

Decoupling Growth from Impact on the Environment

Baseline Survey of Environmental Stewardship in the Business
Sector of Pakistan

November 2017



Acknowledgements:

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Disclaimer:

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The Centre of Excellence in Responsible Business (CERB) is the first of the Pakistan Business Council's outreach initiatives to build capacity and capability of businesses in Pakistan. CERB's vision is to assist Pakistani businesses to pursue long term sustainability

and value creation, and its mission is to contribute towards inclusive social development. As part of its strategic objectives, CERB engages with businesses and industry leaders to provide a clear direction towards conducting responsible business in Pakistan. It leverages private sector growth as a means for development and poverty reduction by following the United Nations Sustainable Development Goals framework. CERB comprises two interdependent units:

- Inclusive and Sustainable Development Forum: this will focus on generating livelihoods, promoting women's empowerment and decoupling growth from impact on the environment;
- Ethics, Values and Governance Forum: this will promote responsible practices which strengthen the formal sector in pursuit of sustainable value creation.

Both of these forums aim to raise awareness of responsible business practices that ensure a fair and competitive economic environment central to sustainable business, economic growth and national development.



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The Pakistan Business Council: An Overview

The Pakistan Business Council (PBC) is a business policy advocacy forum, representing private-sector businesses that have substantial investments in Pakistan's economy. It was formed in 2005 by 14 (now 60) of Pakistan's largest enterprises, including multinationals, to allow businesses to meaningfully interact with government and other stakeholders.

The Pakistan Business Council is a pan-industry advocacy group. It is not a trade body nor does it advocate for any specific business sector. Rather, its key advocacy thrust is on easing barriers to allow Pakistani businesses to compete in regional and global arenas.

The PBC works closely with the relevant government departments, ministries, regulators and institutions, as well as other stakeholders including professional bodies, to develop consensus on major issues which impact the conduct of business in and from Pakistan. The PBC has submitted key position papers and recommendations to the government on legislation and other government policies affecting businesses. It also serves on various taskforces and committees of the Government of Pakistan as well as those of the State Bank, SECP and other regulators with the objective to provide policy assistance on new initiatives and reforms.

The PBC conducts research and holds conferences and seminars to facilitate the flow of relevant information to all stakeholders in order to help create an informed view on the major issues faced by Pakistan.

The PBC's Founding Objectives:

- To provide for the formation and exchange of views on any question connected with the conduct of businesses in and from Pakistan.
- To conduct, organize, set up, administer and manage campaigns, surveys, focus groups, workshops, seminars and field works for carrying out research and raising awareness in regard to matters affecting businesses in Pakistan.

- To acquire, collect, compile, analyze, publish and provide statistics, data analysis and other information relating to businesses of any kind, nature or description and on opportunities for such businesses within and outside Pakistan.
- To promote and facilitate the integration of businesses in Pakistan into the world economy and to encourage the development and growth of Pakistani multinationals.
- To interact with Governments in the economic development of Pakistan and to facilitate, foster and further the economic, social and human resource development of Pakistan.

The PBC is a Section 42 not-for-profit Company Limited by Guarantee. Its working is overseen by a Board of Directors elected every three years by the Membership with the Board being headed by a Non-Executive Chairman. The day-to-day operations of the PBC are run by a professional secretariat headed by a full-time, paid CEO. More information on the PBC, its members, and its workings, can be found on its website: www.pbc.org.pk

Member Companies

 <p>Abbott A Promise for Life</p>	 <p>AkzoNobel</p>	 <p>Allied Bank</p>	 <p>Artistic Milliners</p>
 <p>Atlas</p>	 <p>Bank Alfalah Limited</p>	 <p>CHERAT CEMENT</p>	 <p>Coca-Cola</p>
 <p>Colgate Palmolive</p>	 <p>Dawood Hercules</p>	 <p>DESCON</p>	 <p>efu</p>
 <p>English Biscuits Manufacturers</p>	 <p>engro corp</p>	 <p>faysabank</p>	 <p>FEROZSONS LABORATORIES LIMITED</p>
 <p>GATRON</p>	 <p>Getz pharma</p>	 <p>gsk GlaxoSmithKline</p>	 <p>gsk GlaxoSmithKline Consumer Healthcare</p>
 <p>GulAhmed TEXTILE MILLS LIMITED, KARACHI</p>	 <p>HBL</p>	 <p>HASCOL</p>	 <p>HUBCO</p>
 <p>ICI PAKISTAN</p>	 <p>interlop</p>	 <p>INTERNATIONAL INDUSTRIES LTD.</p>	 <p>INDUS GROUP</p>

Member Companies

 <p>TOYOTA DAIHATSU INDUS MOTOR COMPANY LIMITED</p>	 <p>JDW JDW Sugar Mills</p>	 <p>KE Energy That Moves Life</p>	 <p>LOTTE</p>
 <p>LUCKY CEMENT</p>	 <p>MEGA MEGA CONGLOMERATE</p>	 <p>MTL Millat Tractors</p>	 <p>National FOODS SINCE 1970</p>
 <p>Nestle</p>	 <p>NISHAT MILLS LTD</p>	 <p>Martin Dow Pharmaceuticals for a Changing World</p>	 <p>PACKAGES Limited</p>
 <p>pakarab FERTILIZERS LIMITED</p>	 <p>optel</p>	 <p>PAKISTAN TOBACCO COMPANY</p>	 <p>Philip Morris International</p>
 <p>Reckitt Benckiser</p>	 <p>SAIF GROUP</p>	 <p>Sapphire</p>	 <p>SICPA</p>
 <p>SIEMENS</p>	 <p>Soneri Bank</p>	 <p>SOORTY World Of Dairies</p>	 <p>South Asia Pakistan Terminals</p>
 <p>Standard Chartered</p>	 <p>TAPAL</p>	 <p>TCS WE MOVE YOU</p>	 <p>Tetra Pak PROTECTS WHAT'S GOOD</p>

Member Companies

 TPL Holdings Tomorrow Delivered Today	 Tufail Chemical Industries Ltd.		
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Background and Objectives

The Centre of Excellence in Responsible Business (CERB) is an online research initiative of the Pakistan Business Council and was founded in November, 2016. CERB's mission is to engage with businesses and industry leaders and enable the transformation towards the conduct of responsible business in Pakistan and to leverage private sector growth for environmental sustainability, inclusive development, and poverty reduction as guided by the United Nations Sustainable Development Goals (SDG) framework.

The United Nations Sustainable Development Goals discuss environmental sustainability in five out of seventeen goals. Three of these have been selected by CERB for businesses to focus on through their operations in the country with a view to facilitating the private sector in making its contribution to Pakistan's achievement of the SDG. Goal 9 focuses on building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation, Goal 12 focuses on ensuring sustainable production and consumption patterns, whilst Goal 13 urges countries to take urgent action to combat climate change and its impacts. In relation to the SDGs, CERB has conducted a survey on environmental stewardship among the PBC member companies. The aim of this baseline survey is to identify the current practices in relation to current environmental stewardship by PBC member companies. The data from this survey will help codify good practices that may be used by other businesses in building sustainable systems in due course of time. In turn these lead to Environmental Stewardship, improve their reputation and move such businesses towards long term sustainable value creation.

For the purpose of the survey and report, environmental stewardship has been referred to as the responsibility that companies and their boards need to understand and undertake to manage their impacts on the environment in any number of ways.

The Survey

In June 2017, an online questionnaire based on a Google form was shared with the sixty member companies of the Pakistan Business Council. The questionnaire has been created to map environmental stewardship being practiced which goes beyond compliance. The intent is to understand the leadership role and best practices in building sustainable systems by decoupling growth from the environmental impacts on the country's natural resources, specifically air, land and water. Further, it also seeks to identify whether companies are aware of the global concerns about impacts on the environment and whether this awareness has led to policy change and implementation. With greater attention being directed to the progress being made towards achievement of SDGs, the results of this survey will, among other, enable the user to determine the private sector's contribution in helping Pakistan progress satisfactorily towards such achievement.

Executive Summary

The detailed analysis of the results of our online survey on '*Environmental stewardship in Business Sector of Pakistan*' has provided us with a baseline knowledge on the current environment and sustainability practices existing amongst thirty-one companies spread across Pakistan. A summary of the results is as follows:

- **Organizational Sustainability Structure**

The responses from the survey indicate that while it is a general practice for companies to have a sustainability policy, there is a varied response in the nature of the policy. Business understanding of environmental stewardship varies across sectors – with a basic response seen in the banking and finance sector and better practices seen in FMCGs. Similarly, companies which have comprehensive policies to address environmental stewardship, have strategies for setting targets and periodic review. In terms of drivers for company strategy, whilst availability for resource is high on the list, companies also recognize climate change as an important driver for future business decisions linking it to impacting raw material availability, consumer demands and their physical assets.

- **Leadership Training & Development**

Responses identified both training and awareness in relation to environmental stewardship are considered a general practice in most organizations. Training is given to a number of tiers of employees in most organizations. It must be mentioned that only 16 percent of companies engage in training the C-Suite on environmental issues. Likewise, most companies engage in spreading awareness to employees about environmental activities and progress. Better practices identified through the survey responses include training on KPI and measuring impacts.

- **Environmental Stewardship**

The survey looked at how environmental stewardship is practiced in companies. Responses identified that most companies are aware of their impact on the environment and can identify the types of point source discharges made into air, land and water. There is also a general practice in companies to manage the emissions to air, namely the greenhouse gases. Responses identified 60 percent of companies engage in quantifying GHG emissions, but only 16.7 include transport in the quantification – hence a total quantification is not being included.

Sector-wise, the banking and finance sector showed a limited response in the section, whilst the sectors linked to manufacturing displayed aspects of environmental stewardship.

- **Value Chain & Procurement**

This section of the survey looked at a company's responsibility to its supply chain. The responses identify that while most companies have a Code of Conduct for its suppliers, the emphasis lies on occupational health and safety rather than environmental sustainability. In terms of measuring the impact of supply chain activity, there is some good practice of measuring GHG emissions, and few companies highlight the good practices of measuring inputs going into agricultural products.

- **Sustainable Systems:**

- **Energy Efficiency**

Respondents were asked to identify how they are moving towards energy efficiency. This section looked at how companies are moving towards energy efficiency. Looking at sources of energy, most companies either self-generate using fossil fuels or import electricity from the grid. Some companies are also using renewable energy in some aspect of the business. Most companies have designated policies, plans and procedures to reduce energy consumption. Moreover, some companies have established targets to move toward increased renewable energy solutions. Sector wise companies from the FMCG and textile sector show a lead in improving energy efficiency.

- **Water Efficiency**

Responses in this section showed approximately half of the companies surveyed have policies, plans and procedures to take into account water efficiency, take into account water efficiency when procuring machinery and have reduced water use to increase water efficiency in the past five years.

- **Wastewater & Waste Management**

The survey response to this section identifies that there is a general practice amongst companies to manage waste and have a policy. This practice is more prevalent in companies which have a manufacturing base. Companies which provide services have generally identified such a policy is not applicable to them. Likewise, one-third of companies recycle

wastewater to some extent, whilst two companies are demonstrating recycling 100% of wastewater.

- **Resource Management**

This section of the survey shows a gap in understanding and application of the concepts of lifecycle analysis. With the exception of a few companies which display stewardship in a few categories, most companies identified the process was not applicable to them. In this section, no company was able to answer all of the specific questions.

Key Findings:

- 83.3 percent of respondent companies have a sustainability policy - majority of these come from the textiles and FMCG sector, while most companies of the banking & finance sector do not have a sustainability policy. *For details, see Figure 5 & 7.*
- 94 percent of companies acknowledge that climate change is a highly important issue and directly affects the functioning and operations of their business. *For details, see Figure 16.*
- More than 80 percent of companies either do not conduct Life Cycle Assessments of their products that are consumed in Pakistan or they do not consider it applicable to them. *For details, see Figure 43.*
- 80.6 percent of companies stated that they directly affect the environment via emissions to air while 61.3 percent of companies effect the environment through liquid effluents to water bodies. *For details, see Figure 21.*
- 67.9 percent of companies quantify their total carbon emissions into CO₂ equivalents - *namely companies in the FMCG, chemicals and textiles sectors.* However, 56.7 percent of companies' state that they do not include transport emissions as part of their total emissions - *it must be noted that this shows that majority of companies are not quantifying their emissions effectively.* *For details, see Figure 23 & 24.*
- More than half of companies include aspects of environmental sustainability (waste, emissions) as part of their Code of Conduct (CoC) for suppliers. However, more than 60 percent of companies do not map energy nor GHG emissions through its supply chain. *For details, refer to Figures 26.*
- More than 90 percent of companies depend on direct combustion of fossil fuels for most of their energy needs – *this suggests that while 98 percent of companies understand the risks associated with climate change, they are still releasing carbon emissions into the atmosphere.*
- **More than 60 percent of companies state that they have reduced water consumption between 5% and 60% over the past five years.**

Introduction

Globally, businesses have been using resources from the environment to operate and sustain themselves. Without the generation of these resources, most companies would not be successful, neither be operational after a certain length of time. However, it is evident that irresponsible business practices by companies around the world have contributed greatly to the damage of the environment, thereby affecting the ability to extract resources, sustain the growing population, as well as mitigate against impacts of climate change.

Responsible companies have become cognizant of the fact that the impacts of their operations have directly impacted the environment negatively by polluting the air, water and land and also contributing to climate change. These companies have chosen to practice environmental stewardship and embed the concept of sustainability within their core business strategy. They are convinced that they must fundamentally change the way they operate in order to be efficient and effective.

In 2015, the United Nations agreed upon identifying seventeen goals to work towards by 2030, in order to ensure sustainable development across the world. The UN has also pushed businesses globally to prioritize their strategies and align them to the UN Sustainable Development goals to meet them by 2030. Through the UN Global Compact which is geared towards increased business engagement, this is the world's largest corporate sustainability initiative and aims to transform the world by changing the way businesses operate and practice.

Of the UN SDGs, Goal 9 pertains directly to sustainable industrialization and is relevant to increasing environmental stewardship by businesses. As one of its targets, it emphasizes on promoting "inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product in line with national circumstances, and double its share in least developed countries." It also mentions that companies should "upgrade infrastructure and retrofit industries to make them sustainable, with increased resources-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes".

Further, Goal 12 aims to ensure sustainable consumption and production patterns and directly targets reduction of waste. One of the targets of Goal 12, states that 'by 2020, substantially reduce waste generation through prevention, reduction, recycling and reuse.' Additionally, it states 'by 2020, achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil in order to minimize their adverse impacts on human health and the environment'. Goal 12 also highlights on sustainability reporting and aims to 'encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle', along with promoting 'public procurement practices that are sustainable'. Further, it also mentions that 'by 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.'

Goal 13 of UN Sustainable Development Goals also focuses on climate action. It urges companies to integrate climate change measures into strategies and planning and 'implement the commitment undertaken by developed-country parties to United Nations Framework Convention on Climate Change (UNFCCC) to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency.'

With a growing population of more than 200 million people, Pakistan urgently requires public and private sectors to work together in reducing negative impacts on the environment. Hence, private sector companies in Pakistan that serve this massive population have the corporate responsibility to educate them of the impacts of their consumption of the products.

Though there is an understanding for environmental responsibility by companies in Pakistan, there is little stakeholder engagement around issues of the environment, and thereby little enthusiasm within the industrial and business sector to practice

environmental stewardship and showcase themselves as environmental stewards. However, as more Pakistani companies wish to become a key participant in the global export market, companies have started to engage in environmental stewardship. Further, an increase in consumer awareness has also pushed this change in larger companies in Pakistan.

Further, governments across the globe, more so in the developed world than the developing world, have placed limits on pollution by measuring and managing emissions and restricting unethical and environmentally damaging activities. They have also set limits on water consumption and waste created by companies, because most of their consumers have also changed ways of consumption to become more sustainable inhabitants of the world.

Whilst there is a lot of understanding around doing the 'right' thing and protecting the environment, not all companies see a business case in practicing environmental stewardship. Companies in Pakistan can commit to these specific UN Sustainable Development Goals to play their part in lowering negative impacts on the environment and increasing environmental stewardship. To implement an environmental stewardship strategy, the senior leadership at the company must understand the importance of environmental stewardship.

Therefore, the results of the survey assist in understanding whether environmental stewardship strategy is prioritized by the companies and their specific sectors and identifies whether this strategy has been implemented within the company throughout various aspects of environmental stewardship and sustainability.

The survey focuses on capturing the baseline trend and good practices of companies that are members of the Pakistan Business Council. The results of this survey have been divided into the following sections:

- Organizational Sustainability Structure
- Leadership Training & Development
- Environmental Stewardship

- Value Chain & Procurement
- Sustainable Systems:
 - Energy Efficiency
 - Water Efficiency
 - Wastewater & Waste Management
 - Resource Management

The Survey Response

I. Respondent Data

Surveys sent: 60

Responses received: 31

Responses accepted: 31

The respondent companies are both listed and non-listed companies (Figure 1.) Figure 2 identifies the different sectors represented by the companies which include textile, chemical, engineering and industrial, fast-moving consumer goods (FMCG), logistics & storage, banking & finance and power generation & distribution.

An overwhelming 17.9 percent of the respondents were FMCG companies, while the textile and chemical sectors both came a close second with six companies responding from each sector, adding up to 30.8 percent. Together, the three sectors of FMCG, textile and chemical sector account for more than 50 percent of the respondents. Following them are the banking & finance, power generation & distribution and engineering & industrial sectors, each with four respondents to the survey. Only a few responses were received from the pharmaceutical sector, logistics & storage, and companies producing cement. No responses were received from companies in the Insurance Sector.

