Stock exchanges are robust and resilient engines of commerce, efficiently adapted to raise and sustain capital. They help businesses big and small create jobs and provide investors with access to a diverse and dynamic marketplace. But stock exchanges are also change agents, responsive to market demand for new products, better services, and more transparent data. The World Federation of Exchanges (WFE), the largest and most inclusive trade association for stock exchanges around the world, develops and promotes market standards, proposes innovations and reforms, fosters international cooperation and coordination among regulators.

Creation of the WFE Sustainability Working Group (SWG) in 2014 signaled the industry’s commitment to explore and integrate environmental, social and governance (ESG) issues. The SWG is comprised of representatives from a diverse array of 22 global stock exchanges, all working towards consensus on the purpose, practicality, and materiality of ESG data. The SWG has been embarked for the last 18 months on an exploration of this topic via original research, public debate, expert analysis and engagement with the broader WFE membership.

Today, we present this recommendation for your consideration and/or amendment.

The guidance in this document provides a useful and necessary starting point for exchanges. Strategic and transparent ESG practices can be as beneficial to exchanges as they are to individual companies. Our recommendation focuses on principles and data, with correlating bottom line impacts, but it also implicitly counsels the improvement and harmonization of management practices.

Exchanges recognize their mandate to provide orderly and fair market operations. But they also affirm their commitment to the broader principles that underlie the creation of sustainable, transparent, and inclusive markets. This document, and subsequent work to foster its adoption, is vital to that affirmation—and vital to the continued health and prosperity of our industry.

Evan Harvey, Chairman
Corli Le Roux, Vice Chair
WFE Sustainability Working Group
Methodology

During the course of this project, we have been guided by several converging workstreams. First and foremost, we worked closely with the United Nations Sustainable Stock Exchanges (SSE) initiative to create a substantive document: the Model Guidance (MG) on Reporting ESG Information to Investors. The MG was made public in September and provides a broad and business-centric rationale for better ESG reporting by the companies that list on global stock exchanges. The MG outlines the principles behind exchange involvement in this issue, but does not enumerate the specific data points (or Key Performance Indicators) that have the most impact.

- **You can see a full version of the UN SSE Model Guidance at this link.**

At the Working Committee meeting in London in February 2015, the SWG was advised by several WFE members to provide specific KPIs. In the attached worksheet, titled “Material ESG Metrics,” we call attention to 33 indicators across Environmental, Social, and Governance (ESG) categories that may well be of utmost concern for exchanges.

**NOTE:** Our central guiding principle was to enumerate the KPIs that seemed to be most important and/or material to individual exchange needs and the exchange industry in general. But this is not meant to be a complete or prescriptive list. Exchanges must evaluate the merits of each—and others that may not be listed here—as they see fit.

<table>
<thead>
<tr>
<th>Direct &amp; Indirect GhG Emissions*</th>
<th>Injury Rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Intensity</td>
<td>Global Health</td>
</tr>
<tr>
<td>Direct &amp; Indirect Energy Consumption*</td>
<td>Child &amp; Forced Labor</td>
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<td>Energy Intensity</td>
<td>Human Rights policy</td>
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<tr>
<td>Primary Energy Source</td>
<td>Human Rights violations</td>
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<tr>
<td>Renewable Energy Intensity</td>
<td>Board - Diversity</td>
</tr>
<tr>
<td>Water Management*</td>
<td>Board - Separation of Powers</td>
</tr>
<tr>
<td>Waste Management*</td>
<td>Board - Confidential Voting</td>
</tr>
<tr>
<td>Environmental policy</td>
<td>Incentivized Pay</td>
</tr>
<tr>
<td>Environmental impacts</td>
<td>Fair Labor Practices</td>
</tr>
<tr>
<td>CEO Pay Ratio</td>
<td>Supplier Code (SC) of conduct</td>
</tr>
<tr>
<td>Gender Pay Ratio</td>
<td>Ethics Code (EC) of conduct</td>
</tr>
<tr>
<td>Employee Turnover Rate*</td>
<td>Bribery/Anti-Corruption Code (BAC)</td>
</tr>
<tr>
<td>Gender Diversity</td>
<td>Tax Transparency</td>
</tr>
<tr>
<td>Temporary Worker Rate</td>
<td>Sustainability Report</td>
</tr>
<tr>
<td>Non-Discrimination</td>
<td>Framework Disclosures</td>
</tr>
</tbody>
</table>

