY Attorney General that 37 (of 38) of GSK’s studies viewed by the FDA as ‘positive’ were published in the New England Journal of Medicine. In contrast, among 36 studies viewed as ‘negative’ or with questionable results, 22 were not published, 11 were published in a manner that conveyed a ‘positive’ outcome, while only 3 (of 36) ‘negative’ studies were published as reflective of the empirical data. As a result of the Paxil case, a major overhaul was undertaken with the FDA Amendments Act of 2007, which requires results to be published along with	479	Business



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			<p>adverse event data. And, publication of results is required 12 months after the trial is over – results being withheld and buried is no longer an option.</p> <p>However, the act has loopholes; it does not include trials completed before 27 September 2007. During 2010, scientists from Germany’s Institute for Quality and Efficiency in Healthcare (IQEiH) found a similar bias in published trials for Pfizer’s antidepressant reboxetine. Their comparison of published and unpublished trials revealed that the positive benefit-risk ratio of reboxetine in the published literature was changed to a negative ratio if unpublished trials were added to the analysis. They concluded that reboxetine is ‘overall ineffective and potentially harmful’.</p> <p>A further global shift towards increased warnings on products, increased clinical evidence requirements and slower approvals could hamper company profitability. The International Federation of Pharmaceutical Manufacturers has therefore called for self-regulation to include all results. Novartis has made a commitment to the timely communication and/or publication of all trial results (except exploratory trials), no matter what their outcome.</p>		
	Medical products safety	Biotechnology products	Medical (red) biotechnology companies face concerns about pricing and reimbursement of their products as well as global patent protection and drug safety issues.	460	Financial Markets & Information Users



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
		Chemicals use - Phthalates and parabens	Phthalates are a large family of synthetic chemicals linked to a number of health issues including decreased fertility and reproductive defects, and asthma and allergies.	479	Business
		Pharmacogenomics and drug safety	Pharmaceutical companies may face complex ethical discussions related to pharmacogenomics and drug safety issues	460	Financial Markets & Information Users
		Safety assessment of genetically engineered (GE) crops	<p>Safety assessment of foods and feeds derived from genetically engineered crops</p> <p>The development of such a data base indicates the value of having information for safety assessments</p> <p>Web pages: Product Database currently includes 158 entries of transgenic crops and flowers from 14 species. Products are listed with unique identifiers, and the information includes common/scientific names of the host organism and introduced genes, the events and traits, the regulatory elements and relevant links regarding approvals for release and use in countries.</p>	422	Mediating Institution
		Vaccine pharmacovigilance	This means identifying any “adverse events” that may occur following immunization and investigating them to see if they are related to the vaccine or the immunization procedure. The Blueprint refers to vaccine pharmacovigilance as “the science and activities relating to the detection, assessment, understanding, prevention and communication of adverse events following immunization, or of any other vaccine- or immunization-related issues”, as defined by CIOMS/WHO (2012).	589	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			<p>Adverse events are also sometimes referred to as “side-effects”. Vaccine pharmacovigilance is not just a scientific exercise. Its purpose is to ensure that vaccines are safe and to follow up if a case arises where a vaccination may be linked to harm.</p> <p>Vaccine safety issues are not merely a developing or developed country phenomenon, but a global phenomenon. WHO has therefore proposed developing a blueprint for a global, regional and country level vaccine safety assessment and response system.</p>		
			<p>Health & Safety Aspects of Products</p> <p>Total spending on product safety corporate Percentage of total products sold or shipped corporate subject to product recalls for safety or health reasons</p>	153	Financial Markets & Information Users
	Medicine and drug labeling	Correct use promotion	<p>Rational use of medicines requires that "patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community</p> <p>Irrational use of medicines is a major problem worldwide. WHO estimates that more than half of all medicines are prescribed, dispensed or sold inappropriately, and that half of all patients fail to take them correctly. The overuse, underuse or misuse of medicines results in wastage of scarce resources and widespread health hazards</p>	590	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
		Side-effects information	<p>Supreme Court to decide generic drug labelling issue</p> <p>The Supreme Court said on Friday that it would decide whether generic drug companies could be sued under state law over allegations they failed to provide adequate label warnings about potential side effects. The nation's highest court will consider whether federal law pre-empted such lawsuits because the drug had been approved by the Food and Drug Administration (FDA). The high court agreed to hear appeals by Teva Pharmaceutical Industries Ltd, Mylan Inc's UDL Laboratories and Actavis Inc, based in Reykjavik, Iceland. The Supreme Court decided a related issue in 2009 when it ruled FDA drug regulations do not protect pharmaceutical companies from being sued under state law over drug labelling, a case involving Pfizer Inc's Wyeth unit and its anti-nausea drug Phenergan. The justices are expected to hear arguments in the generic drug cases in March or April, with a decision likely by the end of June. In one case, a U.S. appeals court ruled that Actavis could face claims by a woman who said it should have warned her about the risks of metoclopramide, a drug that treats symptoms such as heartburn, nausea and vomiting. The drug's name brand is Reglan. Julie Demahy sued Actavis under Louisiana law, claiming she developed a neurological disorder after the company failed to alert her about the risks of using metoclopramide and failed to change the drug's label. In another case, a woman, Gladys Mensing, sued the three generic drug makers in federal court in Minnesota after allegedly developing a severe neurological movement</p>	479	Business



