



PAKISTAN  
STOCK EXCHANGE



# ESG AND CLIMATE FINANCE AT PAKISTAN STOCK EXCHANGE

HISTORY, CURRENT, & FUTURE OUTLOOK

MAY 2025

# Executive Summary

## An Overview in Brief

ESG integration is transforming financial markets, and the Pakistan Stock Exchange (PSX) has been aligning with global sustainability trends to boost transparency and investor confidence. Over the past decade, PSX evolved from corporate governance reforms to a strategic focus on ESG and climate finance, culminating in a high-level ESG Task Force in 2021 to steer sustainability efforts. Since then, PSX has launched key initiatives – joining the UN Sustainable Stock Exchanges (SSE) initiative in 2022, issuing an ESG Reporting Primer in 2024, and partnering with the London Stock Exchange Group to develop ESG data tools and scoring services for listed companies. Notably, Pakistan’s first green bond was listed on PSX in March 2025, highlighting the exchange’s expanding role in green finance.

Progress at PSX has been underpinned by a supportive regulatory ecosystem. The Securities & Exchange Commission of Pakistan (SECP) issued an ESG Regulatory Roadmap in 2022 and voluntary ESG disclosure guidelines in 2023–24. SECP also updated corporate governance rules to require board-level oversight of sustainability issues. These steps, along with SECP’s Green Bond Guidelines (2021) and tax incentives for green bonds (2022), are catalyzing climate finance. State Bank of Pakistan (SBP) has also promoted green finance, complementing these efforts.

While PSX’s ESG journey is underway, international comparisons show room for growth. Developed markets have moved faster – the European Union requires 50,000 companies to report ESG data, and the UK mandates TCFD-aligned climate disclosures for large companies. Emerging peer markets also set high benchmarks: in India the top 1,000 listed firms must file Business Responsibility and Sustainability Reports (BRSRs); Malaysia’s stock exchange has required annual sustainability reporting since 2016; and Brazil’s B3 exchange pioneered ESG with the Novo Mercado segment (2000) and one of the first sustainability indices (2005). These examples show that PSX is on a similar path but still a few years behind. By learning from these models, Pakistan can enhance its own ESG frameworks to meet rising global standards.

Despite growing awareness, practical ESG adoption in Pakistan faces challenges. Many companies – especially smaller firms – lack the expertise and resources to collect reliable ESG data and implement sustainability measures. The proliferation of multiple reporting frameworks can overwhelm companies, leading to fragmented disclosures. Moreover, Pakistan’s ESG disclosure regime remains largely voluntary, and only recently the IFRS S1 and S2 standards have been adopted, resulting in uneven compliance. These factors underscore the need for capacity building and stronger guidance to translate ESG awareness into concrete action.

To overcome these hurdles and advance ESG integration, PSX and regulators can adopt a multi-pronged strategy. This includes transitioning from voluntary to mandatory ESG disclosures for larger firms—following India’s phased approach—while allowing time for capacity building. Expanding sustainable finance products, such as green bonds and ESG-focused investment vehicles, will help mobilize capital. Continued investment in ESG education through workshops and sector-specific guidelines can support adoption of best practices. Finally, as investor awareness grows, market pressure will complement regulation, positioning Pakistan’s capital market to accelerate ESG uptake and drive long-term value.

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# List of Abbreviations

<b>APTMA</b>	All Pakistan Textile Mills Association
<b>BRR</b>	Business Responsibility Report
<b>BRSR</b>	Business Responsibility and Sustainability Report
<b>CBAM</b>	Carbon Border Adjustment Mechanism
<b>CSR</b>	Corporate Social Responsibility
<b>ESG</b>	Environmental, Social, and Governance
<b>ETF</b>	Exchange-Traded Fund
<b>ETFs</b>	Exchange-Traded Funds
<b>EU</b>	European Union
<b>EU CSRD</b>	European Union Corporate Sustainability Reporting Directive
<b>GHG</b>	Greenhouse Gas
<b>GRI</b>	Global Reporting Initiative
<b>IFRS</b>	International Financial Reporting Standards
<b>ISSB</b>	International Sustainability Standards Board
<b>KSE</b>	Karachi Stock Exchange
<b>LSEG</b>	London Stock Exchange Group
<b>NDCs</b>	Nationally Determined Contributions
<b>PSX</b>	Pakistan Stock Exchange
<b>SASB</b>	Sustainability Accounting Standards Board
<b>SBP</b>	State Bank of Pakistan
<b>SDGs</b>	Sustainable Development Goals
<b>SEBI</b>	Securities and Exchange Board of India
<b>SECP</b>	Securities and Exchange Commission of Pakistan
<b>SSE</b>	Sustainable Stock Exchanges (Initiative)
<b>TCFD</b>	Task Force on Climate-related Financial Disclosures
<b>UK</b>	United Kingdom
<b>UN</b>	United Nations

# Foreword



**Dr. Fakhara Rizwan**

Co. Secretary/ Chief Legal  
& Corporate Affairs  
Officer/ Acting Head of HR

Pakistan Stock Exchange Limited (PSX) is pleased to endorse this report on ESG and Climate Finance, prepared by Resource Future. This report is a timely and insightful contribution to the national and regional discourse on sustainable finance, environmental responsibility, and good governance. At PSX, we recognize that stock exchanges have a vital role to play in shaping sustainable financial ecosystems. Under the visionary leadership of our Chairperson, Dr Shamshad Akhtar, PSX has taken several pioneering steps to mainstream ESG consideration in Pakistan's capital market. Dr Akhtar's commitment to aligning Pakistan's financial sector with global sustainability standards has catalyzed meaningful change at both policy and operational levels.

Among the most significant of these initiatives is the establishment of the ESG Task Force, comprising key stakeholders from across the public and private sectors. This Task Force is a critical platform for dialogue, collaboration, and action, driving forward the ESG agenda with a unified and inclusive approach. PSX has also placed a strong emphasis on awareness and capacity building. We have organized multiple engagements, training sessions, and dialogues with market participants to enhance understanding and adoption of ESG principles. A cornerstone of these efforts is the development of PSX's ESG Primer, a foundational document that outlines guiding principles and best practices for ESG integration by listed companies.

This report marks another step in our journey to support companies and investors in transitioning toward a more resilient and responsible financial system. We thank Resource Future for their contribution and look forward to continued collaboration with all stakeholders as we move toward a more sustainable future for Pakistan.

**Prof. Dr. Fakhara Rizwan**

Corporate Secretary & Chief Legal & Corporate Affairs Officer

Pakistan Stock Exchange Limited

# Preface



**Khurram Karim Lalani**

CEO, Resources Future

Sustainability and responsible business practices are rapidly shaping the future of capital markets. At Resources Future, we recognize the growing importance of Environmental, Social, and Governance (ESG) considerations and climate finance in driving long-term value creation. As global and local regulatory frameworks evolve, companies listed on the Pakistan Stock Exchange (PSX) must align their operations with ESG disclosure requirements and sustainable investment trends.

This report, supported by the Pakistan Stock Exchange (PSX), provides a comprehensive overview of ESG and climate finance at PSX, highlighting the regulatory landscape, market dynamics, and emerging opportunities for listed companies and investors. It explores the role of PSX in facilitating ESG integration, the significance of sustainable financial instruments, and the increasing demand for ESG-compliant securities.

Through this publication, Resources Future aims to equip stakeholders with the necessary insights to understand and engage with ESG-related developments in Pakistan's capital markets. By fostering awareness and promoting best practices, we seek to support businesses in enhancing transparency, improving ESG performance, and unlocking sustainable investment opportunities.

We hope this report serves as a valuable resource for corporate leaders, investors, and policymakers committed to building a more sustainable financial ecosystem.

**Khurram Karim Lalani**

Chief Executive Officer

Resources Future

# Acknowledgements

We would like to extend our heartfelt gratitude to the Pakistan Stock Exchange (PSX) for their exceptional collaboration and support in the creation of this report. Their proactive role in promoting Environmental, Social, and Governance (ESG) integration and sustainable finance within Pakistan's capital markets has been pivotal in shaping the insights shared in this publication.

The resources, expertise, and data provided by PSX have significantly enriched the content of this report, enabling a comprehensive exploration of the evolving ESG landscape in Pakistan. PSX's forward-thinking approach to sustainability, as well as its ongoing commitment to aligning with global best practices, has provided a strong foundation for understanding the regulatory frameworks and market trends that are influencing the financial sector.

Special thanks are also owed to Prof. Dr. Fakhara Rizwan, Chief Legal & Corporate Affairs Officer at the PSX, and her team for their guidance on the report. Their efforts in facilitating the introduction of ESG-compliant securities and the development of ESG-related financial products, such as the anticipated PSX ESG Index, are paramount in encouraging sustainable business practices and attracting both local and international investors.

This collaboration has been instrumental in ensuring that this report serves as a valuable resource for corporate leaders, investors, and policymakers alike. We hope that the insights shared will help advance the integration of ESG considerations into business and investment decisions, ultimately contributing to a more sustainable and responsible financial ecosystem in Pakistan.