Please refer to the additional supporting document for more detail about each of these suggested indicators, including cross-reference to various ESG reporting frameworks. This list covers the so-called
“first-generation” sustainability metrics that organizations (e.g., Corporate Knights) use to annually evaluate and rank exchange leadership in this area.

Our evaluation and ranking of these metrics was also based on the following factors:

- Exchange guidance (or requirements) already enacted around the world—either by the exchanges themselves, or local market regulators, or reporting frameworks that were most prevalent in a variety of markets
- The ubiquity of certain indicators across multiple reporting frameworks; in fact, we have included a grid in the attached worksheet to support this assertion
- Investor opinions about the correlation of certain metrics to overall company health, strategic advantage, and/or expected returns as well as increased investor demand for comparable indicators across companies and jurisdictions
- The research, guidance, and counsel of key investor advocacy groups, most notably Ceres
- A reasonable analysis of available resources at companies of all sizes to track and report on these issues

As contributors to the UN SSE Model Guidance, we believe that every exchange should start with that document. It provides a cogent summary of the value drivers behind exchange advocacy for better ESG reporting. In brief, the MG calls attention to these seven main value drivers:

- Developing well-functioning, more resilient, less volatile markets
- Encouraging companies to transparently manage risks and opportunities
- Creating more attractive markets for engaged investors
- Helping companies navigate current or forthcoming disclosure regulation
- Promoting corporate governance and efficiently regulated markets
- Contributing to national and international sustainable development goals
- Helping companies outcompete on ESG matters

To that end, we have reinforced our selection of metrics by linking each one to one of these seven value drivers. In other words, there are real and lasting goals that exchanges believe in, and the timely and accurate disclosure of certain KPIs by listed companies will help exchanges achieve those goals.

**Recommendations for Exchanges and Listed Companies**

Stock exchanges can and do advance the promotion of sound financial reporting and corporate governance standards. As the link between issuers and investors, exchanges are uniquely positioned to create more transparent and efficient capital markets that generate long-term value. But listed companies, individually and en masse, are equally able to drive change.

More than 44,000 companies—representing a total market capitalization of USD 64 trillion and a total trading value of USD 76 trillion, or more than 75% of the global economy—list on WFE member
The SWG is keenly aware of the potential scale of its work; even a small step towards better reporting is sure to improve market conditions around the world.

We have made this connection explicit by providing a list of MG-specific recommendations not only for exchanges to follow, in any capacity possible, but also the individual companies that list on those exchanges. You can find this in the worksheet titled “SSE MG Recommendations” in the attached document. Salient passages (with page citations) from the MG are linked to an exchange-specific recommendation, a discrete and measurable course of action, and also a company-specific recommendation.

**Global Advocacy with Local Customization**

It is not our intention to dictate exchange standards or requirements when it comes to ESG practice. Just as the MG is intended to be ‘raw material’ for exchanges to use in producing their own, customized reporting guidance, the SWG selection of KPIs is simply a recommendation. We have tried to be transparent about the reasons behind each one, as well as sensitive to the real opportunities and constraints present when asking (or requiring) listed companies for more information.

Exchanges may elect to use the MG and the corresponding KPIs that we have provided without any alteration. By doing so, they can be assured that their approach and impact would be serious and sustained. But exchanges are also encouraged to adapt or amend these KPIs to better suit the needs of their listed companies, to place them within the context of their practices.