Within the various sectors, there are companies delivering services and producing a variety of consumer products, including edibles, cigarettes, cosmetics, consumer health and hygiene products and personal care products. The respondent data is also varied in the sense that some responses represent a group of companies, whilst other responses are for a single company.

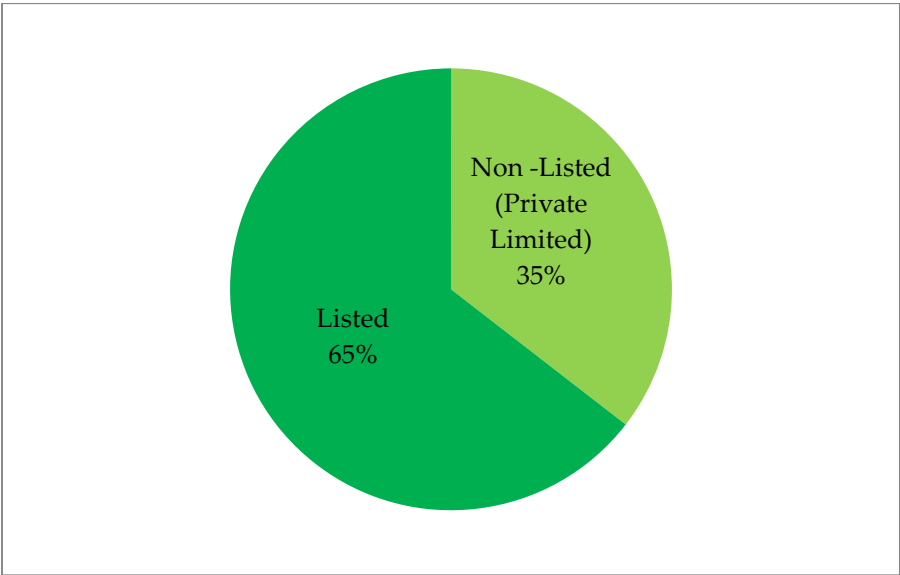


Figure 1: Categories of respondent companies

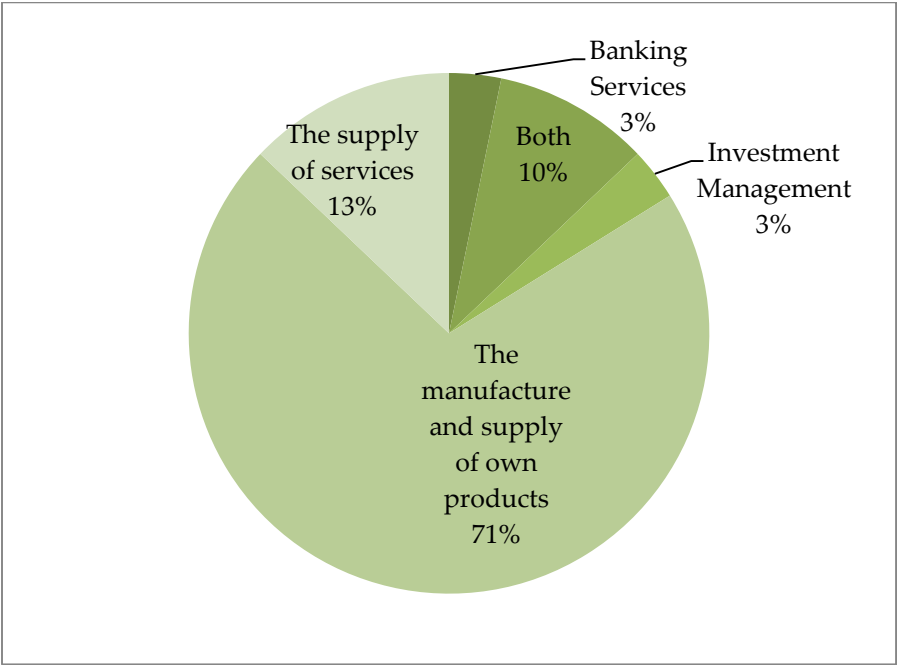


Figure 2: The nature of operations of the respondent companies

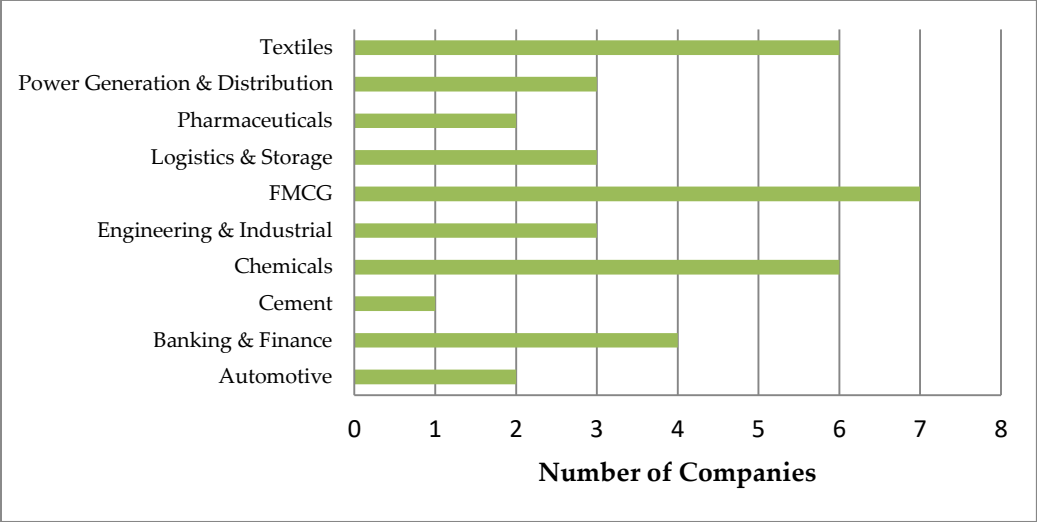


Figure 3: Sector-wise division of respondent companies

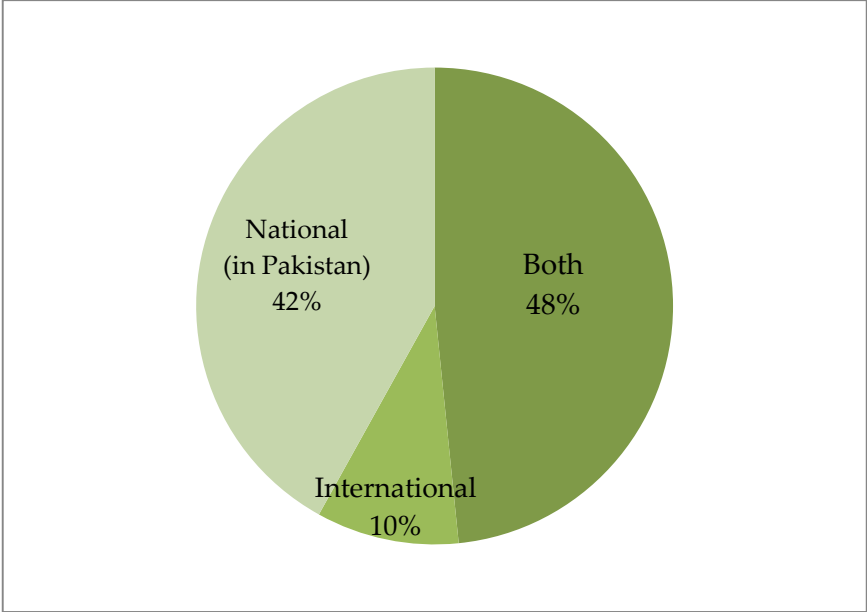


Figure 4: Primary market of supply and/or service operations of respondent companies

II. Organizational Sustainability Structure

Companies that understand the need for sustainable value creation also appreciate that sustainability reporting is key in implementation of such policies. Sustainability reporting enables enterprises to consider the impacts of their sustainability issues and provide transparency on the risks and opportunities that they face.

The aim of this section is to understand a company's sustainability strategy and policy in place. and relate it to the company's compliance, disclosure and actual practices towards environmental stewardship. This section of the survey looks at:

- The presence of a sustainability policy, its coverage of environmental stewardship and if it includes an independent reporting structure.
- The methods of establishing, reviewing, and disclosure on environmental performance indicators in the company
- The establishment and measuring of environment stewardship targets
- If the company's sustainability strategy cover its procurement policy.
- Identify the perception of climate change is a pertinent business issue for the company operations

When asked about whether the company has a sustainability policy, 80 percent of the responding PBC member companies responded in the positive (Figure 5). Looking at the responses sector-wise, 25 percent of these companies are from the textiles sector, while 30 percent of them are from the FMCG sector. On the other hand, 40 percent of companies that do not have a sustainability policy are from the banking & finance sector.

A responsible business in the context of sustainable development is an enterprise that strives to have minimal negative impact on the globe or the local environment, community, society, or economy.

It thereby seeks to embody the triple bottom line in its business model by employing global economic, social and environmental standards and setting progressive governance, human rights and environmental stewardship policies.

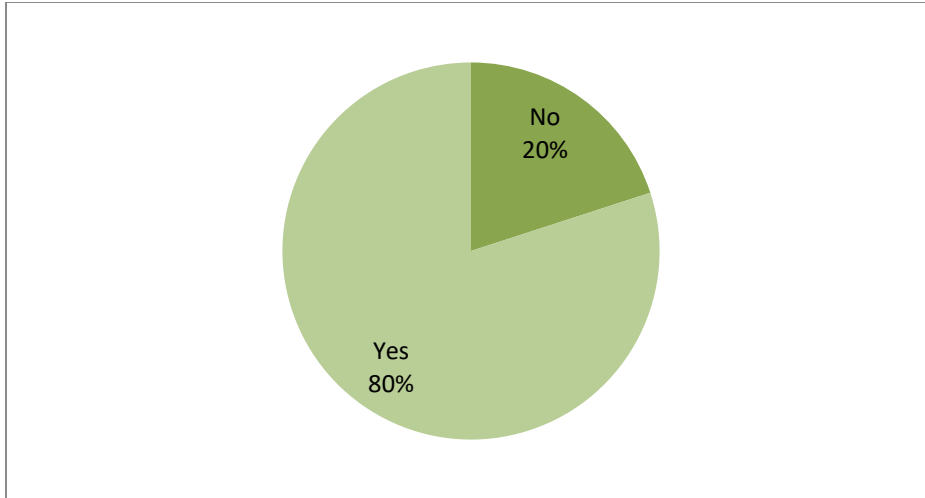


Figure 5: Percentages of companies that have and do not have a sustainability policy

Out of the twenty-four companies which have a sustainability policy, that do have policies, only 12.5 percent of them have an independent sustainability organizational reporting structure. In terms of the responses, it can be seen many companies follow their company's global reporting structure, expressed that they did have an independent sustainability organizational reporting structure, but after some research, it was identified that these companies were only reporting their performance to their global head offices.

Good practices link environmental stewardship to the responsibility for environmental quality shared by all those whose actions affect the environment (USEPA, 2005). Respondents were also asked about whether environmental stewardship was part of their sustainability policy, 82.7 percent companies said yes. When asked what aspects of environmental stewardship are covered in the sustainability policy' the responses identify many companies do not differentiate Environmental Stewardship with organizational Environment, Health and Safety (EHS) and Corporate Social Responsibility (CSR). EHS activities are linked to decent work practices social and human resource management HR policies, and whereas CSR is linked to philanthropy and social aspects of sustainability.

Responses show, a difference in understanding between companies. Responses also termed environmental stewardship in following international standards to improve operations and minimize negative impact: citing ISO certifications, energy and environmental targets

identified in the UN Global Compact. The companies which manufacture packaging products use the Forest Stewardship Council (FSC) certification for their paper-based packaging materials.

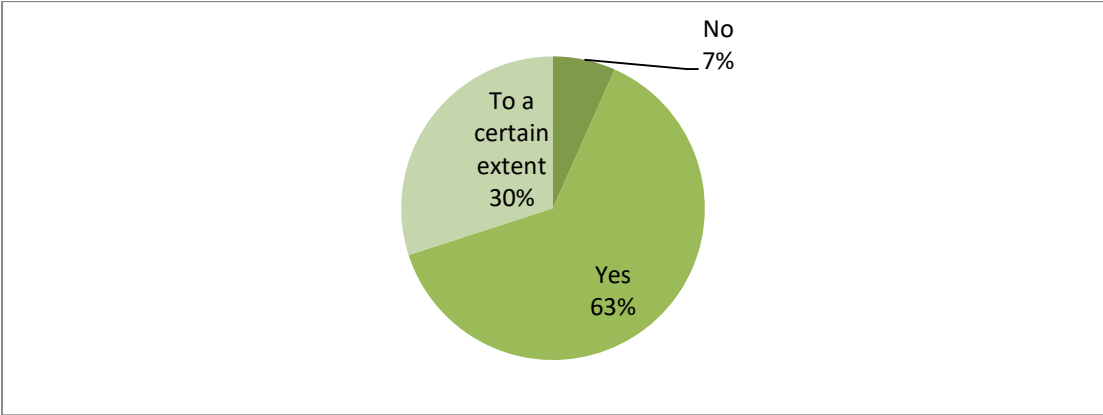


Figure 6: Percentages of companies that do and do not engage in periodic improvement of their policy focusing on environmental stewardship and sustainability performance indicators

In response to the question, *‘Does the company engage in periodic improvement of the policy focusing on environmental stewardship and sustainability performance indicators?’* the results of our survey indicate 63 percent of companies which have a sustainability policy also engage in periodic improvements of that policy, shown in Figure 6. Looking at the responses sector-wise, Figure 7 highlights the major responses from FMCGs (17.9 percent) and the textile sector (15.4 percent), who undertake a periodic improvement of the policy.

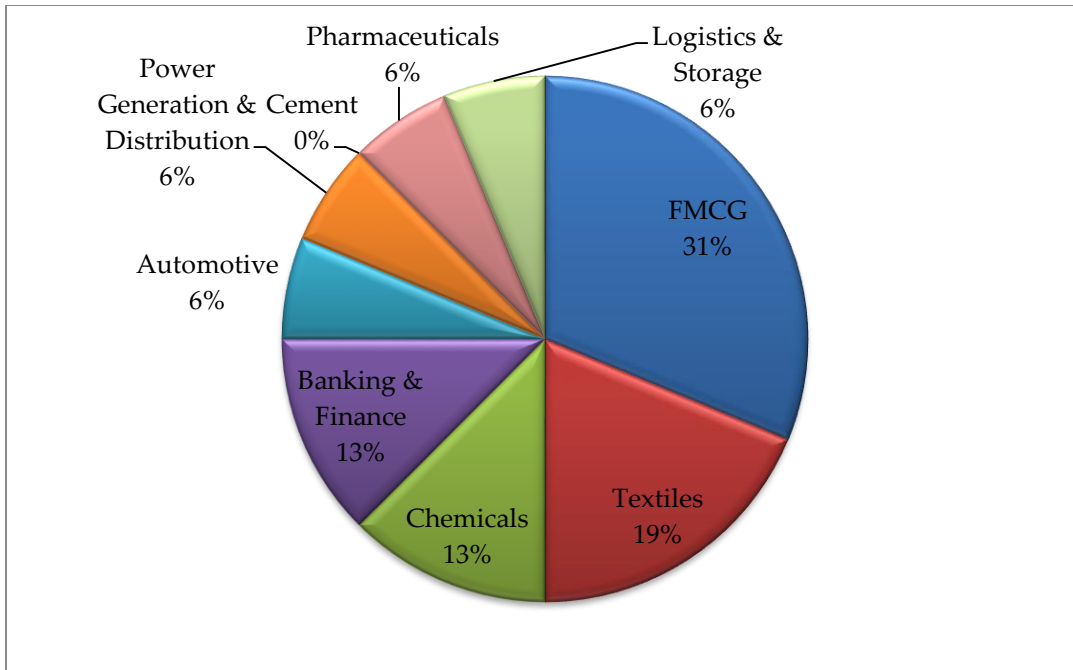


Figure 7: Sector-wise division of companies that do engage in periodic improvements of their environmental policy

Figure 8 identifies the responses to the timeframe of periodic review of environmental performance indicators and targets. Although there is a varied response from the PBC member companies, more than 50 percent of companies conduct a review at least once per annum, whilst there is a good practice in more than 20 percent of companies which conduct a monthly review.

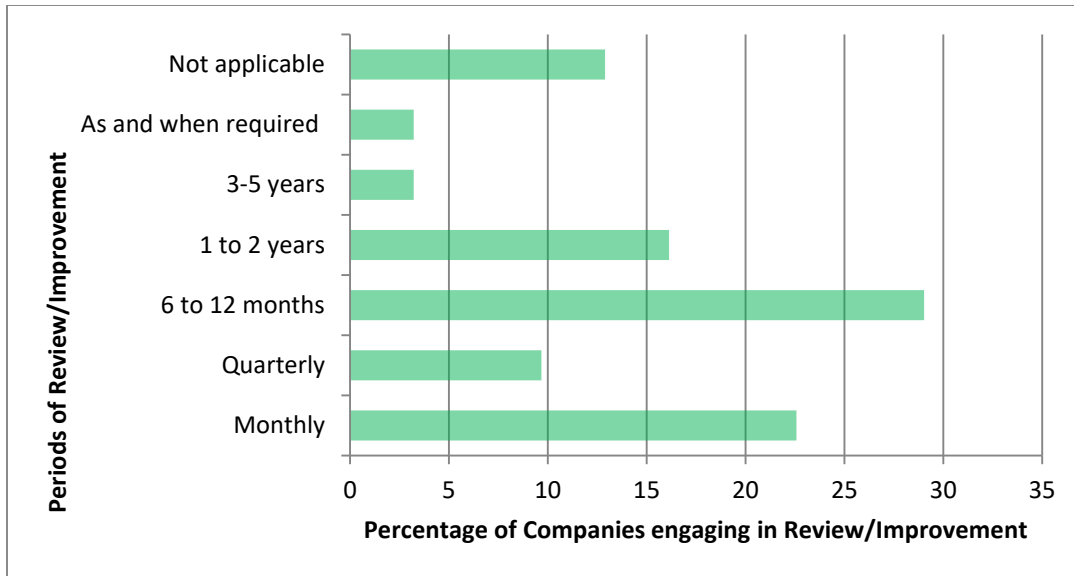


Figure 8: The time frame for periodic review of the Environmental Performance Indicators and their associated risks

Furthermore, companies were asked about how they share the targets and results of their policies. Figure 9 highlights that 46.7 percent of the companies identified they reveal the results to their board members, whilst 40 percent publicly disclose their results on platforms, such as newspapers, website, or publicly published reports. Another 40 percent report to Pakistan’s federally run body, the Environment Protection Authority (Pak-EPA).