We are grateful to the PSX team for their unwavering support and their commitment to driving positive change in the country's capital markets.

## Resources Future

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# 1 Introduction

The Pakistan Stock Exchange (PSX) has transitioned from early corporate governance reforms to a strategic focus on Environmental Social Governance (ESG) and climate finance, with collaborative regulatory support and new tools such as ESG reporting guidelines, data platforms, and an upcoming ESG index. PSX has progressively integrated ESG considerations over the past decade. Early efforts included corporate governance reforms and collaborations on Sustainable Development Goals (SDGs) reporting. By 2021, PSX established a high-level ESG Task Force and signaled a shift toward sustainability. Today, PSX is actively advancing ESG and climate finance services. Key developments include PSX's membership in [the UN Sustainable Stock Exchanges \(SSE\) initiative](#) (2022), the launch of an ESG Reporting Primer (2024), and collaboration with the London Stock Exchange Group (LSEG) to provide ESG data tools and scoring for listed companies. Much of the evolution in ESG and climate finance has happened in concert with other regulators, principally, the Securities & Exchange Commission of Pakistan (SECP) and the State Bank of Pakistan (SBP). SECP issued an ESG Regulatory Roadmap (2022) and voluntary ESG disclosure guidelines (2023-24) and amended corporate governance rules to require board-level sustainability oversight. This has led to an upcoming PSX ESG index and a dedicated ESG information portal. This report outlines historical evolution of ESG and climate finance at PSX, where it is headed, comparison with regional and international peers and its outlook.

- **International benchmarking reveals that while PSX has progressed, developed and emerging markets have implemented more advanced and often mandatory ESG disclosure frameworks, setting higher standards that highlight opportunities initiatives Pakistan to enhance its ESG practices.** PSX's ESG progress is contrasted by comprehensive abroad. Developed markets, such as the European Union (EU), the United States (U.S.) and the United Kingdom (UK), have moved toward mandatory ESG disclosures – e.g. the EU's Corporate Sustainability Reporting Directive now compel 50,000 companies to report ESG data, and the UK now mandates climate-risk reporting under the Taskforce on Climate-related Financial Disclosures (TCFD) for 1,300+ large companies. The US is advancing climate disclosure rules (though facing legal challenges) and stock exchanges have promoted governance reforms (such as board diversity, albeit with mixed success). Emerging market peers have leapt ahead in some areas: **India** requires top-1000 listed firms to file comprehensive Business Responsibility and Sustainability Reports (BRSR) from FY2022-23; **Malaysia** made annual sustainability reporting a listing requirement since 2016; **Brazil's B3** pioneered ESG with a dedicated corporate governance segment (Novo Mercado) in 2000 and one of the world's first sustainability indices in 2005.

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**UK Government (2023).** *Task Force on Climate-related Financial Disclosure (TCFD)* - GOV.UK. [online] Available at: <https://www.gov.uk/government/publications/tcf-aligned-disclosure-application-guidance/task-force-on-climate-related-financial-disclosure-tcf-aligned-disclosure-application-guidance> [Accessed 25 Apr. 2025].

**Securities and Exchange Board of India (2021).** *Business Responsibility and Sustainability Reporting (BRSR)*. [online] Available at: [https://www.sebi.gov.in/sebi\\_data/commondocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure1\\_p.PDF](https://www.sebi.gov.in/sebi_data/commondocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure1_p.PDF) [Accessed 25 Apr. 2025].

- Future opportunities for Pakistani listed companies include adopting global ESG reporting standards, engaging in climate-smart investments, and exploring innovative financial products, all while aligning with Pakistan’s Nationally Determined Contributions (NDCs) and enhancing capacity through stakeholder engagement.** In parallel with publishing ESG disclosure guidance, PSX has actively fostered ESG literacy through a series of capacity-building sessions and sector-level engagements. Thirteen ESG webinars have been conducted to date, featuring implementation case studies from companies such as Unilever Pakistan, Lucky Core Industries, Soorty Enterprises, Philip Morris Pakistan, and Lakson Investments. These sessions have covered diverse topics—from sustainability metrics and traceable fibers to greenwashing, diversity, and ESG reporting tools. Introductory workshops on the ESG Primer and Refinitiv’s ESG Contribution Tool have been complemented by roundtable discussions with sector representatives from textiles, banking, and automotive industries. These engagements, led by Dr. Shamshad Akhtar, have reinforced PSX’s role in promoting informed and sector specific ESG uptake. Feedback highlights increasing ESG training uptake by larger corporates, while smaller companies cite resource constraints and complexity as key barriers. In response, PSX continues to support listed companies through guidance, technical tools, and peer learning platforms to accelerate ESG integration. Looking ahead, Pakistani listed companies can tap into new opportunities by aligning with global ESG standards, such as Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) standards, IFRS Sustainability Disclosure Standards, and TCFD, exploring climate-smart investment instruments (e.g., green bonds and sustainability-linked finance), and preparing for participation in voluntary carbon markets. Firms can pursue sector-specific decarbonization pathways aligned with Pakistan’s NDCs under the Paris Agreement. There is also scope to introduce innovative market offerings, such as green indices, transition bonds, and carbon credit trading platforms, while building internal capacity through board-level training, cross-sector engagement, and consistent ESG performance disclosure.
- Resources Future has been supporting PSX-listed companies by enhancing ESG disclosures, facilitating climate investments, and developing decarbonization strategies, while also providing capacity-building services across various sectors.** We have assisted firms in understanding ESG disclosures and sustainability reporting, facilitate climate investments by structuring green finance deals, guide companies in identifying and monetizing carbon reduction projects, develop industry-specific decarbonization strategies (e.g. for energy, manufacturing, agriculture), and provide training on ESG and climate risks and reporting standards such as IFRS S1 and S2 to strengthen ESG capabilities across the market.

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**Bursa Malaysia (2024).** *BURSA MALAYSIA REQUIRES SUSTAINABILITY REPORTING USING THE IFRS SUSTAINABILITY DISCLOSURE STANDARDS.* [online] Available at: <https://www.bursamalaysia.com> [Accessed 25 Apr. 2025].

**S&P Dow Jones Indices (n.d).** *S&P/B3 Brazil ESG Index.* [online] Available at: <https://www.spglobal.com/spdji/en/indices/sustainability/sp-b3-brazil-esg-index/> [Accessed 25 Apr. 2025].



## Where it all began?

ESG and climate finance have transitioned from niche to mainstream, with stock exchanges like PSX playing a key role in guiding disclosures, green investments, and supporting sustainability integration through strategic policies and services. In recent years, ESG and climate finance have moved from niche concepts to mainstream imperatives. Stock exchanges are uniquely positioned to champion sustainable business practices by guiding listed companies on disclosure standards and facilitating green investment products. This report provides a strategic overview of the history, current state, and outlook of ESG and climate finance initiatives at the PSX. It draws on PSX's own ESG Primer (2023-24) and other sources to chart how sustainability integration has evolved at PSX, what policies and services exist today, and how Pakistan's progress compares to international trends. It also offers forward-looking recommendations for Pakistani listed companies and identifies opportunities for specialized support to accelerate ESG adoption. The goal is to inform both sustainability professionals and capital market stakeholders about where PSX stands on the ESG journey and the road ahead.



**Figure 1.** Comparison of ESG disclosure practices

# 2

## Historical Evolution of ESG at PSX

Before 2020, ESG integration in Pakistan’s capital market was in its early stages, focusing on corporate governance reforms and voluntary Corporate Social Responsibility (CSR) efforts, with the 2019 Code of Corporate Governance marking a key milestone in strengthening sustainability oversight. Prior to 2020, ESG integration in Pakistan’s capital market was in a nascent stage, focused mainly on corporate governance and voluntary CSR efforts. A notable early step was the introduction of the [Listed Companies \(Code of Corporate Governance\) Regulations, 2019](#), which were later amended to strengthen board oversight of sustainability – including requirements for companies to have anti-harassment policies and even form board-level sustainability committees. These governance reforms signaled growing recognition that social and environmental issues are material to corporate performance.

In the late 2010s, PSX, in collaboration with partners like Pakistan Institute of Corporate Governance (PICG), International Finance Corporation (IFC), and United Nations Development Program (UNDP), began building sustainability awareness through workshops and SDG reporting initiatives, preparing companies for formal ESG frameworks. PSX and its partners also began laying groundwork for sustainability awareness. In the late 2010s, the PICG and international institutions, such as IFC, organized ESG workshops for directors, while PSX collaborated with the UNDP to promote SDG reporting. PSX and UNDP jointly held awareness workshops across Karachi, Lahore, and Islamabad to introduce the U.N. Sustainable Development Goals 2030 to listed companies. Companies learned to measure and report on a set of “*minimum SDGs*” (six goals with 32 indicators) relevant to business – covering areas such as gender equality, clean energy, and climate action. This early focus on SDGs helped companies understand sustainability as a business concern and prepared the market for more formal ESG frameworks.

