

LatAm ESG

The ESG Dialogue in LatAm Is Gaining Momentum: Takeaways from Our First Forum in Mexico City

OUR TAKE: Positive. We hosted our first full-day conference on ESG in Mexico City on June 5, coinciding with [World Environment Day](#). The purpose of our conference was threefold: (1) to understand global trends in governance, activism, and ESG from the viewpoint of [Morrow Sodali](#), and learn more about the alignment between Alsea (TP MXN 56.00, Sector Outperform, covered by Rodrigo Echagaray) and [Cartica](#), a global activist in emerging markets; (2) to provide an overview of the ESG "ecosystem" – that is, how credit agencies, the buy side, and the sell side include ESG in their analysis, and the data challenges involved; and (3) to explore how Mexico-based issuers view ESG. [Valora](#), a global consultancy firm, provided insights and valuable content for our panels.

At Scotiabank, we care. In [March 2019](#), Scotiabank launched its new strategy on sustainable business, focusing on four core priorities: Trust, Climate Change, Economic Inclusion, and Young People. On the equity research side, in [March 2018](#) we ranked the 100+ LatAm-based companies under coverage on environmental factors. In [November 2018](#), Patrick Bryden launched Scotiabank GBM's ESG investment research in Canada and recently hosted a very well attended [ESG conference](#) in Toronto.

KEY POINTS

Takeaways on activism from [Morrow Sodali](#), [Cartica](#), and [Alsea](#):

- Ten trends that are altering both the expectations of shareholders and the valuation of companies in the financial markets. LatAm issuers should take note.
- LatAm companies should embrace collaboration, as [Alsea](#) does.
- In corporate and market practices, Mexico has plenty to learn from Brazil.

Takeaways from our discussion on the ESG ecosystem:

- Many boards in Mexico stand in the way of change.
- Standardization of material non-financial disclosures is needed.

The view on ESG from leading issuers in Mexico:

- **Banorte:** One of the 28 global founders of the principles for responsible banking.
- **Cemex:** A leader in CO₂e emission cuts; major steps in improving [governance](#) are underway.
- **Fibra Prologis:** Beyond the "E" and the "G", it's the "S" that matters most.
- **Rotoplas:** A role model as LatAm's first issuer of a sustainable bond.
- **Walmex:** Teaching a master class on how to build a materiality matrix.

Dissemination: June 19, 2019, 16:01 ET. Production: June 19, 2019, 15:52 ET.

ANALYST TEAM

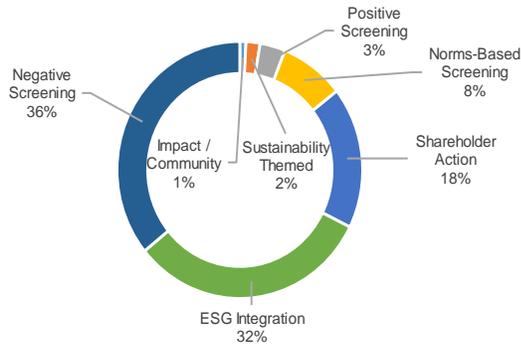
[Link to ScotiaView](#)

Francisco Suarez | Analyst
52-55-9179-5209
Scotiabank Inverlat

Ramon Obeso, MBA | Associate
52-55-9179-5236
Scotiabank Inverlat

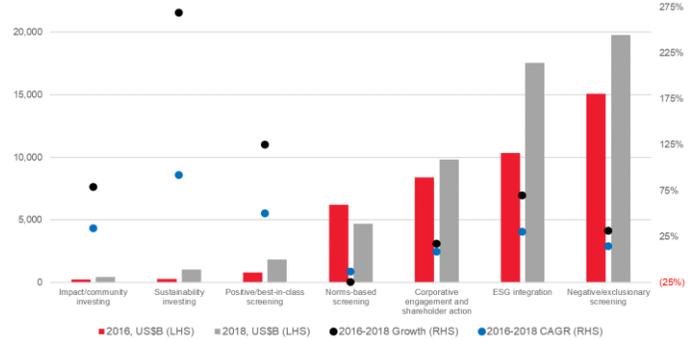
ESG Investing: Let's Look at the Numbers

Exhibit 1: Investment Themes in ESG Dominated by Negative Screening, ESG Integration, and Activism



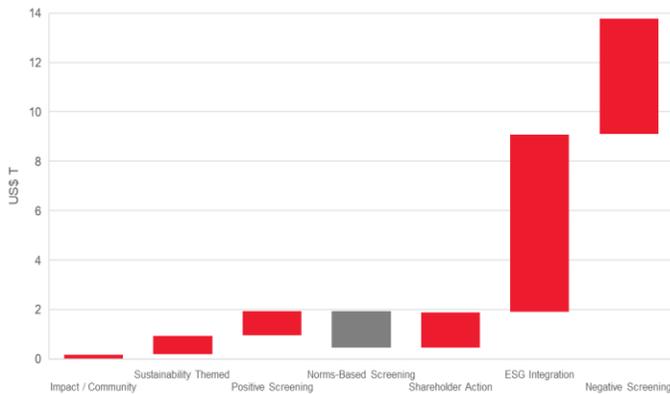
Source: Valora; Scotiabank GBM.