Sector-wise, the results identify that majority of companies belonging the banking and finance sector chose the 'Not Applicable' option, whereas majority of companies that are in the chemicals and pharmaceutical sector choose to only report to the EPA. On the other hand, majority of the companies from the FMCG sector, which are mainly listed companies, choose to report their results publicly.

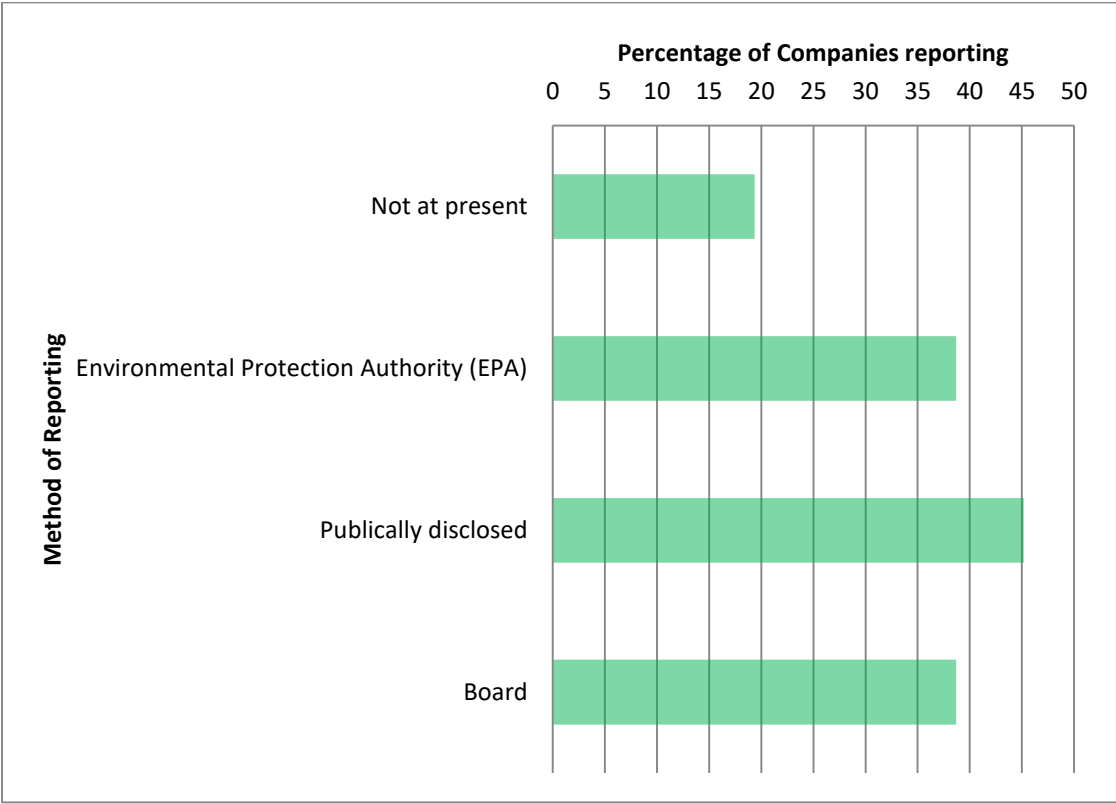


Figure 9: Methods of periodic reporting of environmental performance indicators by respondent companies

When asked whether the disclosure of the key performance indicators (KPIs) follow any global standards, 50 percent of the companies responded in following universal global standards for their policies by having ISO 14001, OHSAS 14001, ISO14044, and ISO 26000 certifications as shown in Figure 10. A majority of these companies are FMCGs or belong to the Textiles sector. Approximately 13 percent of companies are reporting using indicators and

voluntary reporting guidelines such as the Global Reporting Initiative (GRI Guidelines). Similarly 13 percent of companies are signatory to the United Nations Global Compact (UNGC). Only one respondent identified being a signatory to UNGC and using the GRI Guidelines. An overwhelming percentage of companies - more than 40 percent, stated that this question does not apply to them - while a majority of them are from the banking and finance sector.

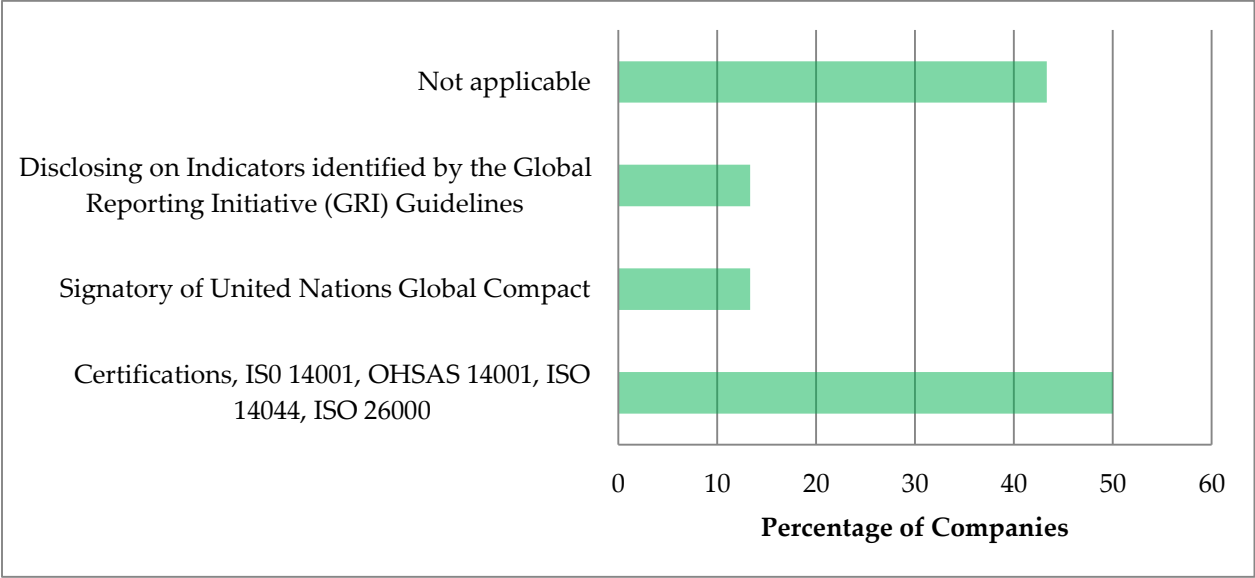


Figure 10: Responses to whether companies follow global standards or guidelines when publically disclosing their environmental indicators

When asked about procurement policy, 80 percent of the responding companies have stated that their procurement policy is a part of their sustainable strategy and these mostly belong to the FMCG and power generation and distribution sector (Figure 11). The aspect of aligning environment stewardship with procurement is important as companies are now being held accountable for their value chain. By focusing on procurement, this can be done by a process that achieves value for money and promotes positive outcomes not only for the organization itself but for the economy, environment, and society.

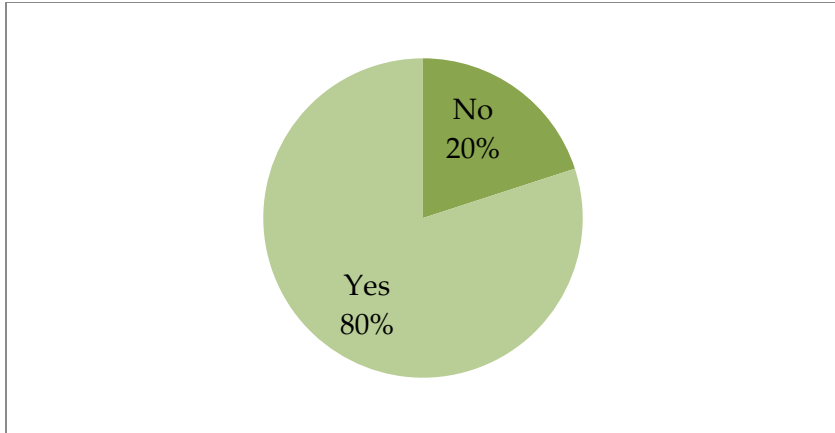


Figure 11: Percentages of companies that include procurement policy as part of their sustainability strategy

When asked in the survey whether companies engage in setting measurable environmental stewardship, 64.5 percent stated that they do engage in setting these goals and targets. However, as shown in Figure 12, 22.6 percent stated that they do it to a certain extent, while 12.9 percent stated they do not do it presently. Companies from all sectors gave mixed responses and there was no strong pattern visible in their answers.

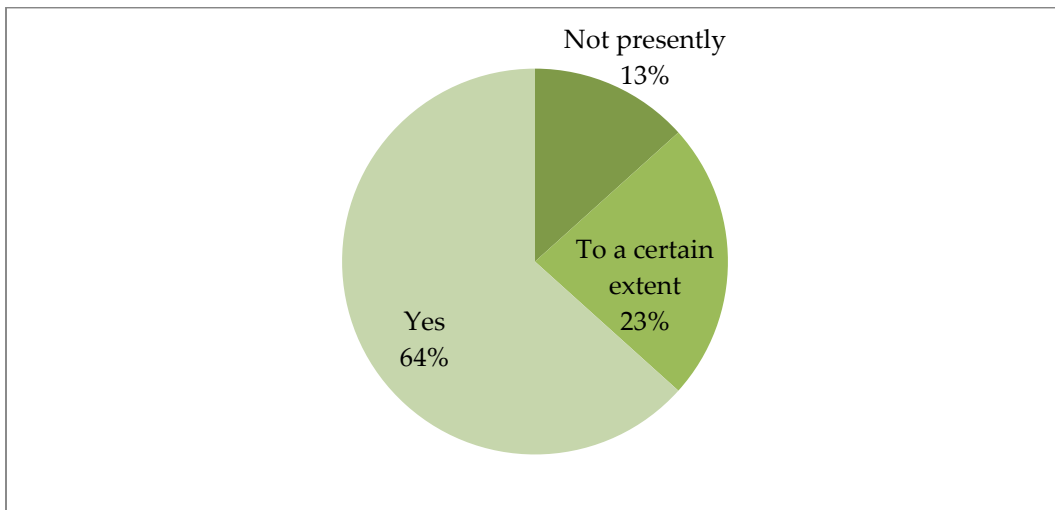


Figure 12: Percentages of companies that engage in setting measurable environmental stewardship goals and targets versus those that do not

Setting targets which are measurable helps evaluate the impact of environmental stewardship policies over a length of time. This process can assist in identifying both risks and opportunities that the company faces.

Additionally, companies were asked about what aspects related to the environment are looked at when identifying goals and targets. As shown in Figure 13, approximately 70 percent of companies stated that they look at both aspects relating to the development of company products (goods/services) within Pakistan as well as company's activities and operations within the country. On the other hand, approximately 30 percent of companies only look at environmental aspects relating to the company's activities or operations within Pakistan, highlighting an interesting fact that product manufacturing not only takes place in Pakistan, rather they only operate in the country.

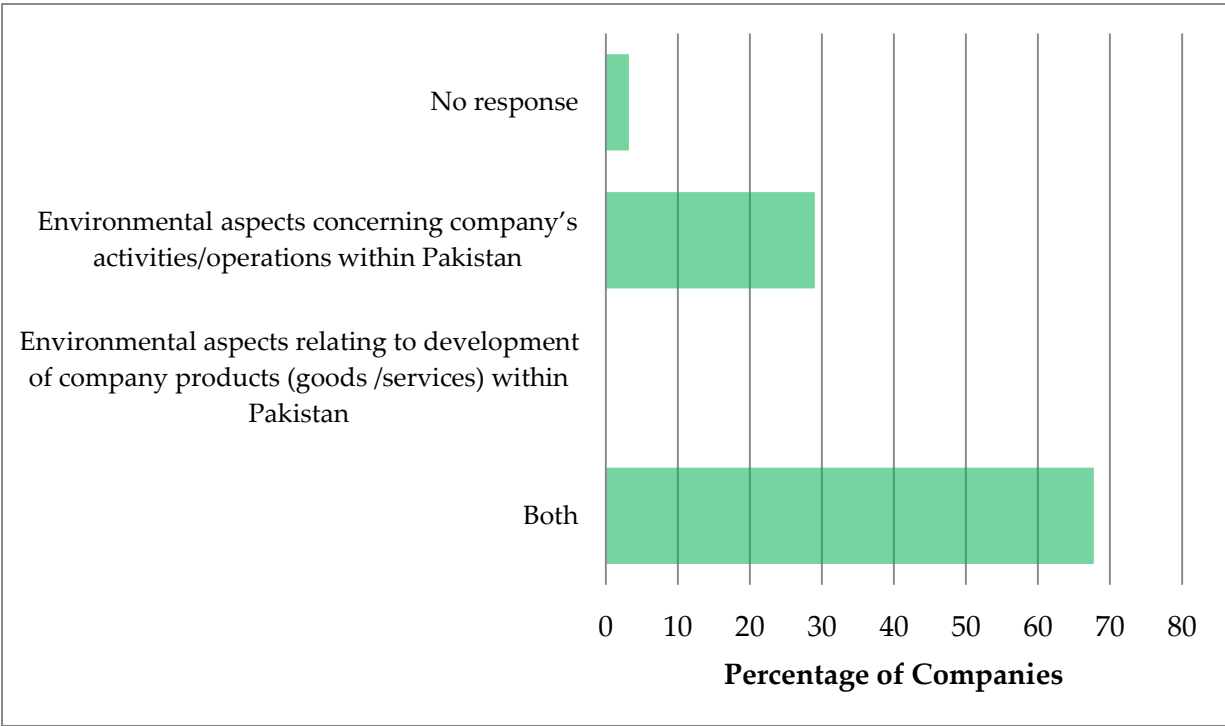


Figure 13: Percentages of companies that consider environmental aspects concerning their operations/activities versus the development of company products within Pakistan

What are the drivers behind environmental stewardship?

The survey inquired about the motivation behind creating environmental policy regarding a company's activities and operations. As shown in Figure 14, 50 percent of respondents are motivated by consumer demand, current legislation, business continuity, and active commitment regarding a company's activities and operations. Approximately 80 percent of companies consider reduced resource consumption an important driver. This suggests that efficient and sustainable use of resources is regarded in high level of importance. Future legislation ranked at the lowest for the responding companies at 54.8 percent.

When asked about what drivers assist them in setting environmental targets regarding the development of products and services, companies gave similar responses. As shown in Figure 15, 80 percent of companies consider reduced resource consumption as the most important driver, while the least important was future legislation at 50 percent. Hence, future legislation is considered by only a few companies at the moment.

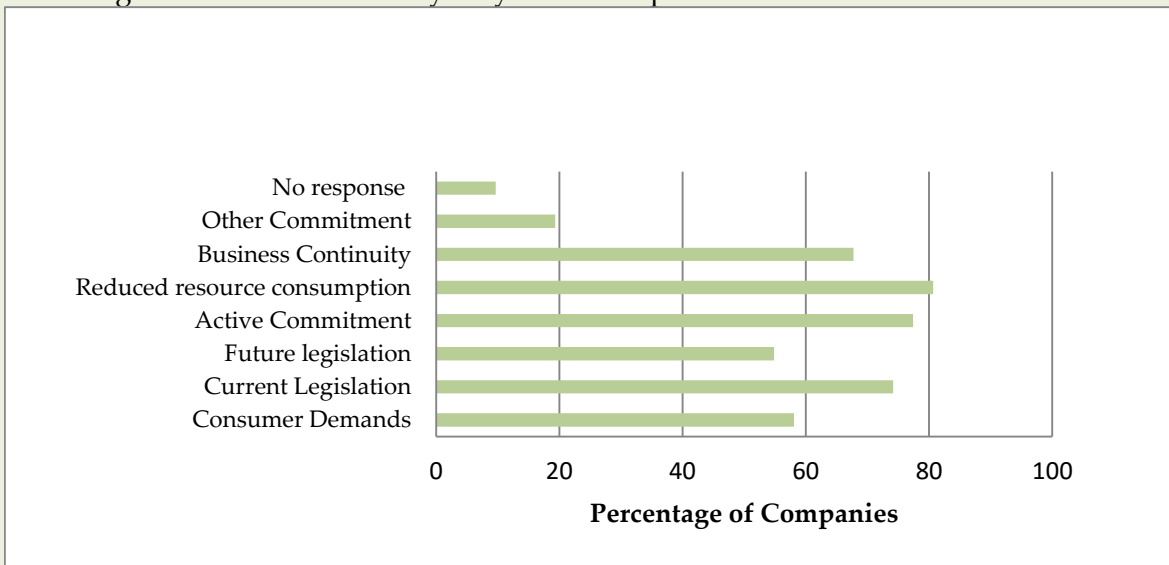


Figure 14: The drivers for setting environmental objectives considering companies' activities/operations

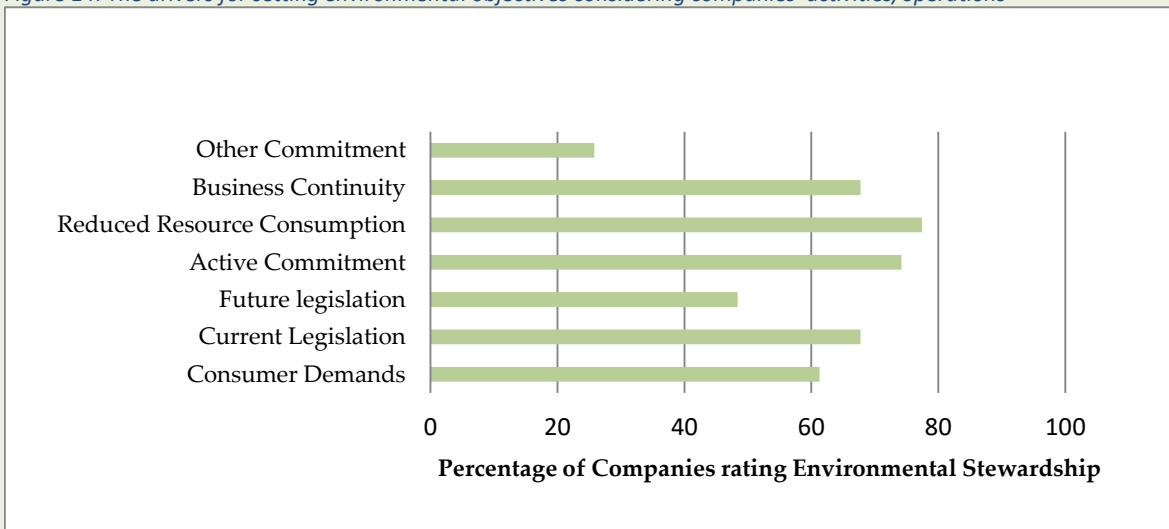


Figure 15: The drivers for setting environmental objectives considering companies' production of goods/services

Is climate change an important driver for future business decisions?