The formation of the ESG Task Force in 2021 marked a key turning point for PSX, bringing together regulators, industry stakeholders, and experts to develop a systematic framework for encouraging voluntary ESG adoption among companies. A major turning point came in 2021 when PSX, under the leadership of Chairperson Dr. Shamshad Akhtar (former Governor of the State Bank of Pakistan and Finance Minister), convened a multi-stakeholder ESG Task Force. The Task Force brought together representatives from PSX, Securities and Exchange Commission of Pakistan (SECP), PICG, and other key stakeholders. Its mandate was to “develop and launch a coherent, systematic and realistic framework” to encourage the voluntary adoption of ESG standards by companies and financial institutions. Throughout 2021, the Task Force held sector-specific roundtables with listed companies to identify barriers to ESG reporting and solicit practical feedback. The inclusion of SECP signalled regulatory support, while PICG contributed expertise on corporate governance. This collaborative model helped lay the foundation for subsequent guidance and capacity-building initiatives. In addition to steering ESG adoption, PSX is actively working with SECP and financial institutions to support climate finance mobilisation. This involves promoting sustainable investment products—including green bonds and sukuks—facilitating alignment with international ESG reporting frameworks and enhancing issuer and investor capacity on climate-related financial disclosures. PSX’s broader strategy focuses on raising awareness about climate risk management, supporting the development of climate-aligned financial instruments, and fostering an enabling environment for a

climate-resilient capital market. Through sustained stakeholder coordination and regulatory alignment, PSX aims to advance Pakistan’s climate and ESG agenda across both financial and corporate sectors.



**Figure 2. Members of the PSX Taskforce**

By the end of 2021, the PSX Task Force’s efforts culminated in SECP’s 2022 ESG Regulatory Roadmap, setting out a phased approach to corporate sustainability, while also introducing green finance incentives to support climate finance products on PSX. By the end of 2021, these efforts began to crystallize into formal guidance. PSX’s Task Force work informed SECP’s “[ESG Regulatory Roadmap](#)”, released in 2022, which laid out a phased plan for embedding sustainability in Pakistan’s corporate sector. This roadmap laid out requirements and encouraged voluntary compliance in the interim. Around the same time, Pakistan’s government and regulators introduced incentives for green financing – for example, SECP in mid-2021 issued [Green Bond Guidelines](#) to facilitate the issuance of bonds financing environmental projects, and by June 2022 the government proposed tax incentives for issuers and investors in green or gender bonds. These steps, while outside the stock exchange per se, created a supportive ecosystem for climate finance products that would eventually list or trade on PSX.

Overall, the pre-2020 to early-2021 period saw Pakistan’s capital market moving from ad-hoc CSR and governance measures toward a more structured ESG agenda. It set the stage for the rapid developments in ESG services and policies that followed from 2022 onward.

# 3

## Current State of ESG and Climate Finance at PSX

As of 2024, PSX has firmly embraced its role as a driver of ESG and climate-focused finance. Several services, policies, and partnerships are now in place to support sustainable practices among listed companies:

- PSX’s membership in the UN SSE Initiative in June 2022 marked a significant step, granting access to global ESG reporting best practices and tools to support sustainability, green finance, and gender equality in Pakistan’s capital market.** In June 2022, PSX joined the United Nations’ Sustainable Stock Exchanges (SSE) Initiative, which aligned itself with a global network of exchanges committed to sustainable development. Through SSE membership (effective from 6 June 2022), PSX gained access to international best practices on ESG reporting and capacity-building for market participants. PSX described this as a “significant development” enabling the exchange to “better champion and lead the ESG narrative for Pakistan’s listed companies”. The SSE platform provided databases and guidance that could help PSX embed sustainability into its operations, grow green finance, and even advance gender equality in the marketplace.
- By 2023, the PSX ESG Task Force, under Dr. Shamshad Akhtar’s leadership, delivered Pakistan’s first ESG Primer, alongside sector-specific training and plans for an ESG Information Portal to enhance sustainability reporting and resources for listed companies.** Dr. Shamshad Akhtar led the Task Force at PSX which achieved tangible outcomes by 2023. It developed Pakistan’s first comprehensive ESG reporting guide for companies – published by PSX as an “[ESG Primer](#)” in 2024. This Primer (the basis of this report) serves as a voluntary reporting guidance for listed companies, that explained the importance of ESG integration and outlined global frameworks, and provided step-by-step advice for



**Figure 3. PSX Primer on ESG - Stages of drafting an ESG report**

**UN Sustainable Stock Exchanges Initiative (2022).** *UN SSE welcomes Pakistan Stock Exchange.* [online] Available at: <https://sseinitiative.org/all-news/un-sse-welcomes-pakistan-stock-exchange> [Accessed 25 Apr. 2025].

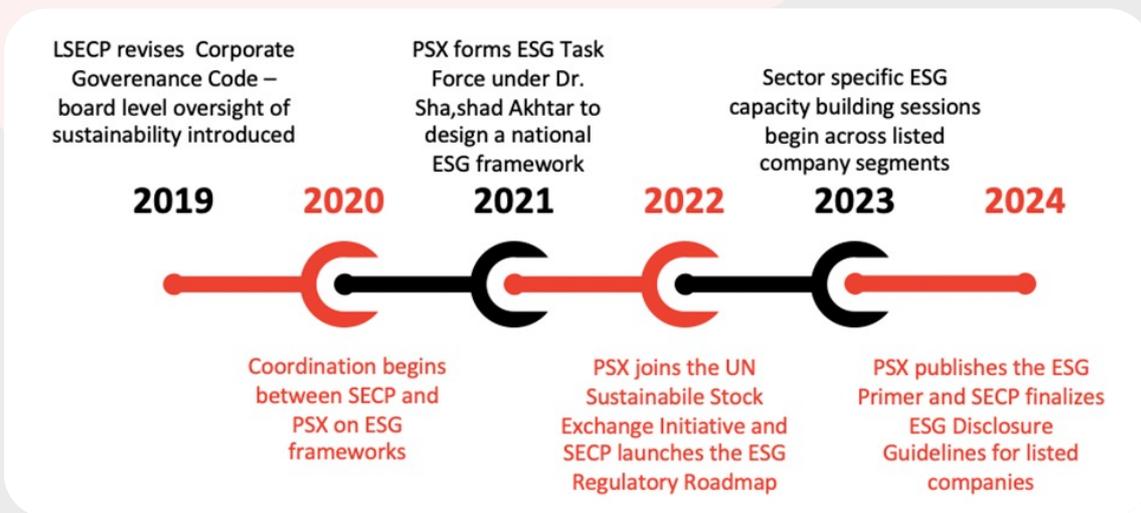
**Pakistan Stock Exchange (2023).** *Primer on ESG Reporting Guidance for Companies.* [online] Available at: [https://www.psx.com.pk/psx/themes/psx/uploads/PSX\\_Primer\\_on\\_ESG.pdf](https://www.psx.com.pk/psx/themes/psx/uploads/PSX_Primer_on_ESG.pdf) [Accessed 25 Apr. 2025].

- producing sustainability reports. It is intended to raise the competency of all companies “at various stages of their ESG journey”. Alongside the Primer, PSX conducted outreach and training: for example, sector-specific ESG roundtables (such as a 2023 session on ESG in the automotive sector) and webinars on how to use ESG data tools. The Task Force also laid plans for an ESG Information Portal to centralize ESG resources and company disclosures on the PSX website.
- **The SECP, in collaboration with PSX, introduced voluntary ESG disclosure guidelines in 2023-24, providing a baseline reporting framework and encouraging board-level oversight, setting the stage for potential future mandatory reporting.** The SECP, working closely with PSX, has introduced *voluntary* [ESG disclosure guidelines for listed companies](#) (draft released 2023, finalized in 2024). These guidelines provide a baseline reporting framework, aligned with global standards, to improve consistency and transparency of ESG information. Companies are encouraged to report on environmental impact, social responsibility, and governance structure either within annual reports or as standalone sustainability reports. Notably, SECP’s guidelines also prompted changes in regulatory requirements – listed firms are now expected to have board-approved policies (e.g. anti-harassment) and dedicated board committees for sustainability oversight. The integration of ESG into corporate governance regulations (under the 2019 Code) elevated sustainability to a board-level agenda, that ensured directors are accountable for ESG performance. While the SECP guidelines remain voluntary for now, they are paving the way for future mandatory reporting, as indicated by the *ESG Regulatory Roadmap 2022*. SECP has even launched an “[ESG Sustain](#)” web portal to host these guidelines and related resources.
- **In April 2024, PSX partnered with the London Stock Exchange Group (LSEG) to develop standardized ESG data tools for listed companies, enhancing their visibility to global investors and supporting the creation of an ESG index.** Another development in 2024 is PSX’s partnership with the LSEG to enhance ESG data services. In April 2024, PSX signed a collaborative agreement with LSEG to develop a suite of standardized ESG data tools for PSX-listed companies. Through this collaboration, LSEG is extending its [Refinitiv ESG Contributor Tool](#) to Pakistani firms, allowing them to input ESG metrics which can generate ESG scores and ratings visible to global investors. This means Pakistani companies’ sustainability data will be collected in a format consistent with international databases, which increases their visibility on international ESG radars. For companies, it provides a ready-made platform to benchmark and improve their ESG performance. For PSX, it lays the groundwork for building an ESG index, as data from this tool can be used to construct an index of high-performing companies. PSX noted that this collaboration will yield a “comprehensive suite of services” in the ESG domain for listed companies and includes plans for training sessions to build reporting capacity.
- **PSX is set to launch new ESG-themed investment products, including an ESG Index to track top-performing companies, alongside the debut of Pakistan’s first locally listed green bond in March 2025, signaling the exchange’s growing role in green finance.** With data and disclosure foundations being set, PSX is poised to introduce new ESG-themed investment products in

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Securities and Exchange Commission of Pakistan (2024). ESG Disclosure Guidelines for Listed Companies. [online] Available at: <https://esgsustain.secp.gov.pk/guidelines-and-circulars/> [Accessed 25 Apr. 2025].