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			disorder after taking generic versions of Reglan. A U.S. appeals court ruled her lawsuit could go forward. The Obama administration supported the two women and said the appeals court in their cases correctly ruled their claims were not categorically pre-empted.		
	Patient privacy	Medical records and genetic data	<p>The storage and uses made of health records and the results of genetic tests raise questions in relation to the right to privacy.</p> <p>This case raises questions about the right to privacy of the people from whom the samples were taken. There has, for example, been concern that samples of this kind could be used in paternity suits or to assess health insurance risks. AT the other hand, Retention of the samples has significant potential public health benefits, such as retrospective diagnosis from the stored blood spot, even after the individual is deceased, to help provide counselling to the family. Approved research can provide information that is of public health interest or information that can provide a better understanding on how diseases develop, identifying potential opportunities for intervention.</p>	66	Mediating Institution
	Product design	Harmless degradation	Principles of Green Chemistry: 2. Less Hazardous Chemical Syntheses (Wherever practicable, synthetic methods should be designed to use and generate substances that possess little or no toxicity to human health and the environment), 3. Designing Safer Chemicals (Chemical products should be designed to affect their desired function while minimizing their toxicity), 4. Safer Solvents and Auxiliaries (The use of	19	Civil Society Organization



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			auxiliary substances (e.g., solvents, separation agents, etc.) should be made unnecessary wherever possible and innocuous when used), 10. Design for Degradation (Chemical products should be designed so that at the end of their function they break down into innocuous degradation products and do not persist in the environment).		
	Take back of pharmaceutical products		<p>A large portion of the pharmaceuticals in our water come from the improper disposal of unused or unwanted drugs by households and medical facilities. Most people either flush them down the toilet or throw them in the trash. The best method of disposal—“take back” programs in which drugs are returned to an authority and disposed of properly—is not commonly available, leaving people with few options.</p> <p>The presence of pharmaceuticals in our waterways raises issues beyond concerns about their potential impacts on human health. The threats posed to wildlife ecosystems should be of equal or higher concern because of the continuous nature of the exposure. Human exposure through drinking water is intermittent compared to wildlife living in contaminated waters. Environmental monitoring has identified a host of pharmaceuticals present in some ecosystems at levels likely to harm aquatic organisms at the individual and population level.</p>	388	Civil Society Organization
Other	Animal welfare	Animal testing	Animal Welfare. Animals shall be treated humanely with pain and stress minimized. Animal testing should be performed after consideration to replace animals, to reduce the numbers of animals used, or to refine	436	Business