Companies around the world have now developed strategies which identify climate change is no longer a non-issue for the business world; rather it is becoming increasingly important every day as its implications are increasing greatly on the world's businesses. Almost 40 percentage of companies that answered the survey acknowledge that climate change is rated highest in the functioning of their business and their operations (Figure 16). Looking at companies which have voted 3 and above, these highlights 90 percentage of companies identify climate change as an important business issue. Only 6 percentage of companies do not identify this as a top business issue.

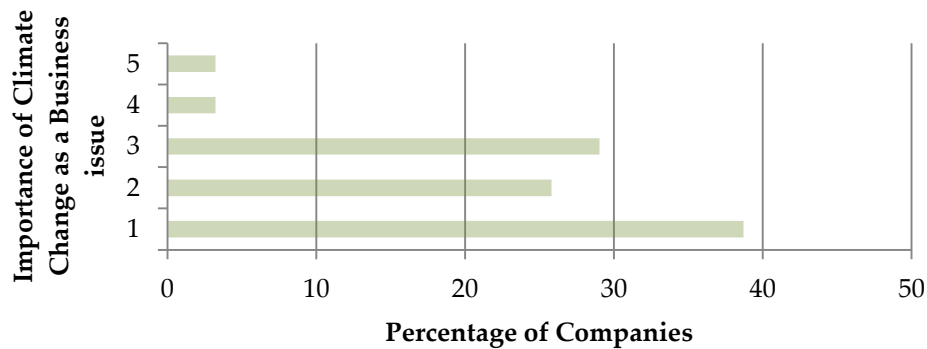


Figure 16: Importance of Climate Change as a business issue

As shown in Figure 17, 71.4 percent of businesses believe that in the coming 10 years, climate change will greatly affect their investment in their technology and equipment, their physical assets. Additionally, 50 percent of the companies also express concerns over change in consumer demand for their products and services, while 39.3 percent of companies will affect the quality of raw materials that are procured, as well as the quality of product produced.

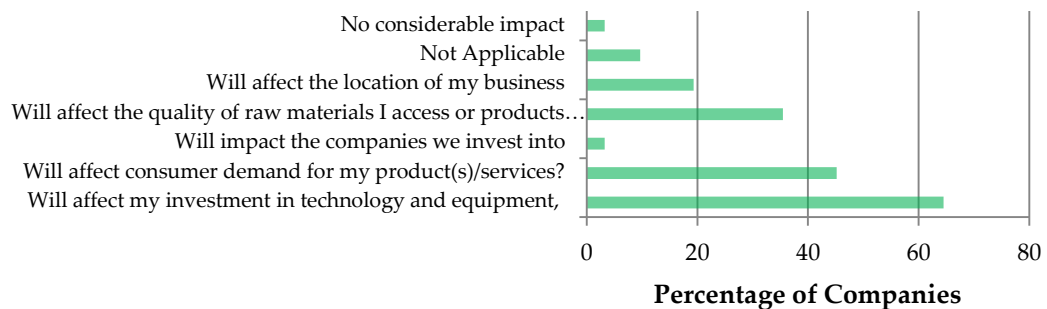


Figure 17: How climate change is predicted to impact companies' business in the next 10 years

The responses from the survey indicate that whilst it is a general practice for enterprise wide strategy to have a sustainability policy, there is a varied response in the nature of the policy. Business understanding of environmental stewardship varies across sectors – with a minimum response seen in the banking and finance sector and better practices seen in FMCGs. This corresponds to the development of environmental targets and indicators. Companies which have comprehensive policies to address environmental stewardship, have strategies for setting targets and periodic review.

According to ACCA's June 2017 report titled, "*Sustainability reporting: The evolving landscape in Pakistan*", companies that have been periodically releasing voluntary sustainability reports believe that a commitment from top management is one of the key factors that has led to sustainability reporting. Responses in our survey indicate, while companies engage in reporting performance to the board and public, only a few companies are using internationally identifiable good practices of using indicators from Global Reporting Initiative and United Nations Global Compact. It must be noted though, whilst not identified in the survey, multinational companies will be using these indicators by default if companies are reporting at a global level according to GRI and are signatories of UNGC.

In this section the survey also identified what can drive management towards environmental stewardship at an operational level or a product and services level. Resource consumption is an important driver, whilst only 50 percent of companies identify future legislation as a driver to focus on environmental stewardship. This indicates companies do not expect compliance to become stricter in the future in Pakistan.

Interestingly, companies do recognize climate change will impact future business activities, linking it to impacting raw material availability, consumer demands and their physical assets. This indicates that climate change will be an important driver for future business decisions.

To summarize, there is an indication in the survey that organizations which have the intent to measure and report their sustainability practices are usually those where the management has a specific sustainability strategy and structure to measure impacts and mitigate them. At a global level, good practice indicates the stronger the top management believes in sustainability and mitigating environmental risks, the more environmentally responsible the organization becomes. While creating its environmental policy, environmental stewardship can be aided by conducting environmental impact assessments to understand its direct impacts on the environment. Further, the company should identify certain indicators to establish these realistic targets for environmental stewardship. These targets should be measurable to evaluate the impact of environmental stewardship policies over a length of time. This process assists in identifying both risks and opportunities that the company faces.

II. Leadership Training & Development

This section explores how a company engages its employees and provides the training in order to keep up with the world's sustainability and environmental stewardship trends. This section looks at:

- Whether the company has a department dedicated to improving its sustainable systems and environmental stewardship in Pakistan
- Training and awareness about how companies can reduce their environment footprint
- Engagement between the management and employees in environmental activities

When asked *whether the company has a dedicated research and development team for implementing environmental stewardship or sustainable systems in Pakistan*, the results identify, 52 percent of the responding companies have a dedicated research and development team for implementation of sustainable systems and environmental stewardship (Figure 18). Looking at the results sector-wise, there is no trend which can link the presence of team to a particular sector or to the nature of business (national or international).

In response to the question related to environmental awareness sessions for reducing the environmental footprint for the top tier management, 80.6 percent companies stated that they regularly conduct awareness sessions and trainings for their management (Figure 19). Overall, most companies provide training to all levels of management in their organizations. A majority of the companies conduct these trainings for their top tier (72.4 percent), middle-tier (86.2 percent), entry-level (58.6 percent) management. Only 16 percent of the companies provide training for the C-Suite.

Companies were also asked an open-ended question about how they raised awareness about the organization's environmental activities. The response highlights a varied approach to increasing awareness. These include:

- Internal newsletters which the employees about information regarding environmental stewardship and monthly meetings,
- Presenting progress against KPIs and their monthly and quarterly achieved targets.
- Meetings are conducted on how to work in a responsible manner and update their intranet portals regularly
- An environment month, which serves as an opportunity to train the employees about KPIs, their monitoring and measuring

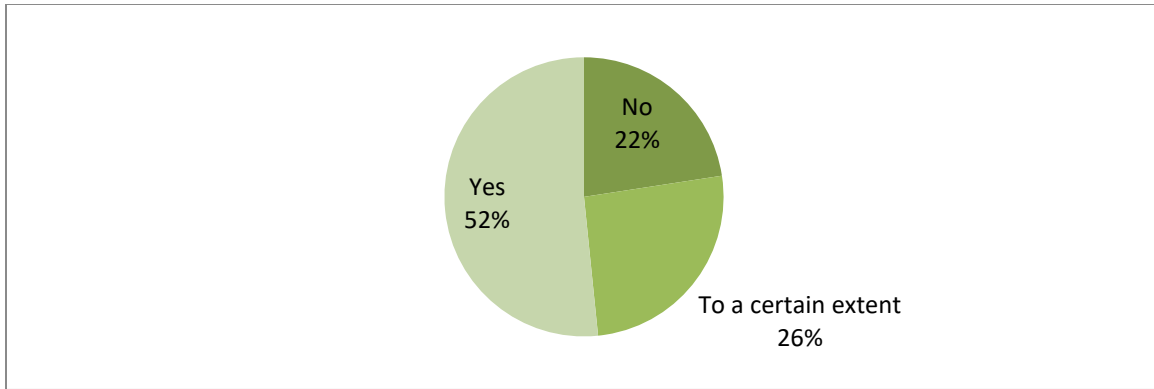


Figure 18: Percentages of companies that do and do not have a research body/department for implementing sustainable systems & environmental stewardship within Pakistan

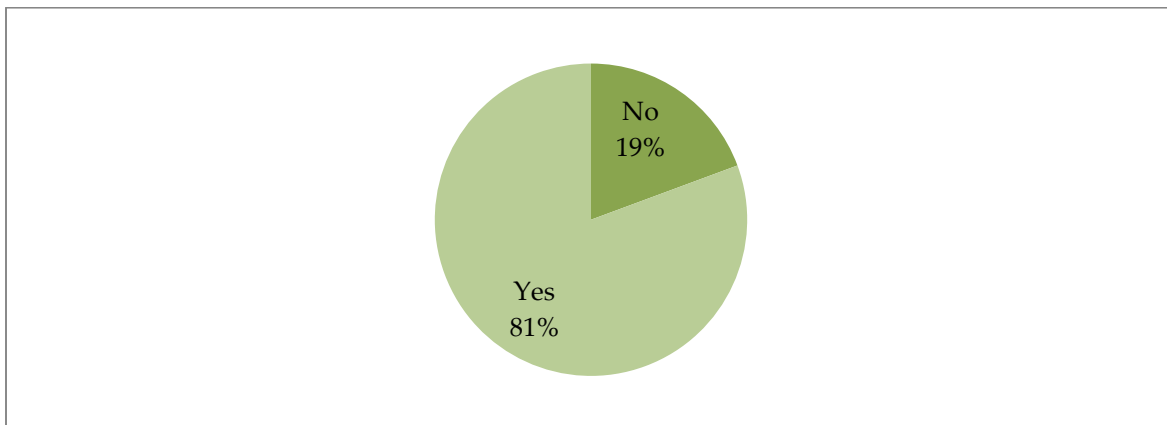


Figure 19: Percentages of companies that do and do not conduct training and awareness sessions for reducing its material and environmental footprint for the top tier management

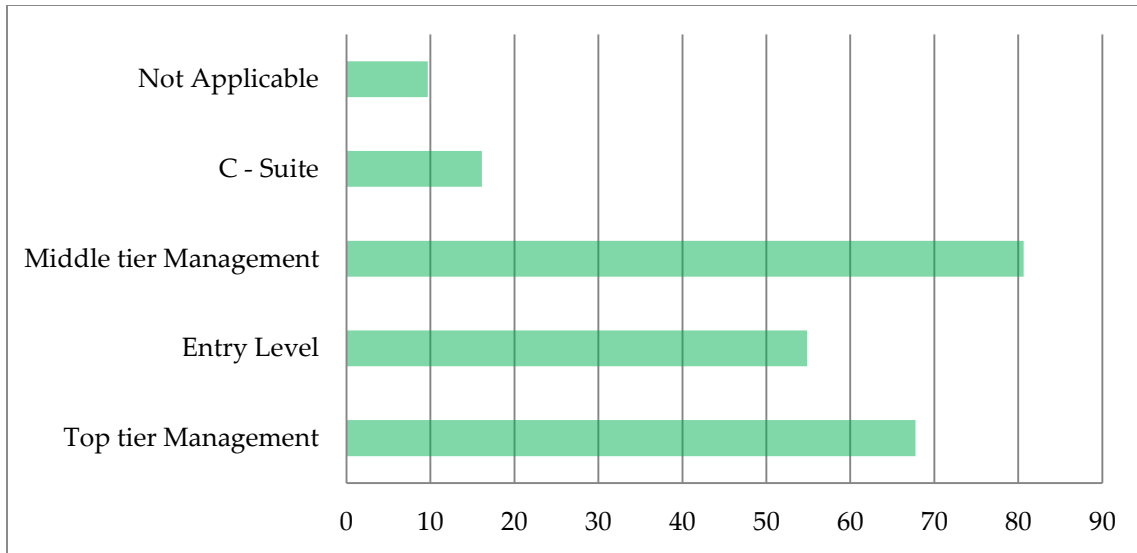


Figure 20: The percentages of levels of management to which companies provide environmental stewardship training for their employees

In summary, this section identifies that both training and awareness in relation to environmental stewardship are a general practice in most organizations. Training is given to a number of tiers of employees in most organizations. It must be mentioned that only five companies engage in training the C-Suite. Research conducted by UNGC and Duke University, identify companies classified as true Environmental Stewards anchor their environmental strategy at the governance level of the company – stating ‘a company’s management which design strategies that enable companies to become environmental stewards have the competitive advantage to identify obstacles and opportunities in the market, generate value for stakeholders, and gain a competitive market position’. Thus, companies which display leadership in environmental stewardship will have adequately aware C- suite executives developing a holistic strategy.

In relation to awareness, a varied response was seen in the methods of awareness by companies. Two good practices which have been identified are communicating internally about progress against KPIs related to environmental stewardship and employee engagement through celebrating an environment month which includes conducting training on measuring and monitoring KPIs.

IV. Environmental Stewardship

Environmental stewardship is defined as the comprehensive understanding and effective management of critical environmental risk and opportunities, related to climate change, emissions, waste management, resource consumption, water conservation, biodiversity protection and ecosystem services (UNGC()). This section aims to identify whether businesses are fully aware of their impacts on the environment and about what kind of environmental stewardship measures their organization is pursuing.

Overall, this section looks at:

- What aspect of the environment is effected by the company
- Which areas of environment protection is the company working in
- If the company records all of its carbon dioxide emissions

Figure 21 highlights the responses to the question to identify the impact on the environment, the results highlight a high level of awareness and candidness. 80.6 percent of the companies are aware that their operations directly add to air pollution, while 61.3 percent of the companies state their operations directly contribute liquid effluents to water bodies.