We encourage exchanges to be as inclusive and transparent as possible in undertaking this work. The consultation and creation period can take many forms and involve engagement with companies, investors, other priority stakeholders and subject matter experts. This is necessary to better understand the demand for ESG disclosure and ensure that any exchange effort in this regard will have a real and lasting impact. Exchanges can investigate the challenges that exist in a particular marketplace, as the MG document makes clear:

- Levels of reporting, where there is insufficient ESG data reported by companies
- Format of reporting, where the data is being reported in a way that does not enable the target audience to access and use it adequately
- Content of reporting, where the information provided is not meeting the demands of the intended audience; for example, there is no clear link to financial impacts or the demand for quantified data is unsatisfied

In general, exchanges may want to contextualize the contents of this document to:

- Complement existing guidance on corporate financial, governance, or ESG reporting
- Create new or dramatically improved guidance on ESG disclosure
Other Considerations

Reporting Mechanisms. This document recommends the collection and transparent dissemination of listed company ESG data on a regular basis, but we wish to emphasize that exchanges control this aspect of implementation. In most cases, exchanges have robust disclosure processes already in place. This process normally takes place on an annual basis—which seems sufficient for ESG data transmission as well. Once the form and timing of ESG disclosure was set by the exchange, this data could simply be added into the mix. In other cases, exchanges may prefer to use a third party collector or stand-alone system. We only caution against giving the impression that ESG data is somehow less vital or less integrated in the investment process than "traditional" financial data.

Consultation and Engagement. Exchanges are advised, whenever possible, to look within their markets for partners to assistant in this work. This adds expertise into the process that exchanges may not have in house (just as the SWG serves in this capacity for exchange members), but also broadens and diversifies the engagement pool at the outset of the program. Potential participants include investors and investor advocacy groups, regulators, NGOs, listed company representatives, and outside experts. This document does not specifically recommend global or regional consultation partners, but we do list the most prominent sustainability reporting agencies in Appendix A, which may be a useful place to begin. In addition, the SWG will continue to serve as a resource and information clearinghouse for exchanges in this regard.

Materiality. While the concepts of “materiality” and “material business impact” are essential to a proper evaluation of ESG cause and effect, it is not the intention of this document to define the process whereby materiality is evaluated. That work must be undertaken by the corporate reporters—possibly in concert with more detailed guidance from their listing exchange—and with the interests of their stakeholders at heart. The SWG can and will, however, provide assistance in the evaluation of materiality for any exchange that requires it. This assistance might come through education, expert consultation, the drafting of case studies or further research.

- For a better understanding of the concept of materiality, we refer you to guidance provided by the Global Reporting Initiative and the Sustainability Accounting Standards Board.

Why Should Companies Report Sustainability Metrics?

If and when exchanges decide to create issuer guidance for ESG disclosure, they can make the value proposition clear to the listed company audience. This is especially true if there will be no listing rule or “comply or explain” rationale behind the guidance – essentially, exchanges will have to market the value of participation. We refer exchanges to the summary of value drivers that we listed in the MG document, as summarized below. Taken together, they demonstrate the positive impacts of better disclosure.
Access to Capital

- Demonstrate transparency and effective management and enhance the company’s ability to attract long-term capital and favorable financing conditions.
- Enhance the company’s ability to attract longer-term investors, including major institutional investors such as pension funds (in fact, some funds actually have mandatory requirements in this regard)

Profitability and Growth

- Generate financial value for the company by identifying opportunities for cost savings, revenue generation, and risk mitigation.
- Drive continuous improvement by creating accountability and fostering collaboration with stakeholders.
- Create a deeper understanding of stakeholder needs, which could drive innovation and enhance market differentiation and competitiveness.
- Enable management and board scrutiny of ESG opportunities and risks, and promote company-wide alignment on goals.