- response to growing institutional interest. This increasing demand for sustainable and green investments is driven by both local and international investors who are actively seeking companies that align with global ESG standards. This trend is especially pronounced among foreign investors, who place a strong emphasis on ESG metrics when making investment decisions. One of the most anticipated developments is the PSX ESG Index or Sustainability Index – highlighted by both the CEO and the Task Force as a near-term goal. Such an index would identify and track the top-performing companies on ESG criteria, providing investors with a benchmark for sustainable investing in Pakistan. Alongside, PSX has expressed its intent to integrate sustainability into its own operations and potentially list green bonds or other climate-focused securities. Indeed, Pakistan’s first locally listed green bond debuted on PSX in March 2025: the [Parwaaz Green Action Bond](#) (PKR 1.1 billion) was launched to finance renewable energy and energy efficiency projects and marked the exchange’s entry into facilitating green finance. This bond, supported by development partners, reflects growing investor appetite for climate-related investments in Pakistan. PSX’s role in listing and promoting such instruments will likely expand as more issuers tap into green and social bond markets, a trend already encouraged by SECP’s 2021 Green Bond Guidelines.
- **PSX is aligning with national climate objectives, focusing on climate risk reporting and potential carbon market initiatives, which may create a new frontier for climate finance services at the exchange.** In the realm of climate finance, PSX is aligning with national climate objectives. The ESG Primer emphasizes Pakistan’s NDCs targets under the Paris Agreement and the need for companies to identify climate risks and opportunities. While formal TCFD-aligned climate risk reporting has just been made mandatory in Pakistan through IFRS Sustainability Disclosure Standards (S1 and S2), further work is required to ensure that companies can report in both the letter and the spirit of the standards. Furthermore, Pakistan’s government in early 2025 approved guidelines to establish a carbon market, which will enable trade of carbon credits as a climate finance mechanism. As these carbon markets become functional, PSX could serve as a platform for carbon credit trading or at least for listing companies that generate tradable credits. PSX has highlighted the urgency for industries to “*work towards curbing carbon emissions*” and to “*embrace sustainable development*”. We can expect PSX to coordinate with regulators on any future exchange-based carbon trading system, learning from regional exchanges, such as Indonesia and Japan launching carbon exchanges in 2023. This is an evolving area, but it may represent a new frontier of climate finance services that PSX is well-positioned to support.



**Figure 4. Timeline of PSX's ESG Journey**



## 4

# Benchmarking PSX Against International Developments

To gauge PSX's progress, it is useful to compare it with both developed markets and emerging market peers. Below we benchmark key aspects of ESG and climate finance integration:

## Developed Markets: EU, US, and UK

- Developed markets are increasingly mandating ESG disclosures, with the EU, US, and UK setting new standards that are pushing ESG transparency across industries and investors.** Developed markets are increasingly mandating ESG disclosures. The European Union is at the forefront – its Corporate Sustainability Reporting Directive (CSRD) adopted in 2022 will require nearly 50,000 companies to report detailed ESG information in the next few years. This expands on earlier EU non-financial reporting rules and means even non-European companies with significant EU operations must comply. The EU also introduced a Green Taxonomy for classifying sustainable economic activities and the [Sustainable Finance Disclosure Regulation \(SFDR\)](#) for investors, that pushed ESG transparency across the investment chain. In the United States, there is no blanket ESG reporting mandate yet, but the regulatory trend is towards more disclosure. In 2022, the U.S. Securities Exchange Commission proposed climate-risk disclosure rules that would require listed companies to report their greenhouse gas emissions and climate governance in filings. However, these rules have faced legal challenges and are not finalized, that reflected a more contested approach to ESG regulation in the U.S. Nonetheless, many U.S. companies issue sustainability reports voluntarily under investor pressure, and specific disclosures (like conflict minerals, diversity, etc.) are increasingly expected. The United Kingdom has moved faster on climate disclosure – starting April 2022, over 1,300 of the largest UK companies (public and private) **must** disclose climate-related financial information in line with TCFD recommendations. The UK was the first G20 country to make TCFD reporting mandatory for large firms, including listed companies, banks, and insurers. Additionally, the London Stock Exchange imposes certain ESG requirements (for example, premium-listed companies on LSE must report on board diversity and climate risks as part of their listing rules). Overall, developed markets are shifting ESG from voluntary to compulsory, especially for climate metrics, which raises the bar for all market participants.

**Stock exchanges in developed markets have led the way in promoting ESG through dedicated indices, segments, and governance measures, with PSX learning from their established frameworks.** Stock exchanges in developed markets have long provided ESG indices and segments. The LSE offers the *FTSE4Good Index Series* (since 2001) for ESG leaders and in 2019 launched the Sustainable Bond Market (SBM) – dedicated segments for Green, Social, and Sustainability bonds to make these instruments more visible to investors. LSE also introduced a “[Green Economy](#)” mark to highlight equity issuers deriving significant revenue from green products/services. In the EU (e.g., Euronext, Deutsche Börse) and US (NYSE, Nasdaq), exchanges have created ESG indices (like the STOXX Europe Sustainability Index, S&P 500 ESG Index) and offer ESG reporting guidance to listed firms.

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European Commission (2025). *Corporate Sustainability Reporting Directive (CSRD)*. [online] Available at: [https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting\\_en](https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en) [Accessed 25 Apr. 2025].

- Notably, Nasdaq US had implemented a rule (in 2021) requiring listed companies to disclose board diversity and have at least two diverse directors or explain why not. This was a pioneering exchange-level governance mandate, though it was later struck down by a U.S. court in 2023, indicating some pushback on ESG measures. Still, many developed-market exchanges actively host ESG training, ESG data services, and sustainability reporting guidelines through the SSE Initiative. Compared to PSX, these exchanges typically have more mature ESG ecosystems – for instance, LSE’s partnership with PSX on ESG data is an example of PSX leveraging a developed market tool to catch up.
- **Developed exchanges are already deeply involved in carbon trading and green bond listings, providing a model for PSX as it begins its journey in climate finance, with its first green bond listing in 2025.** In Europe, exchanges are involved in **carbon trading** through regulated carbon markets (e.g., Inter Continental Exchange (ICE) and European Energy Exchange (EEX) host EU Emissions Trading System allowance trading). In the UK, ICE Futures Europe lists EUA futures as part of the EU and now UK Emissions Trading Scheme. The **US** lacks a federal carbon market, but regional schemes (Regional Greenhouse Gas Initiative (RGGI) in the Northeast, California’s cap-and-trade) exist; exchanges facilitate trading of carbon credits and renewable energy certificates. Stock exchanges also list green bonds: for example, Luxembourg Stock Exchange’s Green Exchange (LGX) platform is a leader in listing green bonds globally. The LSE’s Sustainable Bond Market, as noted, has hundreds of green and sustainability bonds listed. These developed markets have a breadth of climate finance products – from green bonds to sustainability-linked loans – often supported by exchange listing segments and standards. PSX is only beginning to venture here, with its first green bond listing in 2025 and no carbon trading yet; however, lessons from developed exchanges (such as standardized disclosure for bond proceeds, or trading infrastructure for carbon credits) will be valuable as Pakistan’s market grows.

### Where Does PSX Stand?

Against developed market standards, PSX is still in the early stages but making deliberate progress. Its voluntary ESG guidelines and planned ESG index serve as a strong foundation, though they remain far from the mandatory and comprehensive requirements seen in the EU or UK. Globally, ESG investment flows have seen measurable growth as investors increasingly prioritize ESG factors, driven by a growing awareness of sustainability risks and opportunities. In Pakistan, while this growth is still relatively small compared to global standards, there is increasing interest in ESG investments. However, more regulatory clarity and incentives are necessary to accelerate this trend. Pakistan's regulators have signaled eventual mandatory ESG disclosure, following the example of jurisdictions like the EU and UK, but are giving companies time to build capacity. PSX's collaboration with LSEG offers a strategic shortcut to adopt advanced ESG data practices without the need to reinvent the wheel. The challenge for PSX will be to gradually transition from providing guidance to enforcing compliance, potentially requiring ESG reporting for top-listed companies, similar to India’s approach. Additionally, PSX will need to expand its product offerings, such as green bonds and ESG-based ETFs, in alignment with global market trends.