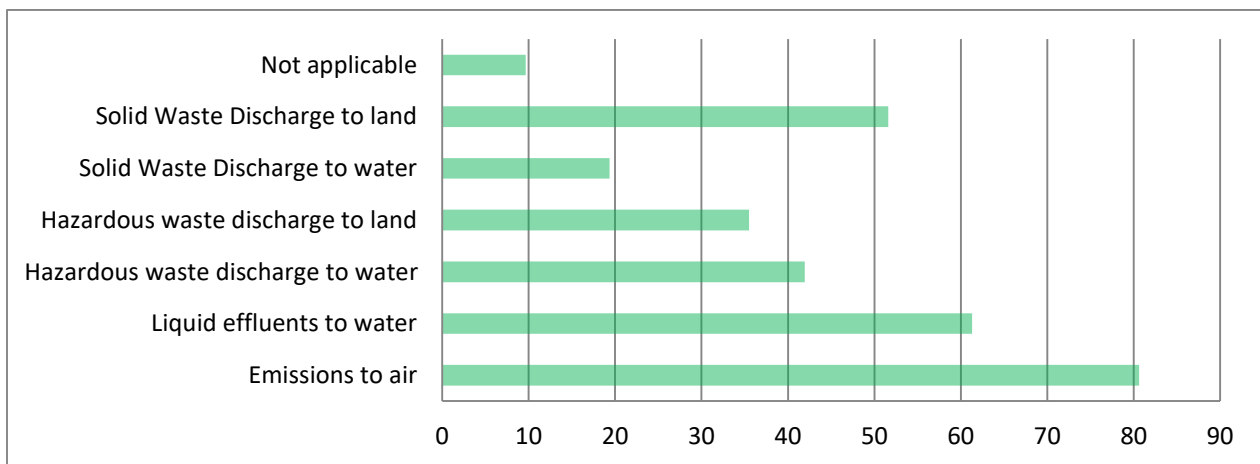


Figure 21: Percentages of how companies effect the environment by their operations

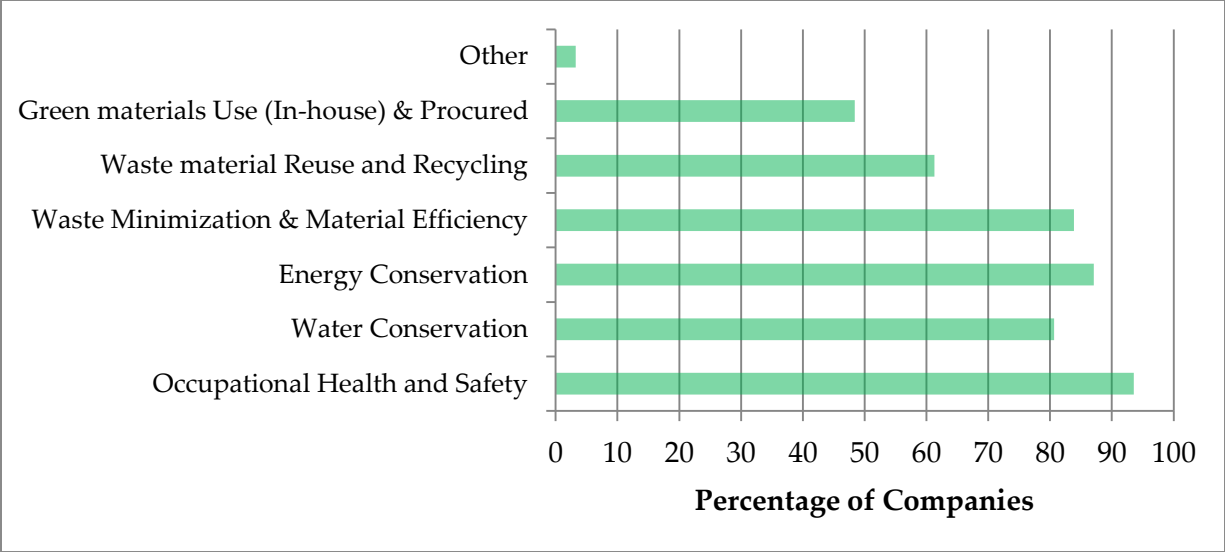


Figure 22: Percentages of the key aspects of environmental stewardship pursued by companies

Further, when companies were asked about which aspect of environmental stewardship pursue in their organization as shown in Figure 22, 90 percent focus on energy conservation, 86.7 percent focus on waste minimization and 83.3 percent focus on water minimization. More than 60 percent of companies are also committed to Waste Material Reuse and Recycling. While this highlights a positive general practice of encouraging a move towards stewardship, matching the response to Figure 21 highlight there is a need for greater focus of discharge into the environment.

In this section, companies were asked whether they quantify their total carbon dioxide emissions including other GHG emissions in carbon dioxide (CO₂) equivalents. Approximately 60 percent of companies stated that they do quantify all their emissions in to CO₂ equivalents, while 22 percent of them said they do not. 3.6 percent of they are not at the stage to report these emissions currently, while another 3.6 percent say that they are reporting on the emissions only to a certain extent. The survey results indicate a growing number of companies are identifying method for identifying KPIs and measuring and monitoring them.

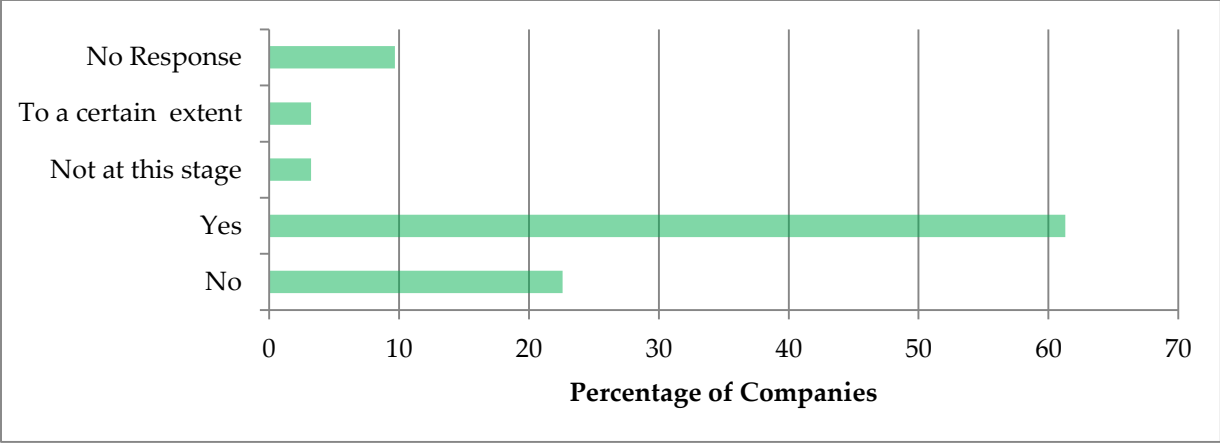


Figure 23: Percentages of companies that do and do not quantify their total carbon dioxide emissions including other GHG emissions in CO2 equivalents

Looking at the responses sector wise, Figure 23 identifies 25 percent of the companies which said yes to reporting on CO₂ emissions were from FMCGs, while 20.8 percent of them are from the chemicals sector and 16.7 percent are from the textiles sector. The companies which do not report on carbon emissions mainly belong to the banking and finance sector.

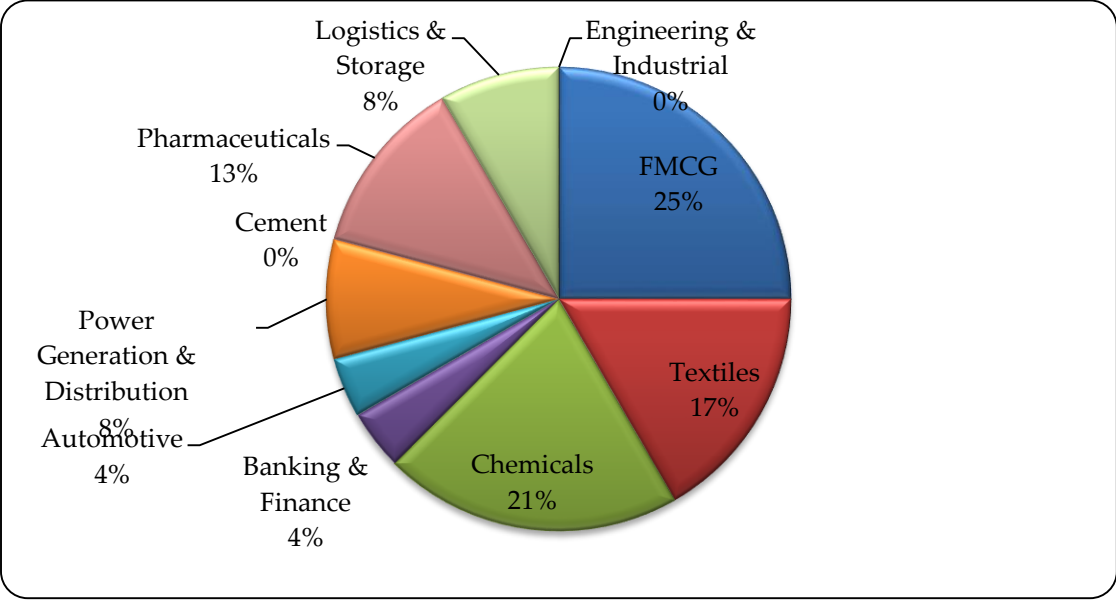


Figure 24: Sector-wise distribution of companies quantifying their GHG emissions

However, when companies were asked whether GHG emissions from transport are also part of their emissions accounting, 23 percent said yes to reporting on transport emissions. 17 percent said that they do it only to a certain extent and one company suggested that they are not doing it currently but will do so in the future. 57 percent of companies said no. This also highlights, that while a majority of companies quantify their emissions, there is still a difference in the levels of quantifications.

In summary, this section looks at how environmental stewardship is practiced in companies. The survey identifies companies are aware of their impact on the environment, by identifying the types of point source discharges made into air, land and water. There is also a general practice in companies to manage the emissions.

The methods of quantifying greenhouse gas emissions were looked at in terms of quantifying the impacts on climate change. It was revealed quantifying GHG emissions is a prevalent practice amongst PBC member companies. However, the levels of quantifications vary and only a few companies are at the level of identifying total GHG emissions including transport. To achieve environmental stewardship, a good practice would be to identify total impacts from emissions.

Additionally, GHG emissions have a scientifically accepted link to climate change. In order to reduce the negative impact of GHG emissions on climate change, companies are now moving towards reducing greenhouse gas (GHG) emissions generated by their operations and activities, and assessing their contribution to physical climate change impacts as well as changing market conditions and consumer preferences as a consequence of climate change.

V. Value Chain and Procurement

Globally, forward thinking companies are developing business strategies that embrace the growth potential of responsible environmental and societal policies, and drive sustainable business practices through their value chains. These companies can demonstrate their leadership in environmental stewardship by sourcing from and providing through a sustainable value chain, thereby minimizing negative impacts and maximizing positive impacts in the environment and societies where they operate. This section looks at how companies in Pakistan encourage responsibility in the supply chain. This section will explore:

- If a code of conduct exists for the company's suppliers
- Is environmental stability and occupational health and safety part of the code of conduct?
- Are compliance audits conducted for the company's suppliers?
- Are the company's partner suppliers provided with any training to be environmentally friendly?
- How important is energy use and greenhouse gases in the supply chain?
- Is responsibility of various factors taken into consideration if agriculture is part of the supply chain?

Thirty PBC member companies responded to the question inquiring whether they have drafted a Code of Conduct (CoC) for suppliers to follow and 94 percent of the companies responded positively (Figure 25). However, when asked '*Are aspects of environmental sustainability (waste, emissions) part of the Code of Conduct (CoC)?*', only 48 percent of companies accepted that various aspects of environmental sustainability (such as waste and emissions) are part of their CoC. 27.6 percent responded that it was to a certain extent, whilst 21 percent identified environmental sustainability was not part of the supply chain (Figure 26).

On the contrary, when asked about occupational health and safety being part of the CoC, Figure 31 -highlights 90 percent companies responded positively and include occupational health and safety as part of their CoC. Occupational health and safety

determines whether a supplier is prone to losses and litigations through the damage caused to an employee or not. The emphasis given by companies on occupational health and safety is probably due to legislation and export requirements rather than environmental sustainability. Essentially, the difference between former and latter is that it is mostly used to reduce negative effects, rather than increasing positive impact.

Further, companies were also asked if they conduct compliance audits of their suppliers. Figure 28 shows 64 percent companies answered yes, while 26 percent companies said to an extent and 10 percent said no. The results suggest that while companies do ask their suppliers to follow their CoC, there is a gap in checks and balances on whether the suppliers actually comply with the CoC.

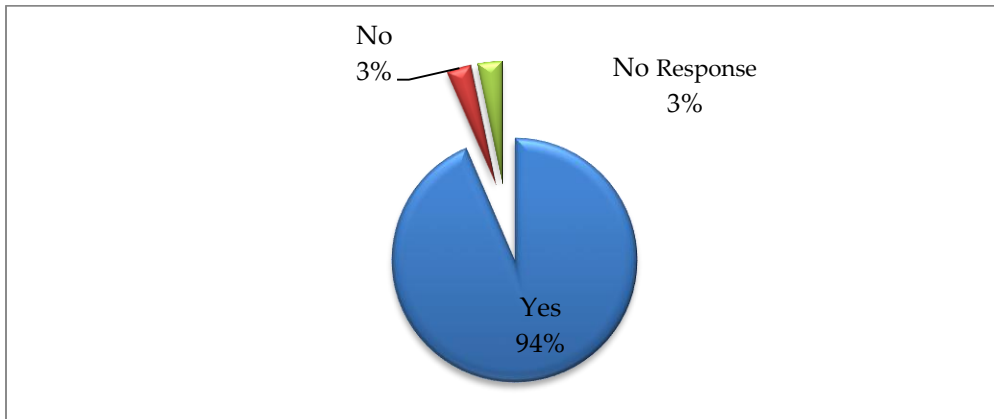


Figure 25: Companies that have a Code of Conduct (CoC) for its suppliers

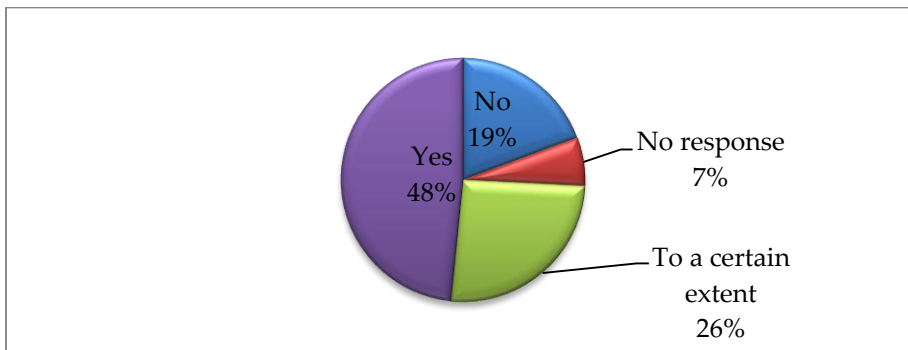


Figure 26: Percentages of companies that include aspects of environmental sustainability in their CoC

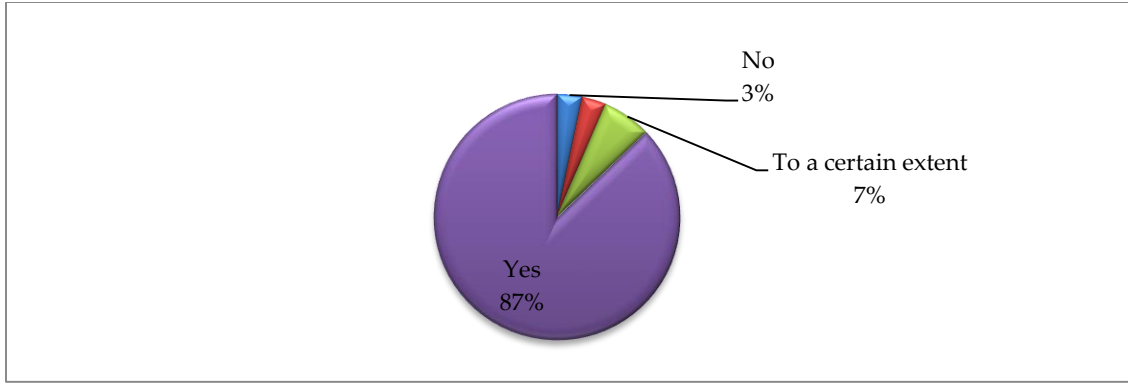


Figure 27: Percentages of companies that include Occupational Health & Safety as part of their Code of Conduct (CoC)

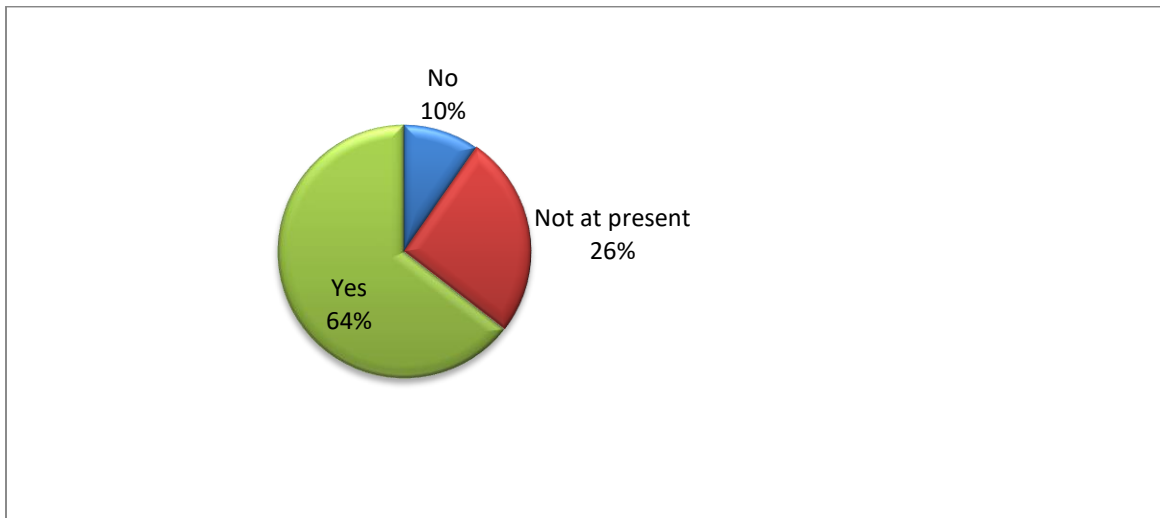
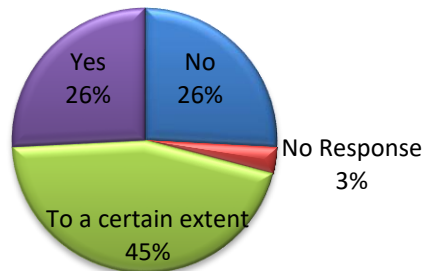


Figure 28: Percentages of companies that conduct compliance audits of its suppliers

In order to keep their suppliers up-to-date in environmental stewardship practices, most larger multinational companies in Pakistan participate in trainings to reduce impacts. However, the results of our survey indicate, only 27 percent of companies frequently conduct capacity building of its value chain partners to lower their environmental footprint, while 48 percent of them stated that they do so at some extent and another 27 percent stated that they don't engage in any such trainings for their suppliers at all. Hence, to add up, 73 percent do not completely conduct frequent capacity building of its partners in the value chain to lower their environmental footprint.