Compliance and Risk Management

- Address mandatory reporting requirements on financially material factors and mitigate compliance risks related to financial disclosure regulations.
- Establish measurement and reporting processes for ESG information.
- Help the company stay ahead of emerging ESG and disclosure regulations.
- Secure the company’s license to operate by demonstrating corporate transparency and responsiveness to stakeholder needs.

Corporate Reputation and Branding

- Demonstrate corporate commitments to responsibly managing environmental, social, and economic impacts.
- Exhibit corporate adherence to industry ethical standards and national and international frameworks on corporate sustainability and sustainable development, particularly in light of the UN Sustainable Development Goals.
- Enhance corporate reputation by improving stakeholders’ perception of a company through reporting-related stakeholder engagement.
- Improve employee perception of the company, helping to attract, retain, motivate, and align new and existing employees.

Information Flow

- Ensure that the key stakeholder(s) have the relevant information that is needed to make informed decisions about the company’s ability to create value in the short, medium and longer term
Enhanced Stakeholder Relationships and Engagement

- Improve relationships with key stakeholders by engaging throughout the reporting process.

Measurable Achievements

- Measure the realization of strategy and the extent of ESG impacts. Reporting should enable the measurement of success or progress in key corporate strategies as well as impacts of corporate practices.

Next Steps

The SWG will continue to debate the merits of this recommendation internally and with key external participants from the corporate, NGO, regulatory, and investor space. Although we have been tasked with delivering a recommendation to the AGM by a specific point in time, we consider this work to be ongoing and evolving, constantly seeking to take new dynamics into account. It is also our hope that the first round of guidance implementation at the member exchanges will lead to greater learning. Through that process, we will update and amend the recommendation as necessary.

In the near term, however, there are a number of processes that must take place. The list below is a summary of the major points on the timeline, but it is not necessarily chronological or comprehensive.

1. Deliver the SWG Recommendation (narrative and metrics) to the WFE Board of Directors
2. Socialize and educate the general WFE membership at the AGM and/or subsequent meetings
3. Solicit Recommendation feedback and/or approval from the WFE member exchanges
4. Make the Recommendation public
5. Issue a statement from the SWG, WFE, or individual exchange members concerning the timeline and/or expectation of integrating sustainability reporting guidance
Appendix A: Sustainability Reporting Frameworks

- **CDP** (formerly the Carbon Disclosure Project) is a global not-for-profit organization, founded in 2000 and headquartered in London. CDP requests standardized climate change, water and forest information from some of the world’s largest listed companies through annual questionnaires sent on behalf of institutional investors that endorse them as ‘CDP signatories’. These shareholder requests for information encourage companies to account for and be transparent about environmental risk.

- The **Global Reporting Initiative (GRI)** is an international, not-for-profit organization working in the public interest towards a vision of a sustainable global economy where organizations manage their economic, environmental, social, and governance performance and impacts responsibly. Thousands of corporate and public sector reporters in over 90 countries use the GRI Guidelines. More than 24,000 reports have been registered in GRI’s Sustainability Disclosure Database and 27 countries and regions reference GRI in their policies. GRI’s activities are two-fold: firstly the provision of sustainability reporting guidelines and secondly, the development of engagement activities, products and partnerships to enhance the value of sustainability reporting for organizations.

- The **International Integrated Reporting Council (IIRC)** is a group of international leaders from the corporate, investment, accounting, securities, regulatory, academic, standard-setting and civil society areas with a mission to create the Integrated Reporting framework. The Framework will provide material information about an organization’s strategy, governance, performance and prospects in a concise and comparable format, a fundamental shift in corporate reporting.

- The **Sustainability Accounting Standards Board (SASB)** is a non-profit U.S.-based organization, has a mission to create and disseminate accounting standards that reporting issuers can use to disclose material sustainability factors in filings with the Securities and Exchange Commission. Developing provisional standards for more than 80 industries in 10 sectors, SASB researches material factors within industries, convenes industry working groups, and conducts a public comment period to establish accounting metrics, and provides education on recognizing and accounting for material nonfinancial factors. SASB plans to release provisional sustainability standards for all sectors and industries by 2016. The SASB Materiality Map is a visual tool that helps users identify SASB disclosure topics on an industry-by-industry basis and compare the potential materiality of various sustainability factors across different industries and sectors.