### Emerging Markets

Emerging markets provide some of the most instructive benchmarks for PSX, as they face similar challenges of developing ESG frameworks in economies where sustainability is still emerging on the corporate agenda. Among them are India, Malaysia, and Brazil. We will Discuss all of the three in detail ahead.



- **India**

India has developed one of the most comprehensive ESG disclosure frameworks in emerging markets, with mandatory reporting for top companies and initiatives for ESG indices and climate finance, offering valuable insights for Pakistan’s future ESG landscape. Over the past decade, India has established one of the most rigorous ESG disclosure regimes among emerging markets. The Securities and Exchange Board of India (SEBI) first introduced voluntary Business Responsibility Reports (BRR) in 2012 for top 100 listed companies, gradually extending it. In 2021, SEBI implemented the new BRSR framework, that aligned with global ESG indicators. From fiscal year 2022-23, BRSR reporting is *mandatory* for the top 1,000 listed companies by market capitalization– a huge scope covering the majority of market cap. The BRSR is quite detailed, requiring disclosures on leadership indicators, environmental metrics (energy, emissions, waste), social parameters (diversity, welfare), and governance. Early analysis shows Indian companies have improved ESG transparency as a result, though data quality varies. Beyond reporting, Indian exchanges have been proactive: the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) both launched ESG indices (e.g., BSE’s S&P BSE 100 ESG Index and NSE’s NIFTY100 ESG indices) and offer ESG rating services. India is also advancing climate finance – for instance, India’s first sovereign green bond was issued in 2023, and a domestic carbon credit trading scheme is under development (the Energy Conservation (Amendment) Act 2022 lays the groundwork for a carbon market). For PSX, India’s experience suggests that a phased approach (*voluntary to comply-or-explain to mandatory*) for ESG reporting can work in South Asia, and that creating indices and listing sustainable bonds can proceed in parallel. Pakistan’s top companies may eventually face requirements similar to BRSR if regulators follow India’s lead in the coming years

**Table 1. Key differences between BRR and BRSR**

Aspect	BRR	BRSR
<b>Reporting Sections</b>	- General Information - Financial Details - Other Details - BR Information - Principle-wise Performance	- General Disclosures - Management and Processes - Principle-wise Performance
<b>Format</b>	Universal / Single format	Essential indicators Leadership indicators
<b>Questions</b>	59 Questions	140 Questions (~2.5 times more) – 98 Mandatory – 42 Leadership
<b>Indicators</b>	Mostly qualitative	Qualitative and quantitative
<b>Disclosure</b>	Annual Report	Annual Report and MCA21 Portal

- **Malaysia**

Malaysia’s success in integrating sustainability into exchange rules demonstrates how stock exchanges can drive ESG reporting and climate disclosures, providing a model for PSX as it advances towards mandatory disclosure. Malaysia provides a success story of exchange-driven sustainability integration. Bursa Malaysia (the Malaysian stock exchange) made sustainability disclosure a listing requirement for public companies in 2016. Specifically, Bursa Malaysia’s Listing Rules were amended to require a narrative *Sustainability Statement* in annual reports, describing how the company



manages material economic, environmental, and social risks and opportunities. This replaced a simpler CSR statement requirement, effectively mandating a form of ESG reporting. The implementation was phased from 2016 to 2018, giving companies (especially smaller ones on the ACE Market) time to adapt. Bursa also published a comprehensive Sustainability Reporting Guide to assist companies and has updated it over time as standards evolve. Because of these efforts, as of today virtually all Malaysian listed companies include sustainability disclosures, and many align with GRI or other frameworks. Bursa Malaysia further introduced the FTSE4Good Bursa Malaysia Index in 2014, in partnership with FTSE Russell, to recognize companies with strong ESG performance; this index has become a benchmark for ESG investing in the Malaysian market. More recently, Bursa is enhancing requirements on climate – in 2022 it announced that companies must report against a set of climate change indicators (aligned with TCFD) on a comply-or-explain basis, signaling that climate disclosures will tighten. For PSX, Malaysia’s approach underscores the value of the exchange taking the lead in requiring ESG information through listing rules and providing guidance. It also shows that even emerging markets can achieve near-universal sustainability reporting when the exchange and regulator collaborate on rules and tools. Pakistan could consider a similar trajectory once its voluntary phase matures.

- **Brazil**

**Brazil's B3 exchange has led ESG integration in emerging markets, demonstrating how innovative products and a "report or explain" approach can drive sustainability reporting and climate finance without mandatory regulations, offering a valuable example for PSX.** Brazil’s stock exchange, B3 (formerly BM&FBovespa), is often cited as a pioneer among emerging markets for sustainability. As early as 2000, B3 established the *Novo Mercado*, a special premium listing segment demanding higher corporate governance standards (e.g. one-share-one-vote, board composition requirements). This was initially governance-focused, but it laid a cultural foundation for transparency and accountability. In 2005, B3 launched the Corporate Sustainability Index ([Índice de Sustentabilidade Empresarial, ISE](#)) – one of the first ESG indices in the world and the first in an emerging market. The ISE index evaluates Brazilian companies on a comprehensive ESG questionnaire and selects a portfolio of top performers each year. The very launch of ISE in 2005 indicates that Brazilian markets recognized ESG value quite early. Additionally, B3 was the first exchange to sign the UN Global Compact in 2005, urging its listed firms to do likewise. Over time, B3 expanded its ESG product suite to *multiple indices*: by 2021 it had four indices focused on corporate governance aspects, one on climate (the Carbon Efficient Index, which encourages disclosure of emissions), and others covering general ESG performance. B3 also offers ESG training and since 2020 has a formal Sustainability Strategy guiding its own operations. Interestingly, Brazil did not impose mandatory ESG reporting by law; instead, B3 adopted a “report or explain” approach – requesting listed companies to either publish a sustainability report or explain why they haven’t. This gentle nudge dramatically increased voluntary reporting rates among Brazilian companies. Moreover, Brazil has been active in climate finance: Brazilian companies issue green bonds (e.g., BNDES and Banco Santander Brasil issued green bonds; the country has a growing green bond market), and B3 itself has supported a platform for trading carbon credits and renewable energy certificates, anticipating carbon pricing mechanisms. For PSX, Brazil’s example highlights the impact an exchange can have by innovating products (like an ESG index) and setting expectations (like report-or-explain) even without formal regulations. It also shows that emerging markets can lead in certain ESG aspects (Brazil was ahead of many developed markets in 2005 with its index).

To summarize the benchmarking, **PSX is on a similar trajectory** as peers like India and Malaysia but a few years behind in implementation. India already mandates ESG reports for top companies; Malaysia mandates basic sustainability disclosure for all; Brazil has multiple ESG indices and a high voluntary uptake.

Pakistan's initiatives (Task Force, Primer, guidelines) resemble the early to mid-stages of these peers' journeys. The table below provides a quick comparison of key ESG integration aspects:

**Table 2. PSX comparison with India, Malaysia, and Brazil in ESG journeys**

Aspect	Pakistan (PSX)	India (BSE/NSE)	Malaysia (Bursa)	Brazil (B3)
<b>ESG Reporting Rules</b>	Voluntary guidelines (2023-24); regulatory roadmap aims for future mandatory reporting.	Mandatory BRSR for top 1000 companies (since FY2023); prior BRR voluntary since 2012.	Mandatory sustainability statement in annual reports for all listed (phased 2016-2018).	"Report or Explain" voluntary regime (since 2012) resulting in high reporting rates; no law mandating, but strong encouragement.
<b>Exchange ESG Guidance</b>	PSX ESG Primer 2024 provides reporting guidance; ESG Task Force drives awareness.	BSE & NSE issued guidance for BRR/BRSR and conduct workshops; Institute of Chartered Accountants also provides ESG reporting guides.	Bursa's Sustainability Reporting Guide (latest 3rd edition) offers detailed how-to for compliance.	B3 provides annual questionnaires for ISE index; offers training and forums via its sustainability program.
<b>ESG Indices</b>	ESG index in development (planned launch upcoming).	Multiple indices: S&P BSE 100 ESG Index, BSE Greenex (carbon-efficient), Nifty100 ESG, etc., launched 2010s.	FTSE4Good Bursa Malaysia Index (since 2014) for top ESG performers; FTSE4Good Shariah as well.	Corporate Sustainability Index (ISE) since 2005; also, Carbon Efficient Index (ICO2) since 2010; several governance indices.
<b>Climate/Green Finance Products</b>	First local green bond listed in 2025; SECP Green Bond Guidelines (2021); exploring carbon market linkages (guidelines 2025).	Growing green bond market (Indian issuers raised >\$7B in green bonds by 2022); launching a domestic carbon credit trading scheme; RBI and SEBI exploring climate risk frameworks.	World's first sovereign sukuk (Islamic bond) labeled green issued by Malaysia in 2017; Bursa has an Islamic Sustainability index; national carbon trading plans under discussion.	Active green bond issuance by companies; robust renewable energy finance. Carbon credit trading pilot via voluntary market (Brazil hosted projects under CDM, preparing for Article 6 market).
<b>Regulatory Support</b>	SECP ESG roadmap 2022 and disclosure guidelines 2024 (voluntary); Corporate Governance Code updated for ESG oversight.	SEBI mandates and monitors BRSR; also issued Stewardship Code for institutional investors on ESG.	Securities Commission Malaysia updated Corporate Governance Code to emphasize sustainability; Bursa and regulator coordinate on guidelines.	No mandatory ESG law, but government endorses exchange initiatives; Brazil's Central Bank now including climate risk in banking supervision.