Figure 29: Percentage of companies that conduct frequent capacity building of their partners in value chain to lower their environmental footprint



Companies were asked ‘*where does the company map energy use and Greenhouse Gas emissions in its supply chain?*’ While companies have identified in the previous sections that climate change was a pertinent issue to them (Figure 16, Page 32) and companies are quantifying GHG emissions (Figure 23, Page 41), it can be seen most companies do not take into account supply chain emissions. Figure 30 highlights 60 percent of the companies surveyed reported they do not take into account the energy use and greenhouse gas emissions in their supply chain - neither upstream, nor downstream. 20 percent of companies (6 in number of companies) are engaging in quantification of supply chain emissions for both upstream and downstream energy use and emissions. 13.3 percent of respondents identify only audit upstream usage and emissions, whilst 6.7 percent audit the downstream emissions (4 and 2 in number of companies respectively).

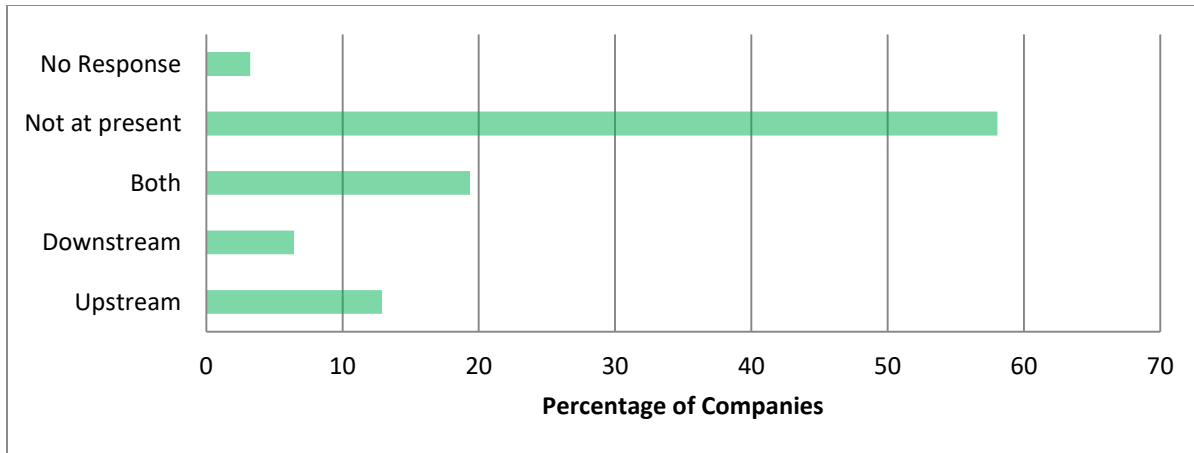


Figure 30: Methods by which companies map energy use and GHG emissions in their supply chains

Are Suppliers being asked to Identify Agricultural Inputs?

Considering that Pakistan is still chiefly an agricultural country and depends largely on natural resources for the production of crops and produce, there are direct impacts on the environment that will affect the rest of the environment. Pakistan is undergoing rapid industrialization, but those with agricultural inputs. Only 19 percent of companies audit inputs of water, pesticides and fertilizers into the supply chain – one company has identified it monitors water use, pesticide use and fertilizer use. 70 percent of the companies stated that this does not apply to them.

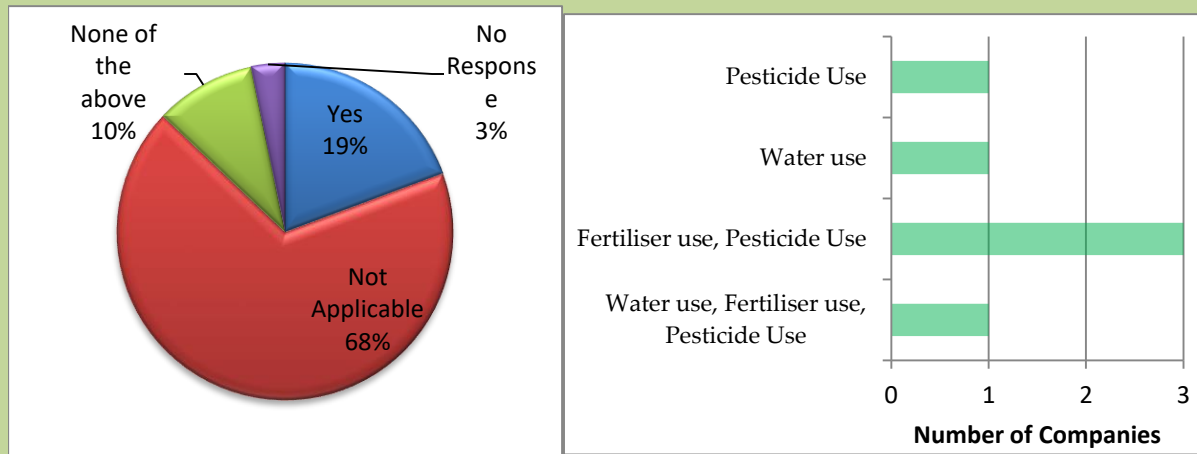


Figure 31: Percentages of companies that identify inputs of agricultural produce as part of their supply chain

To summarize, this section has looked at the company's responsibility to its supply chain. The results identify it is a general practice amongst companies have a code of conduct for their suppliers. Whilst most companies have included occupational health and safety as a part of code of conduct, environmental sustainability is not a general practice amongst companies.

Further, as mentioned earlier, environmental stewardship is linked to climate change. As it has been highlighted in Figure a majority of PBC member companies recognize that climate change is a pertinent issue. In value chain and procurement, this is directly relevant as it is already affecting crop production, through spread of disease, changing weather patterns and extreme weather events. Ultimately, whole regions will cease to be able to produce the crops they grow now and the effects of increased food prices and lower profits due to food scarcity will be felt right up the value chain to the retailers, directly affecting business viability. Hence training the value chain partners on environmental sustainability is an important aspect for reducing risks.

In terms of measuring the impact of supply chain activity, there is some good practice of measuring GHG emissions, and few companies highlight the good practices of measuring inputs going into agricultural products. This highlights companies are steering towards leadership in environmental stewardship in some aspects.

VI. Sustainable Systems: Energy Efficiency

Businesses in Pakistan rely on various sources of energy. Some companies use energy mostly in manufacturing and industrial processes, and hence use sources such as natural gas and coal to generate the required type of energy (heat, electricity) for direct use on site. On the other hand, businesses based in office spaces such as banks, require electricity for lighting and cooling. Electricity used in Pakistan by businesses can be produced on site, or is brought from the grid. Currently grid electricity is derived from a mixture of sources. There is a growing trend to develop on-site energy production via renewable energy technologies, such as solar power. This section looks at:

- The distribution of types of energy used by businesses during company operations
- If any policies, plans and procedures are in place to reduce energy consumption?
- Evaluation of whether energy consumption has reduced over the past 5 years
- Whether company's policy includes shifting to self-generated, renewable energy in the future?

Companies were asked '*what are the types of energy used in your company's operations?*'

As shown in Figure 31, 96.8 percent of companies rely on Grid electricity and 93.5 percent of them depend on direct use of fossil fuels for most of their energy needs. On the other hand, it can be seen 45.2 percent companies use renewable energy in their operations.

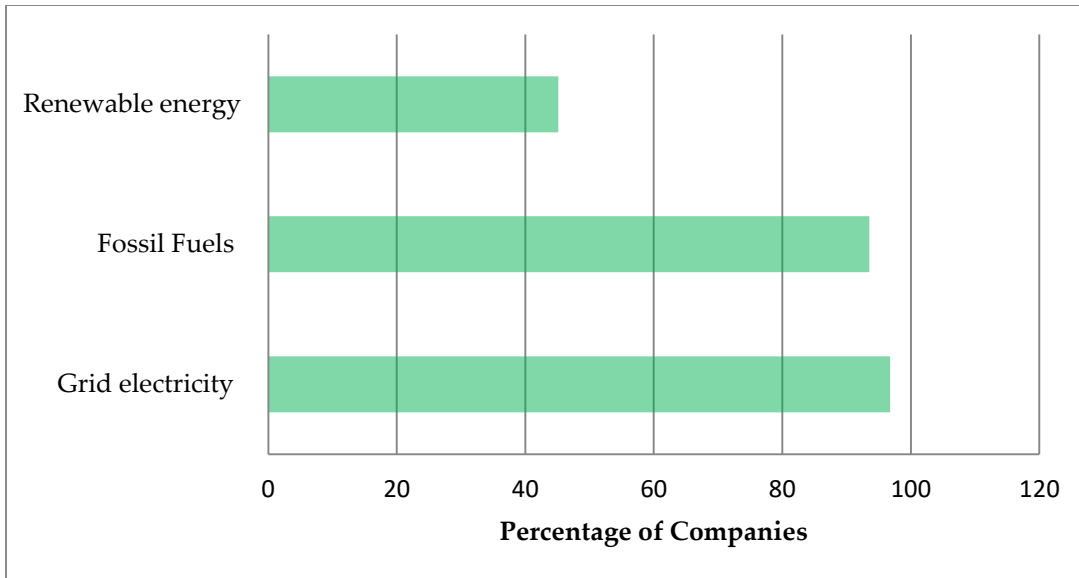


Figure 31: Percentage of companies with various types of energy used

The survey response also identifies that companies use multiple sources of energy. Figure 32 identifies how companies are using multiple sources of energy. One company is self-generating electricity relying on fossil fuels whilst, most companies prefer a mix of self-generation and importing electricity from the grid.

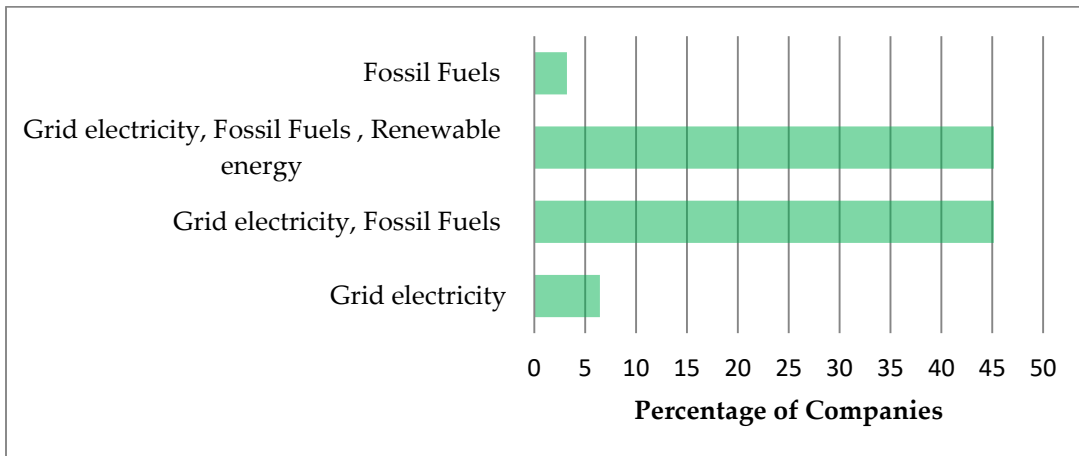


Figure 32: Percentage of companies along with the different types of energy used for their operations

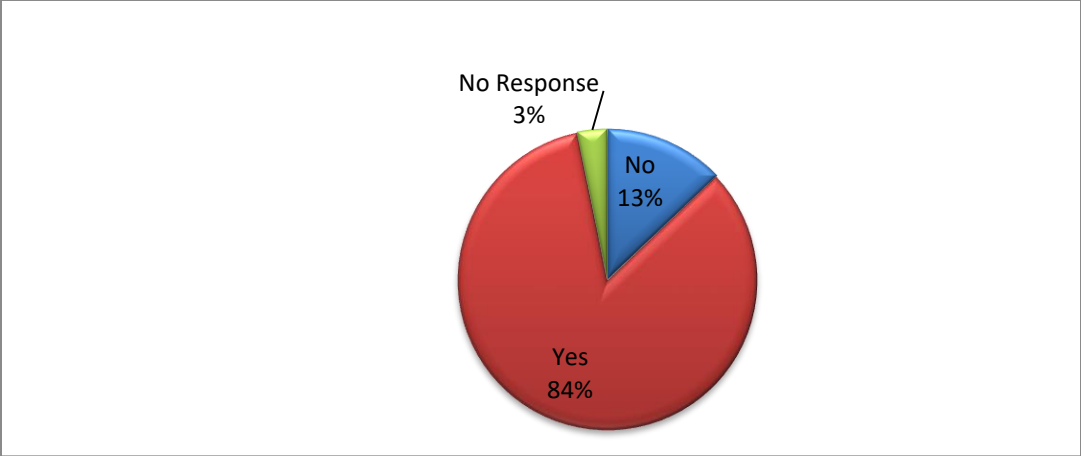


Figure 33: Percentage of companies that have designated policy, plans, and procedures to reduce energy consumption in their operations

Moreover, the survey results also show that 86.7 percent of companies have designated policy, plans and procedures to reduce energy consumption in their operations, while the remaining 13.3 percent no such plans or targets for the future. Majority of the latter belong to the banking & finance sector.

When asked about how '*they reduced their energy usage in the past 5 years*' and a diverse response was collected. Companies in the textiles sector and FMCGs have reduced their energy usage between 5 to 15 percent, while the banking and finance sector has given a limited response in reducing energy usage.

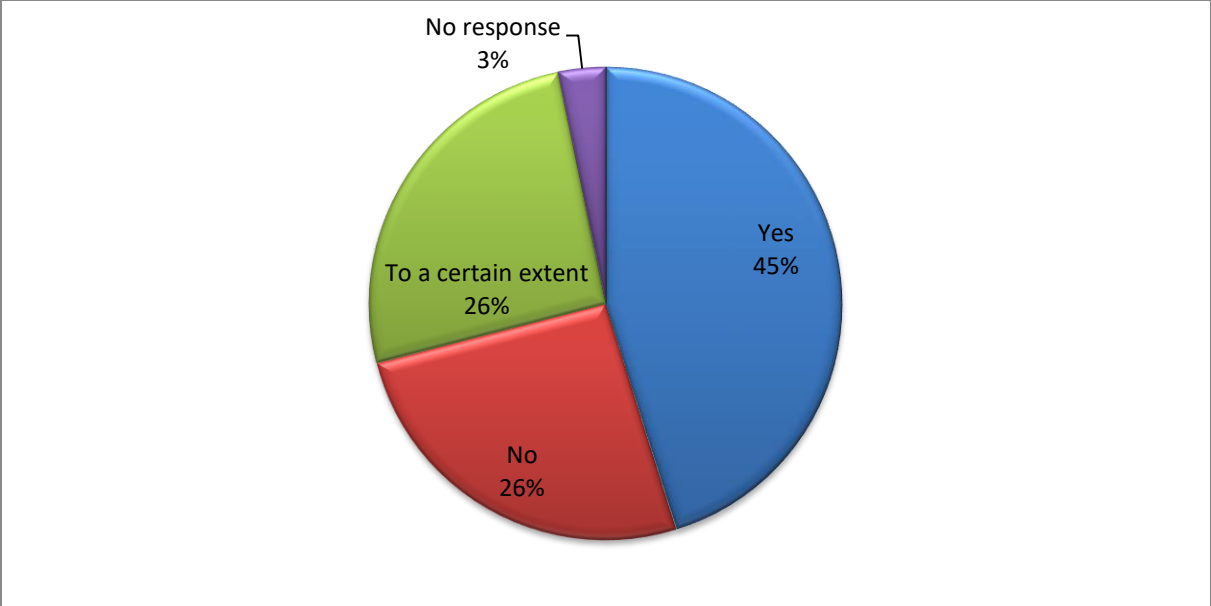


Figure 34: Responses of companies when asked if self-generation of renewable energy is a priority for the companies

In summary, this section looked at how companies are moving towards energy efficiency. Most companies either self-generate using fossil fuels or import electricity from the grid. Some companies are also using renewable energy in some aspect of the business. Most companies have designated policies, plans and procedures to reduce energy consumption. Some companies are moving towards shifting to increased renewable energy solutions. Sector wise companies from the FMCG and textile sector lead in improving energy efficiency.

VII. Sustainable Systems: Water efficiency

According to the Pakistan Council of Research in Water Resources, 84 percent of Pakistan's population does not have access to water fit for consumption. Hence, with dwindling water resources in the country, efficient use can lead to equitable sharing. This section will explore how companies regard increasing water efficiency. This includes:

- Whether the businesses have a policy to reduce its water consumption.
- Whether in the last 5 years they have managed to reduce their consumption and by what percentage
- Identifying whether water efficiency plays an important role in machinery procurement decisions.

According to survey results, 65 percent of companies have designated policy, plans and procedures to reduce water consumption in its operations (Figure 35). A majority of the responding companies are from the FMCG and textiles sector, whilst 19 percent of companies maintained it was not applicable to them and belonged to the banking & finance sector.