- The **United Nations Global Compact (UNGC)** is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption. It comprises more than 13,000 organizations in 80 local networks worldwide. Business participants are expected to publicly report on their progress in an annual Communication on Progress.
Appendix B: WFE Member Exchanges Already Providing Sustainability Reporting Guidance

BM&FBOVESPA S.A. (Brazilian Exchange)
Guidance: Novo Valor: Corporate Sustainability (2011)
Other Resources: The Value of ISE: Main Studies and Investor Perspective (2012)

Borsa Istanbul (Istanbul Exchange)
Issuer Guidance

BSE India Ltd. (Bombay Stock Exchange)

Bursa Malaysia (Malaysian Exchange)
Guidance:
- Powering Business Sustainability – A Guide for Directors
- Corporate Disclosure Guide (2011)
Other Resources:
- Sustainability Knowledge Portal
- Self Diagnostic Questionnaire on Sustainability Practices

Colombian Securities Exchange
Guidance:
- Inversión Responsable y Sostenible: Visión General, Prácticas Actuales y Tendencias (2014)

Deutsche Börse AG (German Exchange)
Guidance: Communicating Sustainability: Seven Recommendations for Issuers (2013)

Hong Kong Exchanges
Guidance:
- Appendix 27 - Environmental, Social and Governance Reporting Guide
- Steps for ESG reporting (September 2011)
Other Resources:
- Draft ESG Reporting Guide – A Toolkit (September 2011)
- ESG Reporting Guide Seminar and Workshop Materials
Johannesburg Stock Exchange

Guidance: SRI Index Background and Criteria (2014)

National Stock Exchange of India


Other Resources: Corporate Governance: An Emerging Scenario

Shenzhen Stock Exchange


Singapore Exchange


Other Resources: An Investor’s Guide to Reading Sustainability Reports (2013)

Taiwan Stock Exchange

Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies

The Stock Exchange of Thailand

Guidance:
- Guidelines for Sustainability Reporting (in Thai)
- Guidelines for Social Responsibility (in Thai)

Other Resources:
- Principles of Good Corporate Governance for Listed Companies (2012)
- CSR for Sustainability (in Thai)

TMX Group Inc. (Toronto Stock Exchange)