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			procedures to minimize distress. Alternatives should be used wherever these are scientifically valid and acceptable to regulators		
	Business strategy	Demographic change	<p>A material sustainability topic is the demographic change, a global phenomenon that sees an ageing and declining population. The trend impacts on the local communities and on the workforce of an organization.</p> <p>Qualitative information: actions implemented by an organization to face with the topic.</p> <p>The demographic change influences the business of the insurance industry. Longer life expectancy, growing wealth, urbanization, different lifestyles, technological development create opportunities for insurers, such as innovative products and services to anticipate/meet evolving requirements of customers.</p> <p>Demographic change may be material for all the organizations, regardless industry, since it affects their workforce. Longer life expectancy means longer retirement age, thus creating challenges for organizations e.g. associated with alternative career paths, adapting working environments and conditions, and transfer of skill and competencies.</p>	370	Business
	Emergency preparedness	Outbreaks of novel, emerging and dangerous pathogens	<p>Laboratories readiness and response for rapid detection and containment of outbreaks of emerging and dangerous pathogens</p> <p>Outbreaks of emerging and dangerous pathogens are a great risk for public health</p>	591	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
	Medical innovation	Intellectual property rights	If countries are to be genuinely in a position to meet the health needs of their populations, even if relying largely on products developed elsewhere, they need to have, at a minimum, a range of expertise across medical disciplines to use such products effectively in their own health systems. Beyond that, many countries wish to develop a capacity for innovation which will be responsive to their own disease and risk burdens. The patent system is one important incentive for promoting research and innovation in new medicines and other products. But the patent system is only one element that contributes to innovation	82	Mediating Institution
		Life science research	<p>Life science Research and development that could pose a risk to public health includes standard techniques of molecular biology, microbiology and non-engineered microorganisms and toxins, and also new techniques, processes and knowledge</p> <p>New techniques are rapidly expanding understanding of genes and their functions, of infectious disease mechanisms (pathogenesis), of the immune defense system and of biochemical pathways. This knowledge can lead to modification and manipulation of the genetic material of a potentially hazardous organism and its products. These new techniques and related knowledge can rapidly be made available throughout the world via the World Wide Web. Likewise, use of techniques such as high-throughput arrays, which, while not in themselves directly hazardous, could facilitate prohibited R&D</p>	585	Mediating Institution



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
		Neglected diseases	Investment in the field of tropical diseases is “an exception in an industry that has traditionally neglected illnesses seen as endemic in the developing world”.	66	Mediating Institution
	Political accountability		<p>There are various measures of political accountability that can be measured (contributions, disclosure, board oversight).</p> <p>Note that this topic is applicable to more than the three industries noted. Essentially the political accountability practices of any company that is owned by public stockholders. Political contributions, the amount of disclosure and board oversight are among the data items that would be helpful in a sustainability report.</p> <p>In making investment decisions (especially for investors interested in socially responsible investing) it would be helpful to understand how a given company is exposed to political risk (i.e. are they backing the winning candidate, are they subject to potential retribution, why do they find it necessary to make political contributions, etc.).</p> <p>I have found the information I reference to be helpful in constructing investment portfolios that take into account this attribute of sustainability. Since it is not currently an established parameter in the socially responsible investment industry (www.ussif.org), adoption by the Global Reporting Initiative would go a long way in moving the topic of political accountability forward.</p>	394, 616	Financial Markets & Information Users