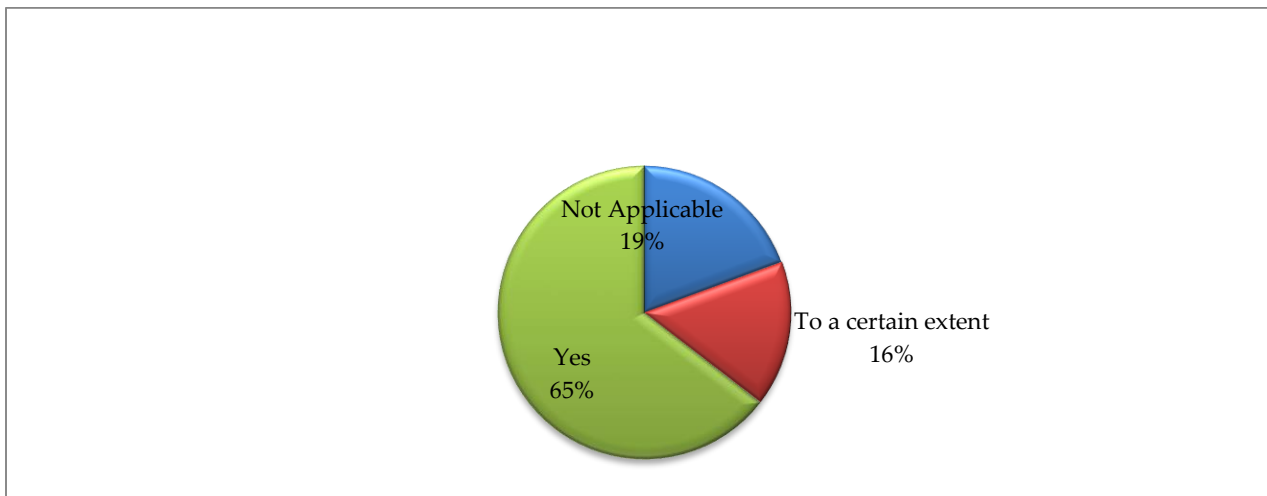


Figure 35: Responses to whether companies have designated policies, plans and procedures to reduce water consumption in its operations.

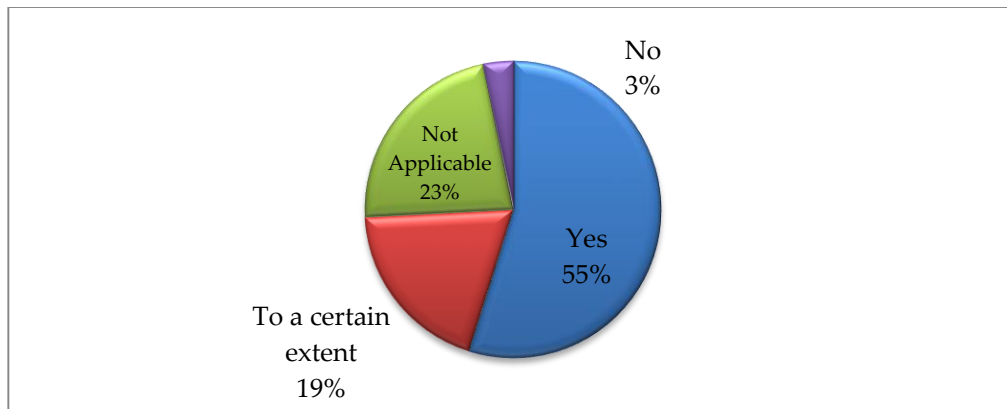


Figure 36: Percentage of companies that have reduced water consumption in their operations over the past 5 years.

Furthermore, when asked ‘Has the company reduced water consumption in its operations over the last 5 years?’, 55 percent of companies stated that they have reduced water consumption in their operations over the past 5 years. 23 percent identified that they do so ‘to a certain extent’. A high number of companies that reduced water consumption were from the FMCGs and textiles sector, while 19.4 percent of companies stated that the question was not applicable to them comprising mainly from the banking & finance sector (Figure 36).

Additionally, when asked whether the companies take into account water efficiency in machinery procurement decisions, Figure 37 identifies 48.4 percent of the companies responded that they do, while 16.1 percent look at water efficiency to a certain extent. 29 percent of companies identified that this question does not apply to them.

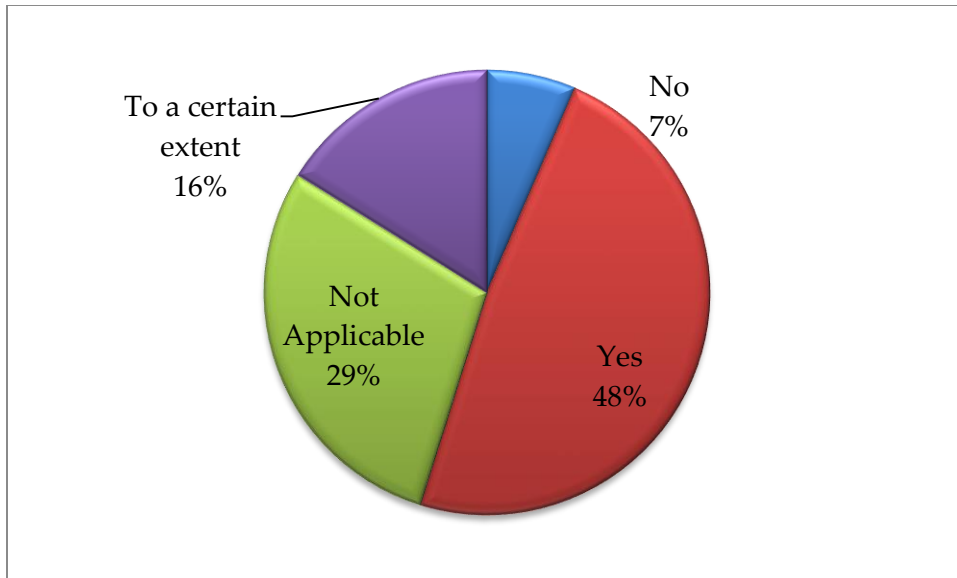


Figure 37: Percentage of companies that take into account water efficiency for their machine procurement decisions.

When asked to identify the percentage reduction in water use over the past 5 years, companies gave a variety of answers to the open ended question. 48 percent of companies have stated that they have reduced water consumption between 5 percent and 60 percent over the last 5 years:

A company from the textiles industry reported a 40 percent decrease in their water consumption over the last five years due to installment of efficient recycling plant. Another company from the FMCG sector has reduced its water consumption by more than 50 percent by using efficient technology. Additionally, some textile companies are in the process of installing more efficient water machinery.

To summarize, approximately half of the companies surveyed have policies, plans and procedures to take into account water efficiency, take into account water efficiency when procuring machinery and have reduced water use in the past five years.

VIII. Sustainable Systems: Wastewater and Waste Management

Resource efficiency as driver for business builds on the concept that current economic growth and development cannot be sustained with the current production and consumption patterns. There is a definitive business case as a method to manage future risks of resource scarcity or stricter legislation. In order to understand whether companies' strategy is aligned with their policy implementation, the following was asked of them:

- Do policies exist to reduce the production of waste?
- Is hazardous and non-hazardous waste separated? If yes, what are the methods of disposal used?
- Are there any policies to recycle wastewater?
- What is the percentage recycled in the last 5 years?

The survey asked *'does the company have a designated policy, plans and procedures to reduce the production of waste in its operations?'* 64.5 percent of the respondent companies stated that they do have a designated policy, along with plans and procedures to reduce production of waste in its operations. A lot of companies belong from the textiles, FMCG, and chemicals sector, while 22.6 percent of the companies stated that they have policies relating to waste management only to a certain extent. However, 23.3 percent of companies stated this policy was not applicable to their business. These companies belonged to the banking & finance sector as well as chemicals and automotive sector.

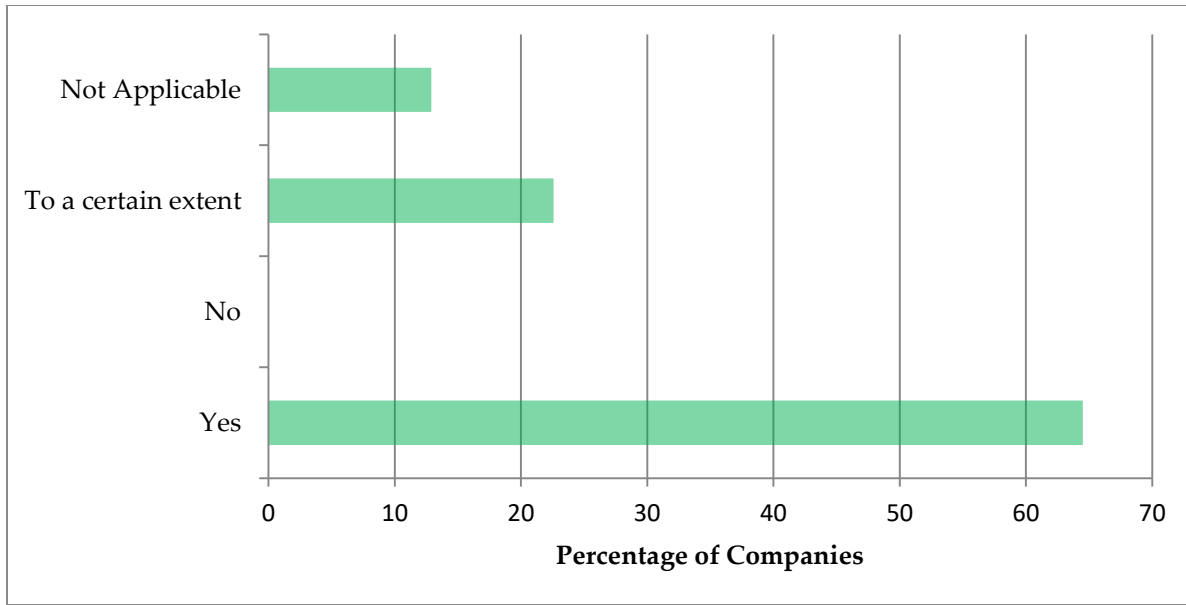


Figure 38: Percentage of companies have designated policy, plans and procedures to reduce the production of waste in their operations.

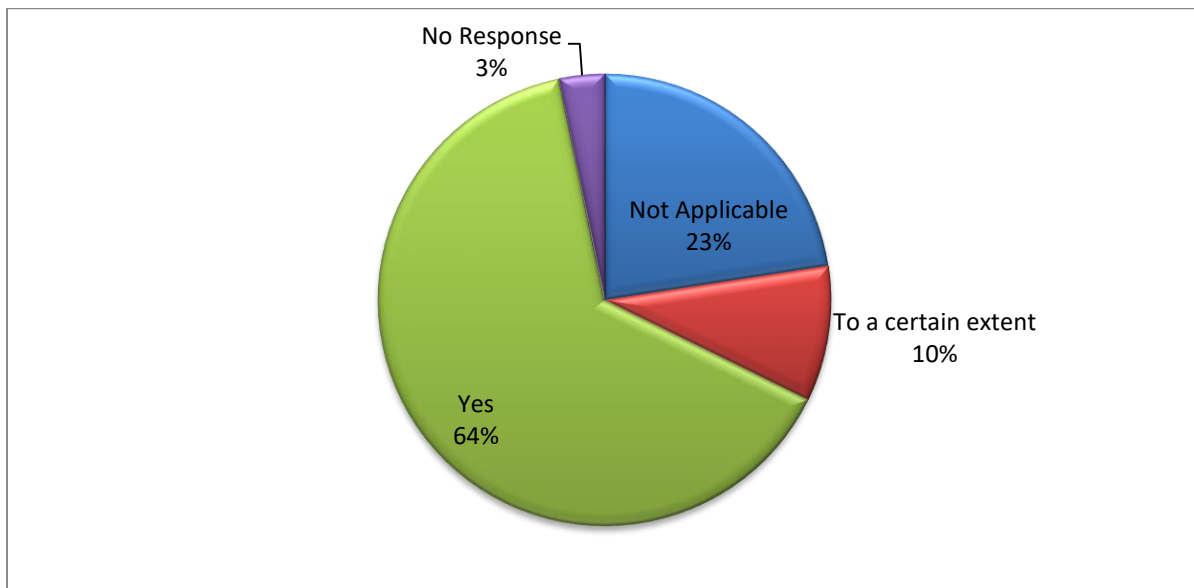


Figure 37: Percentage of companies that separate hazardous waste from nonhazardous waste.

Waste is separated by 66.7 percent of respondent companies (Figure 44). These companies belong to the industrial & engineering, chemicals, automotive, pharmaceuticals and FMCG sector. Furthermore, companies were asked of the methods of disposal of nonhazardous waste.

Some companies identified outsourced their nonhazardous waste management to contractors who are either licensed by the government or have certifications in proper waste disposal. These companies are from the textiles, chemicals, industrial & engineering, power generation and FMCG sectors. Specifically, two companies use the informal sector for waste management - a FMCG auctions its steel waste for reuse, while a power generation company recycles whatever waste it can and sells the rest to the companies that need them for their operations,

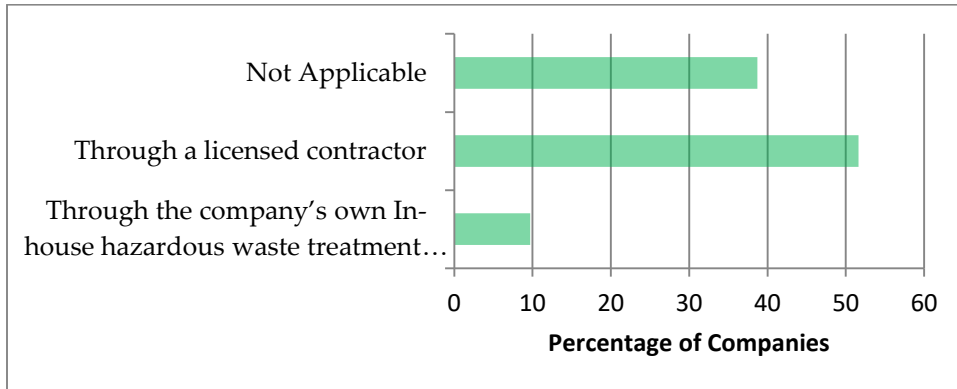


Figure 40: Methods of disposing hazardous waste

Moreover, companies were asked ‘if hazardous waste is produced, how is it disposed?’. Figure 40 highlights 51.6 percent of the companies dispose hazardous waste through a licensed contractor. The latter belong mostly to the chemicals and engineering & industrial as well as textiles and FMCG sectors. A few companies also use their own in house waste treatment facility for incineration.

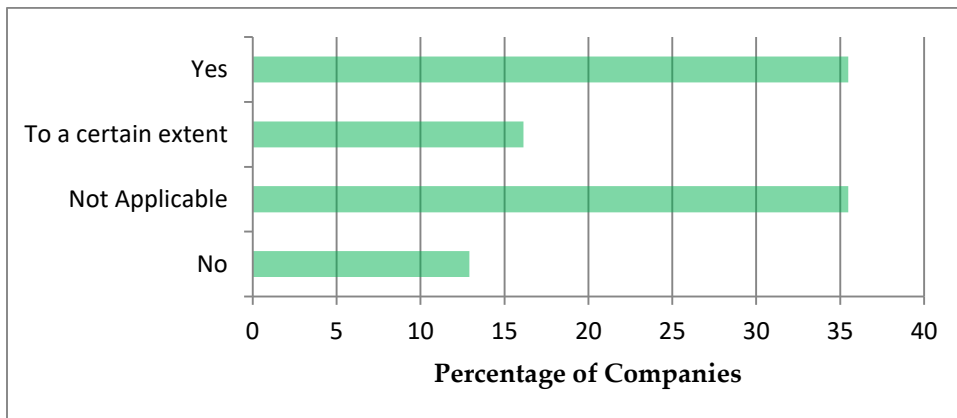


Figure 41: Percentage of companies of that have designated policies, plans and procedures to recycle wastewater from their operations

Companies were asked whether *'the company has designated policy, plans and procedures to recycle wastewater'*, 35.5 percent of responding companies identified that they do have a designated policy, plans and procedures to recycle wastewater from its operations (Figure 47). Majority of these companies are from the FMCG, textiles, and chemicals sector. However, another 35.5 percent said that wastewater management does not apply to them. These companies are mostly from the banking & finance sector; whilst some are also from the power generation and chemicals sector.

Furthermore, companies were asked how much wastewater has been recycled in the last five years. A range of responses were given by companies:

- Some companies stated that they have only recently developed their policy and are currently measuring and quantifying their processes.
- Companies which have been recycling 2 percent to 65 percent of wastewater annually.
- Two companies – one from the automotive industry and a pharmaceutical company, identified that 100 percent of wastewater is being recycled.

In summary, this section identifies that there is a general practice amongst companies to manage waste. This practice is more prevalent in companies which have a manufacturing base. Companies which provide services have identified such a policy is not applicable to them. Whilst the amount and type of waste production will be different in such companies, the results reflect a need to look further. The banking and finance sector, for example, is reliant on electronic items, hence a certain amount of this type of waste will be produced per annum.

Wastewater recycling is prevalent in one third of companies. The amount of water recycled varies, with two companies demonstrating environmental stewardship with 100 percent recycling of wastewater.

VIII. Sustainable Systems: Resource Management

There are a limited number of resources on the planet that are being utilized by businesses every day. Sustainable businesses can reduce future risks to reduce the amount of waste produced, but they also efficiently utilize dwindling resources, such as energy and water. Efficient and sustainable use of resources is good for the environment in which we live in, but it also has a strong business case to have enough supply ready for future generations and the companies themselves. In this section, the following questions were answered by the participants:

- Whether the company has devised a plan to assess the environmental impacts of raw materials. If so, what is it?
- Whether the company conducts a Life Cycle Assessment (LCA) of its products that are consumed within Pakistan. If so, how is it conducted?
- Whether the company has conducted any research on the ‘Use’ Phase and the ‘End of life’ (EOL) Phase emissions of its products consumed in Pakistan.
- Does the company strive for reusing and/or recycling materials at the end of life (EOL) stage of product lifecycle in Pakistan?
- Whether the company has Environmental Product Declaration (EPD) for any of its products for Pakistan.
- Whether the company runs awareness campaigns of the possible environmental impacts from the unsafe use of their products.