(Sources: PSX ESG Primer and press releases; SEBI circulars; Bursa Malaysia SSE report; B3/Nasdaq).

Overall, Pakistan has begun implementing many of the same tools (guidelines, indices, reporting frameworks) that peers have used, albeit on a delayed timeline. The key difference is the level of enforcement: India and Malaysia have moved to mandatory or quasi-mandatory regimes, whereas Pakistan remains in the voluntary encouragement phase. In the next phase of its ESG journey, PSX – in consultation with SECP – may consider moving toward a comply-or-explain requirement for sustainability reporting by top-listed companies once the Primer and capacity-building efforts have matured the market sufficiently.

### **Aligning Incentives with Global ESG Standards for PSX-Listed Companies**

A coordinated incentive structure is required to accelerate ESG offtake among listed companies in Pakistan. While PSX and SECP have taken initial steps to promote ESG disclosures, widespread adoption may depend on a broader national policy response. A blended package of fiscal, regulatory, market-based, and reputational incentives can unlock wider participation.

- **Fiscal Incentives:** Tax rebates for ESG-certified companies (e.g., ISO 14001, GRI, SASB), and government-backed guarantees for green project sukuks.
- **Regulatory Incentives:** Fast-tracked regulatory approvals for ESG-compliant firms, and phased enforcement of mandatory disclosures.
- **Market-Based Incentives:** Launch of a dedicated ESG Index on PSX to increase visibility and attract ESG-focused investors.
- **Reputational Incentives:** Annual PSX-SECP ESG Excellence Awards, enhanced ESG weightage in PSX's Top 25 Company Awards, and potential future development of a public ESG Scorecard.
- **Capacity Building and Tools:** Provision of free or subsidised ESG toolkits (e.g., LSEG's ESG Contribution Tool), especially for SMEs and mid-cap firms.

These recommendations are further elaborated in the next chapter.

## 5

# Strategic Recommendations and Future Opportunities for PSX and Listed Companies

Looking ahead, PSX and Pakistani listed companies can build on current foundations and global best practices to accelerate ESG integration and tap into climate finance opportunities. Investor interest in ESG-compliant securities among PSX-listed companies is growing, with traction from international institutions. PSX has observed a shift toward green and sustainable investments, driven by global investor preferences for ESG-aligned listed companies. While larger listed entities are making progress, smaller listed firms remain cautious due to perceived complexity and uncertain returns, highlighting the need for incentives and regulatory clarity. Below are strategic recommendations and innovative opportunities, structured around key themes:

## a. Enhancing ESG Reporting and Disclosure

1. **Encouraging Pakistani listed companies to adopt international ESG reporting standards, like ISSB and GRI, will enhance transparency, comparability, and attract foreign investment, with PSX playing a pivotal role in promoting these frameworks.** Listed companies in Pakistan should move beyond basic narrative reports to adopt recognized ESG reporting standards/frameworks. The new ISSB standards (IFRS S1 and S2) offer a simplified global baseline – IFRS S2 focuses on climate disclosures (akin to TCFD), and IFRS S1 covers general sustainability-related financial disclosures. Pakistani companies could begin aligning reports to these standards, especially since Pakistan tends to adopt IFRS quickly (SECP has already made ISSB standards become part of reporting norms in phase wise manner starting from FY2026). In parallel, widely used frameworks like the Global Reporting Initiative (GRI) can be employed for broader stakeholder-focused sustainability reports. Using global standards will make Pakistani companies' ESG data more comparable and decision-useful, attracting foreign investors who rely on these benchmarks. PSX's Primer already introduces these frameworks; the next step is encouraging their application. One approach is for PSX (or SECP) to *require* large companies to publish an ESG report consistent with at least one international framework (GRI, ISSB, SASB, etc.) within a 1–2-year timeframe, possibly starting with Karachi Stock Exchange (KSE)-100 index companies.
2. **Encouraging companies to leverage digital tools such as LSEG's ESG Contributor Tool will enhance data accuracy and efficiency in ESG reporting, while PSX can play a key role in supporting these initiatives through training and interactive data platforms.** As ESG reporting becomes more data-intensive, companies should utilize digital tools for data collection, management, and analytics. The [LSEG's ESG Contributor Tool](#) now available via PSX is one such solution and allow firms to input quantitative ESG metrics in a structured way. By using this tool, companies can receive an ESG scorecard and identify gaps in their performance. Scorecards should be encouraged and should not be seen as a report card. It also automates part of the disclosure process by feeding into international databases (e.g., Refinitiv). Beyond this, companies can explore software or platforms for sustainability data (there are tools for tracking carbon emissions, Health, Safety and Environment (HSE) incidents, governance metrics, etc.). Embracing these will improve data quality and reduce the effort of report compilation each year. PSX can facilitate workshops on how to effectively use the ESG data platform and maybe even consider adapting part of "SECP ESG Sustain Portal" where companies can publish interactive ESG data dashboards (making information more accessible to investors than static PDF reports).

3. **To enhance credibility and build creditability, Pakistani companies should seek independent assurance for key ESG metrics, with PSX and regulators encouraging this practice through recognition and awards.** As ESG reports proliferate, so will scrutiny of their credibility. Our companies need to get ahead on this by seeking independent assurance of key ESG metrics (especially environmental data like emissions, and social data like safety statistics). Globally, assurance of sustainability reports is becoming common (the EU's CSRD will mandate limited assurance of reported ESG data). Engaging auditors or third-party verifiers to review ESG disclosures will build investor trust. It will also prepare companies for any future mandatory assurance requirements. Regulators and PSX can encourage this by recognizing companies that obtain third-party assurance (for example, PSX's Top Companies Awards could include a criterion for assured sustainability disclosures, which could spur others to follow).
  4. **Leading companies can adopt Integrated Reporting and align with SDGs to showcase how sustainability is integrated into business strategy, setting an example for others, and attracting development finance.** Companies at the forefront can aim for Integrated Reporting (combining financial and non-financial results in one report, following the International Integrated Reporting Council (IIRC <IR> framework). This approach demonstrates how sustainability is embedded in business strategy and value creation. It's an advanced practice that a few leading Pakistani firms (perhaps in banking or energy) could pilot, setting an example. Additionally, aligning corporate targets with the Sustainable Development Goals remains important – companies should identify priority SDGs and report contributions to them, as introduced by PSX's earlier SDG initiative. This ties corporate ESG actions to national and global development objectives, resonating with development finance providers.
- b. Mobilizing Climate Investments and Green Finance**
1. **Green bonds and sustainable debt instruments offer a powerful tool for financing Pakistan's transition to a low-carbon economy, with opportunities for PSX to promote these instruments and further incentivize green and sustainability-linked investments.** To finance the transition to a low-carbon and resilient economy, companies (and government entities) should utilize **green bonds** and related sustainable debt instruments. The listing of the Parwaaz Green Action Bond on PSX shows local appetite for green investments. More corporations can issue green bonds to fund renewable energy projects, energy-efficiency upgrades, clean transportation, or climate-resilient infrastructure. Sectors like power generation (e.g. solar/wind farms), manufacturing (energy efficiency in factories), and property (green buildings) are prime candidates. *Sustainability bonds* (which fund a mix of environmental and social projects) or *social bonds* (e.g. for health or education projects) are also options. SECP's guidelines for Green and Gender Bonds provide frameworks, and the government's tax incentives (no withholding tax on interest for green/gender bonds) improve their viability. PSX can actively promote its debt listing platform for such instruments, perhaps by fast-tracking green listings or offering fee reductions. Also, sustainability-linked bonds or loans – where the interest rate is tied to the issuer meeting certain ESG targets – could be introduced. These do not restrict use of proceeds but incentivize overall ESG performance (for example, a company could issue a bond that gets a coupon reduction if it reduces CO<sub>2</sub> emissions by 20% by 2025). It's an innovative tool gaining popularity globally for companies without dedicated green projects but with strong sustainability goals.
  2. **PSX can enhance equity-based climate finance by launching a Green Index and associated investment funds, providing investors with opportunities to support environmentally sustainable companies and clean-tech ventures in Pakistan.** Besides debt, PSX can encourage equity-based climate finance. This could involve creating a dedicated "Green Index" (once enough data is available) that tracks companies with significant green revenues (such as LSE's Green Economy Mark concept). An ETF (exchange-traded fund) could be launched on such an

index, which will allow investors to channel funds into a basket of environmentally friendly companies in Pakistan. Moreover, PSX could attract listings of yield-based instruments like *renewable energy investment trusts or infrastructure funds* (if the legal framework permits) – for instance, a YieldCo holding solar projects that provides dividends from selling electricity. Such vehicles package climate investments in tradable form. Venture financing segments for clean-tech startups could also be explored via PSX’s platform (perhaps through the GEM board for smaller companies). Collectively, these expand the menu of climate investment opportunities for investors.