Guidance: A Primer for Environment & Social Disclosure (2014)
<table>
<thead>
<tr>
<th>ESG Metric</th>
<th>Measurement</th>
<th>Reference</th>
<th>Rating</th>
<th>Description</th>
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<tr>
<td>Environment</td>
<td>Direct &amp; Indirect GHG Emissions*</td>
<td>Total amount, metric tons (Scope 2 &amp; 3)</td>
<td>EN16 T16</td>
<td>Encourage companies to transparently manage risks and opportunities</td>
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<tr>
<td>Carbon Intensity</td>
<td>Total Emissions relative to Revenue</td>
<td></td>
<td>EN18 L.C.1</td>
<td>Developing well-functioning, more resilient, less volatile markets</td>
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<tr>
<td>Environment</td>
<td>Direct GHG Intensity</td>
<td>Amount of Direct Energy used per $1 of Sales</td>
<td>EN19 H4</td>
<td>Developing well-functioning, more resilient, less volatile markets</td>
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<td>Primary Energy Source</td>
<td>Specific Energy Type in major direct usage</td>
<td>Helping companies outcompete on ESG matters</td>
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<td></td>
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<td>Renewable Energy Intensity</td>
<td>Percentage of Direct Energy Consumption from Renewable Sources</td>
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<td>ESG Water Management*</td>
<td>Total amount of water consumed, recycled, or reclaimed, m3</td>
<td>EN30</td>
<td>Contributing to national and international sustainable development goals</td>
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<td>Waste Management</td>
<td>Total amount of waste generated, recycled, or reclaimed (by type and weight)</td>
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<td>Contributing to national and international sustainable development goals</td>
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<td>Environmental policy</td>
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<td>Environmental impacts</td>
<td>Does all your company have any ESG disclosure?</td>
<td>Yes/Yes/No</td>
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<td>Social</td>
<td>CEO Pay Ratio</td>
<td>Ratio: CEO Salary &amp; Bonus to Median Employee Salary</td>
<td>CC14 2X</td>
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<td>Social</td>
<td>Employee Turnover Rate*</td>
<td>Percentage of Changes for FT Employees, Contractors, Consultants</td>
<td>LA13</td>
<td>Creating more attractive markets for engaged investors</td>
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<td>Social</td>
<td>Gender Diversity</td>
<td>Percentage of FT Employees, Contractors, Consultants Held by Women</td>
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<td>Developing well-functioning, more resilient, less volatile markets</td>
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<td>Social</td>
<td>Temporary Worker Rate</td>
<td>Percentage of FT Employees Held by Part-Time/Contract/Temp Workers</td>
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<td>Non Discrimination</td>
<td>Does your company follow and enforce a non-discrimination policy? Yes/No</td>
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<td>Social</td>
<td>Injury Rate*</td>
<td>Total number of injuries and fatalities relative to workforce</td>
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<td>Child Development &amp; Education</td>
<td>Number of children enrolled in educational and non-educational health initiatives</td>
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<td>Child Forced Labor</td>
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<td>Encouraging companies to transparently manage risks and opportunities</td>
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<td>Social</td>
<td>Human Rights policy</td>
<td>Does your company publish and a Human Rights policy or statement? Yes/No</td>
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<td>Social</td>
<td>Human Rights disclosures</td>
<td>Number of grievances about human rights impacts filed, addressed, or resolved</td>
<td>LA21</td>
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<td>Social</td>
<td>Board Ethnicity</td>
<td>Percentage of Board Seats filled by Independents &amp; Women</td>
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<td>Social</td>
<td>Governance Board - Separation of Powers</td>
<td>Does your company allow the CEO to sit on the board, act as chairman, or lead committees?</td>
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<td>Promoting corporate governance and efficiently regulated markets</td>
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<td>Social</td>
<td>Incentivized Pay</td>
<td>Are company executives formally incentivized to perform on ESG? Yes/No</td>
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<tr>
<td>Social</td>
<td>For Lab Practices</td>
<td>Does your company (or supply chain) work with workers from organizations that do? Yes/No</td>
<td>LA25</td>
<td>Creating more attractive markets for engaged investors</td>
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<td>Social</td>
<td>Transparency</td>
<td>Does your company publish and follow a tax policy that is overseen by the Board? Yes/No</td>
<td>LA26</td>
<td>Helping companies navigate current or forthcoming disclosure regulation</td>
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<td>Other</td>
<td>Framework Disclosures</td>
<td>Does your company publish a sustainability report? Yes/No</td>
<td>LA27</td>
<td>Promoting corporate governance and efficiently regulated markets</td>
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<tr>
<td>Other</td>
<td>Exchange Value Driver</td>
<td>Does your company's ESG disclosures assured or validated by a third party? Yes/No</td>
<td>LA28</td>
<td>Contributing to national and international sustainable development goals</td>
</tr>
</tbody>
</table>

* First-Generation" sustainability indicators

- "First-Generation" sustainability indicators
  - Developing well-functioning, more resilient, less volatile markets
  - Encouraging companies to transparently manage risks and opportunities
  - Helping companies navigate current or forthcoming disclosure regulation
  - Promoting corporate governance and efficiently regulated markets
  - Contributing to national and international sustainable development goals
  - Helping companies outcompete on ESG matters
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