Companies were asked ‘*Whether the company has devised a plan to assess the environmental impacts of raw materials. If so, what is it?*’ (Figure 42). 38.7 percent of responding companies stated that they do have plan in place to assess the environmental impacts of raw materials used in their operations. Respondents included a few companies from textile, chemicals, pharmaceuticals and FMCG sectors. When asked about how these companies assess the impacts of their raw materials, responses included

- using FSC certified pulps,
- only use raw materials after they have gone through a full environmental and occupational assessment.

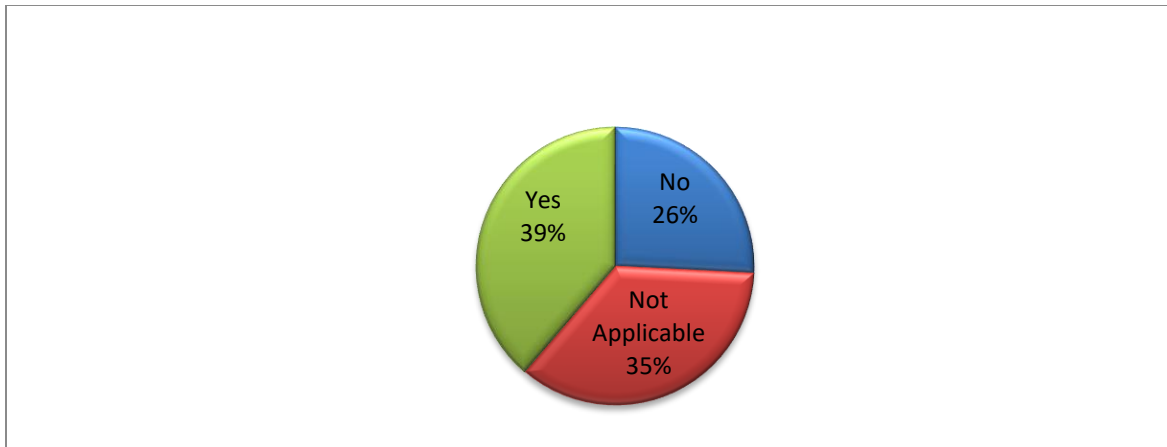


Figure 42: Percentage of companies that have devised a plan to assess the environmental impacts of raw materials used in their operations

When asked whether ‘*the company conducts a Life Cycle Assessment (LCA) of its products that are consumed within Pakistan*’, only four companies responded in the positive. The companies belong to the FMCG, textiles, chemicals and the industrial and engineering sectors each. When asked ‘*if the company has conducted any research on the ‘Use’ Phase and the ‘End of life’ (EOL) Phase emissions of its products consumed in Pakistan*’, only two companies belonging to the pharmaceutical sector and the FMCG gave a positive response.

Similarly when asked ‘*if the company has made an environmental product declaration for its product*’ – only one company responded in the positive, identifying they ecolabel the product. These can be considered best practices and the companies are displaying environmental stewardship. When companies were asked if ‘*they strive for reusing and/or recycling materials at the end of life (EOL) stage of product lifecycle in Pakistan?*’, 30 percent of companies responded in the positive.

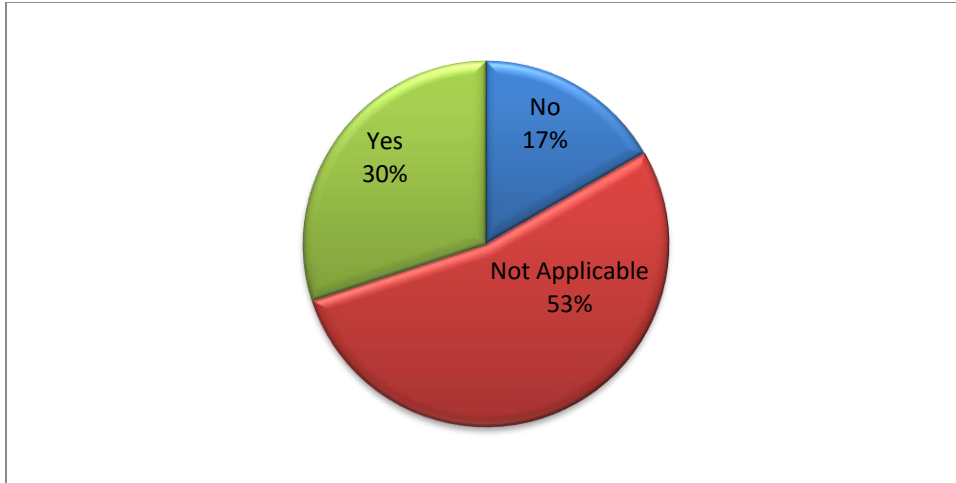


Figure 43: Percentage of companies that strive to reuse and/or recycle materials at the end of life (EOL) stage of product lifecycle in Pakistan

As a final question to the survey, companies were asked whether they run awareness campaigns of the possible negative impacts of the unsafe use of their products, majority of the companies said that this question either does not apply to them or that they don't run awareness campaigns at all. However, a company relating to the farming sector stated that they conduct campaigns to engage farmers and educate them about the impact of excessive fertilizers. Another company discusses carton recycling with its customers for a more sustainable value chain.

In summary, this section of the survey identifies a gap in understanding the concepts of lifecycle analysis. Whilst there are a few companies which display stewardship in a few categories, no company was unable to answer all specific questions. Research is required sector wise to identify what can be good practice amongst all peers of the company.

Global Mega Trends (PwC) excerpts: How does Pakistan compare?

PwC has identified 5 megatrends a collection of macroeconomic and geostrategic forces, factual and often backed by verifiable data that are shaping the world. These trends include some of society's biggest challenges and opportunities. PwC identified them as:

1. Demographic Changes
2. Shift in Economic Power
3. Accelerating Urbanization
4. Rise of Technology
5. Climate Change and Resource Scarcity

One major mega trend at hand is Climate Change and Resource Scarcity. The population of the world will increase by estimated 1 billion people. With a population of over 8.3 billion by 2030, it is estimated that the world in 2030 will need 50% more energy, 40% more water and 35% more food. Do companies have the responsibility to meet this challenge with minimum damage to ecosystems? Global warming leading to climate change by 2030 will force an estimated 200 million people as climate refugees and will increase an estimated 100% of food prices. Further, if global warming is not significantly reduced an estimated 1 million species of plant and animals will become extinct by 2050.

PwC presented its low carbon economy road map in 2015 at COP21 as a way forward to contain global warming and its impacts on climate. According to this roadmap, the world has to maintain on average 2°C global carbon budget and our decarbonization rate should be 6.3 per cent every year. However, the global carbon intensity fell by only 1.3 percent between the years 2010 and 2014.

Engaging on SDGs with CERB's Identified SDGs

With the formal adoption of 2030 Development Agenda titled *Transforming our world: the 2030 Agenda for Sustainable Development* and the associated seventeen Sustainable Development Goals, PwC set out to find how companies could engage and contribute their own efforts to deliver on the seventeen SDGs. PwC SDG Engagement Survey was conducted between the months of June and July in 2015 and generated 986 business responses and 2015 citizen responses. To better understand the approach global companies are adopting, with regard to the impact and opportunities the SDGs offer to businesses, PwC conducted two separate surveys—one for business and another for citizens – that were promoted through social media and shared with PwC clients, United Nations Global Compact (UNGC) members and Global Reporting Initiative (GRI) members to understand and interpret the awareness of companies and citizens for SDGs and the manner in which business concerns around the world were planning to engage with them. The reason is simple and pressing. Hence, once ratified, governments will formulate new regulation, incentives and strategies to achieve the SDGs, gaining momentum to deliver a sustained and lasting change.

Key Highlights of the Survey:

- In 2015, 92 percent of companies had a high awareness on SDGs as compared to the general population where only 33 percent is aware of the SDGs
- In 2015, 71 percent of companies had already started planning on their response to SDGs
- In 2015, 22 percent of companies had no planning on SDGs but it shrank to only 4 percent when given a timeline of 5 years. Hence, this shows that 96 percent of the businesses in 2020 will have plans, procedures and targets for achieving SDGs till 2030.

SDG	Topics	Pakistan Baseline	PwC Survey 2015	Difference
Goal 9: Build resilient infrastructure, promote inclusive & sustainable industrialization & foster innovation	<ul style="list-style-type: none"> · Increased resource-use efficiency; and · Clean and environmentally sound technologies and industrial processes 	68%	54%	14%
Goal 12: Ensure sustainable consumption & production patterns	<ul style="list-style-type: none"> · Adopt sustainable and efficient use of natural resources · Integrate Environmental sustainability information into reporting cycle 	21%	49%	(28%)
Goal 13: Take urgent action to combat climate change & its impacts	<ul style="list-style-type: none"> · Integrate climate change measures into policies, strategies and planning; and · Awareness & institutional capacity on climate change impact reduction 	63%	58%	5%

At present the awareness of the select cluster of Pakistani business entities show a good picture for the targeted SDGs to a specific set of indicators linked to the survey questionnaire with positivity to SDG 9 ‘Industry Innovation and Infrastructure’ and SDG 13 ‘Climate Action’, but shows negativity of 23 percent on SDG 12 ‘Responsible Consumption and Production’. It is also important to consider that the sample size of 31 of the best in class business entities of Pakistan is a very small size as compared to that of 986 from PwC. This baseline survey shows a positive trend and holds a promise that adaptability and strategic responsiveness of companies has the potential to grow over time and the realization that more focused approach by the regulatory bodies as well as greater awareness among business leaders towards identifying the growth potential of responsible environmental and societal strategies lies at the heart of sustainable business practices.

United Nations Global Compact Indicators on Environmental Stewardship

This baseline survey's focus was not limited to identifying the performance businesses in Pakistan to selected SDGs on climate action environmental stewardship and responsible resource utilization. It also held the promise to be the first state of the art document that can help readers in ascertaining baseline environmental stewardship performance of top companies in Pakistan in comparison to global performance indicators. A benchmarking exercise has been conducted to the performance indicators of United Nations Global Compact's principal 7, 8 and 9 of Pakistani companies.

Environmental Stewardship Indicators UNGC 2014	Pakistan Baseline	UNGC Environmental Stewardship Performance 2014	Difference
Management Systems	59%	65%	-6%
Technology Assessment	69%	44%	25%
Life-cycle assessment	13%	29%	-17%
Water Foot Printing	69%	34%	35%
Risk and impact assessment	46%	50%	-4%
Performance targets indicators	83%	64%	19%
Consumption and responsible use targets	78%	66%	12%
3R (Reduce, reuse and recycle)	65%	60%	5%
Employee training and awareness	59%	62%	-3%

Supply chain arrangements	79%	31%	48%
Report Emissions	63%	38%	25%
Public disclosure of policies and practices	22%	49%	-27%

Energy

Companies have a major role to play in the management and optimization in energy utilization. This growing awareness stems from the need for a sustainable future to overcome the problems of pollution and minimize environmental loads from energy consumption that is still vastly based on nonrenewable fossil fuels. These release excessive CO₂ emissions and have high purchase and operating costs. As per the current survey 93 per cent of Scope 1 energy consumed by business entities in Pakistan is derived from fossil fuels as against a 2012 global average of 64 percent from Ernst & Young Global Corporate Energy Mix Survey. Further, 41 percent of these had an energy mix globally with some portion of renewable energy as against 45 percent in Pakistan from the results derived in this survey. In 2016, PwC launched its ‘Corporate Renewable Energy Procurement Survey’ for corporations in USA. In total, 72 percent of respondents are actively pursuing renewable energy procurement in the next five years. Companies in Pakistan also show an active trend and an increasing importance reposed of shifting towards renewable energy.

Recommendations and Conclusions

The primary purpose of this survey is to identify a base line regarding how companies in Pakistan prioritize, strategize and implement environmental stewardship, as well as how they compare from a global standpoint.

Based on the results of the survey, it is evident that a greater majority of PBC member companies understand the importance of environmental stewardship. 83.3 percent of companies have stated that they have an environmental stewardship policy in place and these include mostly companies from the textiles and FMCG sector. Further, 80 percent of PBC member companies also include their procurement policy and incorporate their Code of Conduct (CoC) for policies within their environmental stewardship policies. In addition, an overwhelming 94 percent of companies also acknowledge that climate change is highly important for the functioning and operations of their businesses.

The positive responses to the survey are indicative of the progress in environmental stewardship strategy within the business sector of Pakistan. However, it is important to consider that the thirty-one PBC member companies that responded to this survey comprise mostly of larger size companies and do not represent all companies in Pakistan. Majority of businesses based in Pakistan are medium to small sized companies and this baseline survey focuses on larger companies and provides an example for small and medium sized companies to grow into larger sustainable businesses, eventually.

Further, an increased analysis of the results portrays a variation between sectors as well. A number of companies in the textile and FMCG sector focus greatly on environmental stewardship practices, while those of the banking and finance sector do not consider it their responsibility to contribute towards environmental stewardship. However, the banking and finance sector has a great role to play in environmental stewardship by working towards sustainable responsible investing (SRI), green bonds, investments in retrofits and solar energy, improving office operations, going paperless and so on. Therefore, many of banks and investment companies in Pakistan have the untapped opportunity to increase consumer awareness towards sustainable brands and companies and drive the country towards meeting the UN SDGs by 2030.

Sectors such as engineering & industrial, chemicals, automotive and pharmaceuticals varied amongst themselves and it was evident that companies in each sector that are based globally and nationally are more environmentally responsible and are compliant to reporting and disclosure to their regional and global head offices. Therefore, they are more aware and have

better performance in environmental stewardship than companies based locally in Pakistan. To increase awareness within locally based companies, the public sector as well as various Chambers of Commerce can create engagement opportunities to educate and push companies towards transparency and disclosure of environmental stewardship practices.

Results of the baseline survey suggest that majority of the companies understand the direct environmental impact of their activities, such as air pollution and contributing liquid effluents to water bodies. They also focus on decreasing water use consumption and waste reduction, but a common trend between the companies is that environmental stewardship is related to occupational health and safety and corporate health, safety and environment (HSE). This is however not appropriate and should be classified and prioritized separately by the companies' senior management. This also requires training and certifications to keep employees and management strategy aligned with global sustainability practices.

Further, while companies have stated that they understand the risk associated with climate change and consider it a pertinent issue, majority of them do not measure, record and report their GHG emissions, even within their organizations. Companies need to address this by regular engagements and trainings through all levels of staff to focus on reducing GHG emissions by measuring them accurately and transparently reporting and disclosing them.

In managing their value chain and procurement policies, companies do have a Code of Conduct (CoC) policy for their suppliers, but majority do not have environmental stewardship policies as part of their CoC policy. Further, fewer companies conduct capacity building training for their value chain partners and suppliers. Fewer companies also do not take energy use and GHG emissions of their supply chain into account. Policies and strategies that enable sustainable value chains are tools to drive the business sector towards environmental stewardship and thus far, businesses in Pakistan have not taken full advantage of value chain management to ensure ethical and sustainable practices exist across the supply chain. Being a country based on agriculture, Pakistani businesses have a greater opportunity to drive sustainable agricultural practices through their value chain and procurement policies.

At large, companies based in Pakistan report efficient use of water and energy and have targets to reduce consumption annually. However, a significant gap exists within waste management along with a lack of lifecycle assessments of products that are directly sourced and manufactured by these companies. There is also lack of consumer awareness with regards to the consumption of these products and very little is being done by companies to address this issue. Larger companies operating in Pakistan hold a large stake in the GDP of the country and

hence, have a greater responsibility compared to other small and medium sized companies to address consumption and disposal practices within both urban and rural settings.

As the ordinary Pakistani's lifestyle improves in this country, so will his or her needs and there will be greater use and disposal of fast moving goods and increased consumption of resources, leading to increased waste and pollution. This is a great opportunity for companies to invest in and build an environment for ethical and responsible consumption, as well as sustainable infrastructure, as suggested by both Goals 9 and 12 of the UN SDGs.

Based on the results of this survey and its analysis, the Centre of Excellence in Responsible Business present the following recommendations:

- **Top-down approach of stewardship strategy/management** - Companies must strategize environmental stewardship policies with a top-down approach and ensure that the senior management and executives recognize the importance of environmental stewardship and are aligned to UN Sustainable Development Goal (SDGs) by 2030.
- **Understand impacts** - While many companies understand their environmental impacts, majority still need to assess their environmental impacts and align their environmental stewardship practices to their impacts.
- **Increase awareness** - Companies at large need to increase awareness of their impacts and environmental stewardship for all stakeholders, including the company management, value chain, shareholders and most importantly, consumers.
- **Increased disclosure and transparency** - When measuring their KPIs and environmental targets, companies need to recognize the importance of disclosing and reporting their environmental stewardship practices to their boards, the federal Environmental Protection Agency, and eventually to the public. Further, companies should periodically report on their progress towards meeting the UN SDGs.
- **Regular training and certifications** - Companies need to routinely provide capacity-building resources for their employees (of all levels of management) and their value chain partners.
- **Routine periodical review of policies and strategy** - Companies in Pakistan must regularly review their stewardship policies within their top management and board to maintain themselves as environmentally sustainable and responsible companies to take into account weather patterns.
- **Increased local and international engagement** - Companies must engage within sustainable business conferences taking place internationally as well as locally to remain up to date with practices with their peers in their specific sectors. By staying up

to date with sustainability management policies and stewardship, these companies also stay aware of growing trends within consumers and also maintain a competitive advantage over competitors that are not up to date, efficient and/or sustainable.