3. **Pakistani firms can de-risk climate projects by leveraging blended finance, combining public and private investment, with PSX facilitating connections through events like Climate Investment Roadshows to attract both domestic and international capital.** Pakistani firms should also leverage blended finance – mixing public, donor, or development capital with private investment – to de-risk climate projects. For example, the Parwaaz bond was supported by technical assistance from development partners. Companies can seek partnerships with entities like IFC, ADB through the help of advisors (like Resources Future) to prepare bankable green projects and bring them to market. PSX can facilitate investor connections by hosting “Climate Investment Roadshows” or segments in its investor conferences focused on ESG/green opportunities, where companies present their sustainable investment cases to both domestic and foreign investors.

#### c. **Participating in Carbon Markets and Offset Mechanisms**

1. **Pakistani companies in sectors like energy, agriculture, and forestry can generate carbon credits through emission reductions or carbon sequestration, creating new revenue streams by participating in voluntary or compliance carbon markets with the help of Resources Future for project identification and certification.** Many Pakistani companies, especially in sectors like energy, agriculture, forestry, and waste management, have opportunities to generate carbon credits by cutting emissions or sequestering carbon. For instance, a manufacturing firm could install a biomass boiler replacing fossil fuel (cutting CO<sub>2</sub>), or a company could invest in tree plantation or mangrove restoration (sequestering CO<sub>2</sub>), and get those reductions certified as carbon credits. With Pakistan’s carbon market guidelines approved in 2025 and initial international buyers for credits emerging, companies should explore projects under recognized standards (like Verra or Gold Standard for the voluntary market, or future [Article 6](#)-compliant programs for the compliance market). These credits can be sold internationally (bringing in foreign revenue) or eventually traded domestically if a local exchange platform develops. Companies can thereby monetize sustainability actions which previously had no financial reward. **Resources Future** facilitates companies in this regard by identifying viable projects and guiding them through the certification process.

2. **Pakistani companies, especially high emitters, can adopt internal carbon pricing to guide greener investments, prepare for future carbon pricing policies, and align with global practices, with support from regulators and business associations in setting up internal carbon price toolkits.** As a preparatory step for carbon markets and to drive internal efficiency, companies (particularly high emitters like cement, steel, fertilizer, power) can adopt an internal carbon price in their decision-making. This means assigning a shadow price per ton of CO<sub>2</sub> (for example, \$10/ton) when evaluating projects – effectively factoring in a future cost of carbon. This practice, used by many multinationals, guides companies to choose greener investments (since high-carbon options “cost” more under the shadow price). It will also prepare Pakistani companies for any future carbon pricing policies by the government, and especially the upcoming Carbon Border Adjustment Mechanism. Regulators and business associations can encourage this by providing toolkits on how to set an internal carbon price.

3. **PSX can play a pivotal role in facilitating carbon credit trading by developing a transparent trading platform, collaborating with the Ministry of Climate Change and Environmental Coordination (MOCC&EC), and leveraging its infrastructure to ensure Pakistan stays competitive in the emerging carbon market, while also providing educational sessions for companies.** In the near future, PSX itself has an opportunity to facilitate carbon credit trading. As Pakistan's carbon market moves from policy to implementation, a transparent trading platform will be needed for price discovery and liquidity. PSX could collaborate with the MOCC&EC to develop a Carbon Exchange or trading board where verified credits can be listed and traded among companies and investors. This could start as a segment on the existing exchange or a separate board under PSX management. Given that other exchanges in Asia (Indonesia, Thailand, Hong Kong, etc.) are launching carbon trading platforms, PSX following suit would ensure Pakistan isn't left behind in this emerging market. The exchange can leverage its trading infrastructure and regulatory oversight experience to instill confidence in a carbon market. This is a medium-term opportunity that requires regulatory framework (which is now underway) and capacity building, but planning should start early. In the interim, PSX can host carbon market education sessions to familiarize companies with how carbon credits work, perhaps inviting experts from countries with functioning markets, such as a knowledge exchange with Indonesia's IDX or China's carbon market authorities.
- d. **Developing Decarbonization Pathways for Industries**
  1. **Pakistani companies, especially in high-impact sectors, should set Science-Based Targets (SBTs) for emissions reduction and establish decarbonization pathways to remain competitive, align with global supply chain expectations, and demonstrate commitment to net-zero goals.** Globally, thousands of companies have set Science-Based Targets (SBTs) for emissions reduction, aligning their business with the goal of limiting warming to 1.5°C. To stay competitive, Pakistani companies – especially exporters supplying multinationals – will face pressure to decarbonize their operations. It's recommended that companies in high-impact sectors (textiles, cement, utilities, etc.) conduct greenhouse gas inventories (covering Scope 1, 2, and key Scope 3 emissions) and develop decarbonization pathways to reduce emissions over 5, 10, 20+ year horizons. This includes identifying projects for energy efficiency, renewable energy adoption (like installing solar panels on factories), process changes (e.g. alternative fuels in cement kilns), and carbon offsetting for residual emissions. Setting a public net-zero target for, say, 2040 or 2050 can rally internal efforts and signal seriousness to investors. While Pakistan as a country has a relatively small carbon footprint globally, its businesses integrating into green supply chains will increasingly need to demonstrate such commitments (for example, a Pakistani textile supplier to a global apparel brand might need to show a carbon reduction plan as part of continued business). Industry associations, with support from experts, can develop sector-specific "roadmaps" that outline feasible decarbonization technologies and the investment needed, which companies can then adapt.
  2. **Companies in Pakistan, especially in energy-intensive sectors, should transition to cleaner energy sources by engaging in Power Purchase Agreements (PPAs) with renewable producers, investing in on-site renewables, or shifting from fossil fuels to cleaner alternatives like biomass or biogas, supported by government policies and initiatives.** Power generation is a major source of emissions in Pakistan and a cost center for industry due to rising fuel prices. Companies should seek to transition their energy use to cleaner sources. Options include entering Power Purchase Agreements (PPAs) with renewable energy producers to directly buy clean electricity (this guarantees demand for renewables and often locks in lower long-term costs) or investing in on-site renewable generation (solar panels on office buildings).

Transitioning captive power generation from furnace oil/gas to biomass or biogas where possible is another avenue (some sugar mills already use bagasse, for instance). The government's alternate energy targets and net metering policy can support these moves. Additionally, where companies still rely on fossil fuels, exploring transition technologies like co-firing (mixing biomass with coal), waste heat recovery can be part of the pathway. PSX can highlight companies undertaking substantive decarbonization in its newsletters or media and give positive visibility to leaders and thereby encouraging peers.

**3. Pakistani companies should assess and manage climate risks, such as extreme weather and resource scarcity, by integrating climate risk assessments into their risk management frameworks. Adopting TCFD recommendations will help structure this process and enable companies to invest in adaptation measures, ultimately meeting investor expectations for climate risk disclosure.** Decarbonization is one side of the coin; climate adaptation is the other. Pakistani companies face physical climate risks – from extreme heat and floods to water scarcity – which can disrupt operations and supply chains. Future-ready companies should conduct *climate risk assessments* and integrate them into enterprise risk management. For example, an agribusiness should evaluate how changing rainfall patterns affect crop yields in its supply chain, or a bank should analyze credit risk in its portfolio from clients exposed to climate impacts. Following the TCFD's recommendations on governance, strategy, risk management, and metrics will help structure this analysis. Companies can then invest in adaptation measures: improving water efficiency, strengthening infrastructure, diversifying supplier base, obtaining insurance for climate events, etc. Not only is this prudent risk management, it will also likely be required by investors – global investors increasingly ask for TCFD-aligned disclosure from companies in vulnerable regions.

**e. Capacity Building and Sector-Specific Sustainability Support**

**1. Training and awareness are crucial for successful ESG implementation, and PSX, along with partners, can offer tailored programs to build a pipeline of skilled professionals at all levels within organizations.** A major challenge in implementing ESG is the lack of expertise and understanding within organizations. Continuous capacity building is therefore critical. PSX and partners (Resources Future, PICG, and other professional bodies) can help in rolling out training programs tailored to different audiences: board directors (on fiduciary duties and strategy related to ESG), management (on integrating ESG into business planning), and operational staff (on data collection and sustainability practices). Given the success of prior workshops, a structured curriculum – e.g., an “ESG 101” for new reporters, an advanced workshop on TCFD and climate strategy, or sector-specific ESG best practice seminars – can be delivered regularly. These could be done via PSX's Learning Academy or in collaboration with universities and institutes. The goal is to create a pipeline of ESG-literate professionals who can champion these initiatives within companies.