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
	Production risks	Constraints on supply of materials	Production shortfall caused by material supply constraints in percent (gap between actual production output and theoretical production output as optimal supply)	153	Civil Society Organization
	Safety and ethical standards	Outsourcing of clinical trials	<p>The proportion of clinical trials outsourced to third parties has risen over the past 20 years; pharmaceutical and biotechnology company expenditure on these services has shown double-digit growth rates for some years now. It is easy to see why moving clinical trials overseas is so appealing. For one thing, it is cheaper to run trials in these countries. It is also easier to find what the industry calls 'drug naive' patients: people who are not currently taking any drugs and may never have taken any.</p> <p>This trend raises concerns about the adherence to safety and ethical standards, particularly as these trials are increasingly tested in emerging markets where there are fewer regulations than in developed nations. However, any clinical data produced in these countries for FDA approval processes is subject to the same regulatory oversight as the US. The key risk is being associated with malpractice related to trials conducted on their behalf, if clinical and ethical standards for patient selection are below par. For example, people in impoverished and malnourished parts of the world, for a variety of reasons, may also metabolise drugs differently.</p> <p>Proactive policies to tackle these concerns need to be implemented. Novartis's Bioethics Committee addresses ethical considerations in research, particularly in the developing world, including safety and ethical standards</p>	479	Business



Sustainability Category	Topic	Topic Specification (if available)	Explanation	Reference(s) ¹	Constituency
			defined at an international level such as the Declaration of Helsinki. More generally, a Code of Ethics, training and audits are essential to a healthcare or pharmaceutical company risk assessment.		
	Sourcing strategy and policies	Sourcing standards for child labor in wild plant collection	<p>More and more people demand “natural” products made from wild collected plants. Such products may be used in different ways; mainly they are used in the food industry, in the pharmaceutical industry or in the cosmetics industry. Products collected from the wild (e.g. medicinal and aromatic plants, berries, wild fruits, nuts and seeds, mushrooms) and raw materials for finished products (e.g. essential and fatty oils)</p> <p>Common practices in collection with regard to involvement of children or young people (15 to 18 years)</p>	176, 375	Civil Society Organization
		Sourcing standards for working conditions in wild plant collection	<p>More and more people demand “natural” products made from wild collected plants. Such products may be used in different ways; mainly they are used in the food industry, in the pharmaceutical industry or in the cosmetics industry. Products collected from the wild (e.g. medicinal and aromatic plants, berries, wild fruits, nuts and seeds, mushrooms) and raw materials for finished products (e.g. essential and fatty oils).</p> <p>The collection operation has to maintain fair and transparent relations with the collectors and actively involve them in key decisions that directly affect them, including the product pricing.</p>	176	Civil Society Organization

¹ All references can be found at <https://www.globalreporting.org/reporting/sector-guidance/Topics-Research/Pages/default.aspx>



References

All references can be found at <https://www.globalreporting.org/reporting/sector-guidance/Topics-Research/Pages/default.aspx>

19°	Anastas, P. T. & Warner, J. C., 1998. 12 Principles of Green Chemistry. In: <i>Green Chemistry: Theory and Practice</i> . New York: Oxford University Press, p. 30.
66	Castan Centre for Human Rights Law; International Business Leaders Forum; Office of the United Nations High Commissioner for Human Rights, 2008. <i>Human Rights Translated, A Business Reference Guide</i> , New York: United Nations Global Compact.
82	Commission on Intellectual Property Rights, Innovation and Public Health, 2006. <i>Public health, innovation and intellectual, property rights</i> , Geneva: World Health Organization.
153	European Federation of Financial Analysts Societies (EFFAS) and Society of Investment Professionals in Germany (DVFA), 2010. <i>KPIs for ESG – A Guideline for the Integration of ESG into Financial Analysis and Corporate Valuation</i> , Frankfurt am Main: EFFAS.
176	FairWild Foundation, 'Fairwild Standard', version 2.0, 2010.
237	Hammond, E., 2010. <i>Problems with genetically-engineered crops in the field</i> , Amsterdam: Greenpeace International.
259	Institute for Marketecology, 2010. <i>Manual for Sustainable Wild Collection Practices</i> , Weinfeld: FairWild Foundation.
296	International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), 2012. <i>The Changing Landscape on Access to Medicines</i> , Geneva: International Federation of Pharmaceutical Manufacturers & Associations (IFPMA).
353	Kershaw, P., Katsuhiko, S., Lee, S., Samseth, J., Woodring, D., & Smith, J., 2011. Plastic Debris in the Ocean. In United Nations Environment Programme (UNEP), <i>UNEP Year Book 2011</i> (pp. 20-33). Nairobi: United Nations Early Warning and Assessment.
367	MacKerron, C., 2011. <i>Unfinished Business: The Case for Extended Producer Responsibility for Post-Consumer Packaging</i> , Oakland: As You Sow.
370	Martinez-Fernandez, C., Kubo, N., Noya, A. & Weyman, T., 2012. <i>Demographic change and local development: shrinkage, regeneration and social dynamics</i> , Paris: Organisation for Economic Co-operation and Development (OECD).
375	Meinhausen, F., 2012. <i>Guidance Manual for implementation of social & fair trade aspects in fairwild operations</i> , Weinfeld: Fairwild.