**2. Facilitating peer learning through industry roundtables and showcasing local success stories can inspire companies to adopt effective ESG practices and drive sector-wide improvements.** Sometimes companies learn best from peers. PSX or industry associations can facilitate ESG roundtables within sectors (similar to the automotive sector roundtable PSX led). For example, a banking sector roundtable on green financing and climate risk, or a textile sector session on cleaner production and labor standards. Local case studies should be highlighted – if a Pakistani company has achieved energy savings or diversity improvements, sharing their story can inspire others. PSX's ESG Primer already includes local case studies for materiality and stakeholder

engagement, which is helpful. Expanding this repository of Pakistani case studies (perhaps an online library on the ESG Portal) will make ESG feel more tangible and doable for companies. Annual “ESG awards” or recognition (beyond the Top Companies Awards) could also motivate companies to compete and improve.

3. **Developing sector specific ESG guidelines will help companies focus on the most relevant issues for their industry, ensuring more impactful and tailored sustainability efforts.** Different industries have different material ESG issues. For instance, oil & gas and cement must focus on emissions and environmental management, banks on responsible lending and data security, textiles on labor conditions and water use. Tailored guidelines or checklists for key sectors could be developed to support existing approaches (**Figure 5**), possibly as annexes to the PSX ESG Primer or via separate publications. The SECP or PICG might coordinate with industry bodies to outline what ESG means for each sector. This helps companies prioritize efforts that matter most for their sector. It also aligns with how international frameworks like SASB approach ESG – SASB provides industry-specific standards, which could be referenced or adapted.
4. **Educating investors on ESG integration will drive demand for responsible business practices, creating a market-driven incentive for companies to improve their ESG performance.** Building capacity is an ongoing endeavor – investors in Pakistan (asset managers, banks, DFIs, even retail investors) also need awareness to drive demand for ESG performance. The more investors ask companies about ESG, the more companies will respond. Therefore, educating investors and analysts is vital. PSX can host sessions for analysts on how to interpret ESG reports or integrate ESG factors into valuations. The presence of mutual funds or pension funds that commit to responsible investing (perhaps under a local stewardship code or principles for responsible investment) would be a game-changer. Regulators could consider nudging institutional investors to disclose how they incorporate ESG in their investment process. As this mindset takes hold, companies will face market pressure (not just regulatory pressure) to improve ESG – a powerful motivator.



**Figure 5.** Materiality assessment approach defined in the PSX ESG primer

## 6

# The Role of Resources Future in Supporting PSX-Listed Companies

Despite increased ESG awareness, practical compliance remains a challenge for many listed companies. Fragmented global reporting standards, limited internal expertise, and insufficient systems for reliable ESG data collection particularly impact smaller firms facing resource constraints and competing operational pressures. PSX has responded with technical support initiatives and efforts to promote standardized reporting practices. Resources Future can build on this momentum, providing tailored ESG training, implementation tools, and audit-ready reporting solutions, in line with PSX's push for sector-specific ESG literacy and uptake. As a sustainability and climate finance advisor, Resources Future can play an enabling role for PSX-listed companies, easing compliance and unlocking long-term value .



**Figure 6.** ESG services offered by Resources Future

- ESG Reporting and Disclosure Services:** Drawing on our extensive experience with financial institutions and industrial sectors, Resources Future equips companies to effectively manage their entire ESG reporting cycle. This includes conducting materiality assessments to identify what ESG topics are most important to the business and its stakeholders, helping companies select appropriate frameworks (GRI, SASB, ISSB, etc.), and assisting in data collection and report writing. By staying up to date with the latest standards, our advisor is able to ensure a company's report meets international expectations and SECP's guidelines. Resources Future can provide input on ESG dashboards for companies to track sustainability related Key Performance Indicators (KPIs) year-round, not just at annual report time. For companies new to ESG, having an external expert to set up their reporting structure and train their team is invaluable. Moreover, our advisors can help align the sustainability report with the annual report (integrating financial and non-financial information cohesively) as per the ISSB standards. As assurance becomes important, Resources Future can prepare companies for assurance audits by strengthening their data controls and documentation. In short, we are designed to help accelerate a company's learning curve by providing templates, best practices, and feedback, and hence, improving the quality of disclosures and saving management time.

- Carbon Markets and Climate Strategy:** Understanding the technical world of carbon credits and climate commitments can be daunting for companies. We have offered carbon advisory services – from calculating a company’s carbon footprint to identifying emission reduction opportunities and potential projects for carbon credit generation. Our focus sectors for carbon projects include Waste-to-energy, off-grid renewable energy, Nature based Solutions (NbS), biochar, clean cooking and many other themes. For such projects our technical and financial experts perform feasibility analysis and connect clients with validation bodies. As the carbon market guidelines mature, Resources Future can prepare companies develop and register projects under national or international programs, manage the verification process, and even broker deals to sell the credits to buyers (ensuring the company gets a good price for their credits). On the climate strategy side, we can assist in setting science-based targets, creating a roadmap of interventions to meet those targets, and modeling the financial impact. We can also advise on climate risk assessment – using climate scenario analysis tools to see how extreme weather might affect operations and suggesting adaptation measures. Essentially, the firm becomes an outsourced *climate team* for companies that don’t yet have that internal capacity and enable them to engage with carbon markets and climate initiatives that would otherwise be out of reach.
- Climate Investment Facilitation:** When companies decide to raise green or sustainable finance – be it a bond, sukuk, or loan – Resources Future can act as a transaction advisor. Crafting a credible Green Bond framework (outlining use of proceeds, management of funds, and impact reporting) is a specialized task – one that advisors with experience in Climate Bonds Standard or ICMA Green Bond Principles can handle. We can help companies identify eligible green projects, quantify their environmental benefits, and prepare the documentation needed for certification or investor due diligence. RF could liaise with credit rating agencies to get a green bond rating or with independent verifiers for a second-party opinion on the bond’s green credentials. Similarly, for sustainability-linked financing, we can help set the KPIs and calibration. Essentially, the advisor bridges the gap between companies and investors, packaging sustainability stories into investable propositions. Additionally, we could connect companies with international climate finance sources – for example, helping a client prepare a proposal or tap into a UN-backed climate fund, areas where understanding the language of both finance and climate is key.
- Decarbonization Strategy and Implementation:** For sector-specific needs, Resources Future can bring technical consultants who understand the industry. For example, in the energy sector, advising an independent power producer on how to transition part of its portfolio from coal to renewables; or in textiles, helping set up a cleaner production program that reduces water and chemical usage (which cuts costs and emissions). They can perform energy audits and recommend efficiency measures or advise on switching to biomass or solar. In difficult sectors like cement or fertilizers, they can evaluate emerging technologies, such as feasibility or use of alternative fuels and advise on long-term decarbonization investments. An important contribution is helping build the *business case* for these actions – quantifying payback periods, returns on investment, and intangible benefits, such as brand value and risk reduction, to persuade company leadership. Furthermore, we can assist in engaging stakeholders – e.g., running supplier training for a company aiming to reduce scope 3 emissions or community consultations for a project with social impacts.

- Sectoral Sustainability Programs:** Resources Future could work with entire sectors in a coordinated way. For instance, Resources Future could support the launch of a “Sustainable Textiles Initiative” in partnership with industry bodies, such as All Pakistan Textile Mills Association (APTMA), and guide a cohort of textile companies to adopt best practices in labor standards, water management, and renewable energy (the issues material to that sector). This might involve benchmarking companies against each other and global peers, then providing each with a roadmap to improve, and tracking progress collectively. We are fully equipped with the expertise and tools for creating similar knowledge exchange and peer-learning platforms. Similarly, a “Green Banking Program” could guide banks to integrate environmental and social risk management in lending (following IFC Performance Standards or Equator Principles) and develop green finance products. By operating at an industry level, an advisor can create systemic impact and reduce costs for individual companies (since some workshops or tools can be shared).
- Regulatory and Compliance Advisory:** As SECP moves toward possibly mandating certain ESG disclosures or as international regulations like the EU’s carbon border tax or supply chain due diligence laws begin to indirectly affect Pakistani exporters, companies will need to stay compliant. Resources Future can monitor the evolving regulatory landscape (domestic and international) and alert companies to relevant changes – for example, if the EU’s Carbon Border Adjustment Mechanism (CBAM) will impose a cost on exports of steel or cement to Europe, the firm can help those exporters prepare data and explore efficiency to mitigate costs.



**Figure 7.** Advisory and capacity building sessions conducted by Resources Future for the public and private sector

Resources Future aims to act as a comprehensive sustainability partner, offering strategic, technical, and financial expertise, enabling companies to advance ESG goals while PSX accelerates market-wide adoption through trusted advisory support. Overall, Resources Future can serve as a one-stop sustainability partner for companies: to provide strategic direction at the board level, technical solutions at the operational level, and financial structuring at the capital markets level. By externalizing these capabilities, companies can progress on ESG without having to build large in-house teams immediately – they can “borrow” the expertise until it becomes ingrained enough to internalize. For PSX and the broader market, having such advisory support readily available accelerates the overall adoption of ESG, because companies are less likely to be stuck on the *how to* question. PSX could even formalize partnerships or panels of approved ESG consultants to refer companies to, ensuring quality and trust in the advisors.