388	National Resources Defense Center (NRDC), 2010. <i>Dosed Without Prescription: Preventing Pharmaceutical Contamination of Our Nation's Drinking Water</i> , New York: National Resources Defense Center (NRDC).
394	Nowak, T., 2012. <i>Low Fee Socially Responsible Investing</i> . 1 st ed. Grayslake: Quantum Financial Planning LLC.
418	Organisation for Economic Co-operation and Development (OECD), 2011. <i>Guidance Document on the Use of Information on Pathogenicity Factors in Assessing the Potential Adverse Health Effects of Micro-Organisms: Bacteria [ENV/JM/MONO(2011)41]</i> , Paris: Organisation for Economic Co-operation and Development (OECD).
422	Organisation for Economic Co-operation and Development (OECD), <i>Biosafety – BioTrack</i> , [Online] Available at: http://www.oecd.org/env/ehs/biotrack/ , [Accessed 22 February 2013].
436	Pharmaceutical Supply Chain Initiative (PSCI), 'Pharmaceutical Industry Principles for Responsible Supply Chain Management', 2011.
460	Robeco SAM, 2012. <i>The Sustainability Yearbook 2012</i> , Zurich: Robeco SAM.
479°	Société Générale, 2011. <i>SRI: Beyond Integration, from satellite to core</i> , Paris: Société Générale.
568	Wilsdon, T., Attridge, J., Fiz, E. & Ginoza, S., 2012. <i>Policies that Encourage Innovation in Middle-Income Countries</i> , London: Charles River Associates (CRA) International.
585	World Health Organization (WHO), 2005. <i>Life Science Research: Opportunities and Risks for Public Health – Mapping the Issues</i> , Geneva: World Health Organization (WHO).
587	World Health Organization (WHO), 2010. <i>Responsible Life Sciences Research for Global Health Security: A Guidance Document</i> , Geneva: World Health Organization (WHO).
589	World Health Organization (WHO), 2012. <i>Global Vaccine Safety Blueprint: The Landscape Analysis</i> , Geneva: World Health Organization (WHO).
590	World Health Organization (WHO), 2012. <i>Pursuit of Responsible Use of Medicines: Sharing and Learning from Country Experiences</i> , Geneva: World Health Organization (WHO).
591	World Health Organization (WHO), 2012. <i>Rapid Risk Assessment of Acute Public Health Events</i> , Geneva: World Health Organization (WHO).



593	World Health Organization (WHO), Department for Public Health and Environment Assessing and Managing Environmental Risks to Health, 'WHO Core Principles for Achieving Safe and Sustainable Management of Health-care Waste', 2007.
616	Zicklin Center for Business Ethics at the Wharton School of the University of Pennsylvania, 2012. <i>CPA-Zicklin Index of Corporate Political Accountability and Disclosure</i> , Washington, D.C.: Center for Political Accountability.

° Resource available on request and/or for a fee.