Exhibit 2: Momentum Is Good – AUM Grew ~33% in Two Years to ~US\$55T



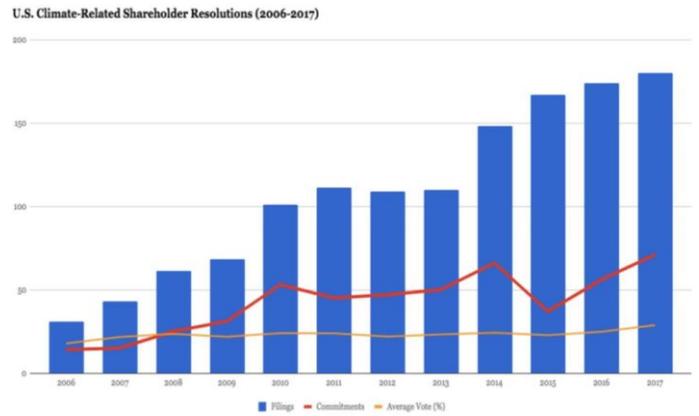
Source: Valora; Scotiabank GBM.

Exhibit 3: ESG Integration Is Contributing the Most to Growth in AUM



Source: Valora; Scotiabank GBM.

Exhibit 4: Investors Are Increasingly Expressing Their Views on Climate Change at Shareholder Meetings



Source: Valora.

Our First Panel: The Future of Activism in LatAm – The Developed Markets Experience

We view corporate governance – the “G” – as the glue that holds ESG together. Without the G, any efforts on the “E” or “S” fronts are likely to be undermined. The first panel at our conference aimed to provide a better understanding of the global trends taking place in both governance and activism. LatAm countries, and Mexico in particular, are already lagging behind – issuers should take note of this, and we think investors can help close the gap with developed markets.

In our discussion, we first outlined the major global trends that are setting the stage for activism to take on a larger role and facilitating future interactions between issuers and stakeholders. We discussed the basics of activism, followed by a talk on market practices, before switching to a real-life example of the impact of activism on corporate practices: Alsea and Cartica.

The panel featured Mike Lubrano, Co-Founder and MD of Corporate Governance and Sustainability at Cartica; John Wilcox, Chairman at Morrow Sodali; and Ivonne Madrid, Head of Sustainability at Alsea. Francisco Suarez moderated the panel on behalf of Scotiabank GBM and provided context.

Ten Trends That Are Altering Shareholder Expectations and Company Valuations in the Financial Markets

John C. Wilcox, Chairman of Morrow Sodali

1. **Board primacy.** The board of directors has clearly defined responsibilities for which shareholders hold it accountable, creating a need for greater transparency about board decisions.
2. **Compensation.** A perennial governance issue, compensation is viewed by shareholders as a window into the boardroom and even more deeply into the character, values, and sustainability of the business enterprise.
3. **Stewardship principles.** Institutional investors are now exercising fiduciary care in their oversight of portfolio companies, their proxy voting decisions, and their response to activism.
4. **Corporate reporting.** Institutional investors are looking more deeply into the inner workings of companies and pushing for information that goes well beyond the traditional disclosure guidelines.
5. **Engagement.** In addition to traditional Investor Relations road shows, companies and boards are now expected to conduct governance road shows that reach out to institutional stewardship teams, as well as portfolio managers.
6. **Activism.** Shareholder activism calls attention to companies with poor performance, weak governance, and unclear business strategy, requiring them to increase transparency surrounding business strategy, corporate governance, and sustainability.
7. **ESG.** No longer viewed as “soft” or “moral” issues, environmental, social, and governance practices are now investment criteria that define both financial risk and long-term sustainable performance.
8. **Integrated reporting.** The International Integrated Reporting Council (IIRC), a movement that seeks to transform how companies think and communicate, is gaining momentum as a global movement.
9. **Technology, social media, and retail shareholders.** Companies face new challenges and risks in the form of robo-brokers, millennials investing (and potentially voting) through digital devices, high-frequency trading, cybersecurity concerns, and social media commentary on corporate behavior.
10. **Regulation and legislation.** Over time, there will be greater co-ordination among regulators in different jurisdictions to facilitate share voting and cross-border transactions, reflecting the global demands and investment practices of institutional investors.

Activism: Some Basic Definitions

How does one define an “activist” investor? An activist investor is a large shareholder that tries to implement major changes within the company. The changes can be financial, such as cost-saving strategies or improving the company’s financial structure, and non-financial, such as improving corporate governance or implementing environmentally friendly policies.

Should we consider different types of “activism”? Yes, there’s the opportunistic activism that looks only for short-term gains, where the investor is the primary winner. There’s also the principled activist that works as an advisor for the company and looks for long-term gains; here, both the investor and the company are winners.

What have activist investors traditionally pursued? Most activist investors generally focus first on improving transparency and disclosure. According to John Wilcox, “corporate reporting needs to go well beyond the traditional disclosure in order to have a better assessment behind all risks related to the company’s operation, including all ESG factors.”

What attributes (besides financial performance) do activist investors look for? Board diversity (e.g., gender, backgrounds, and profiles); board structure and the number of truly independent members; environmentally friendly policies; and social responsibility programs. Panel participants highlighted that “the value of a company is also related to the value it creates for society.” Boards that make themselves accountable to shareholders are likely to behave well, aiming to “treat shareholders the same way you treat customers.”

How do investors evaluate ESG? Do activist investors take a different approach? ESG factors are now seen as “hard” investment criteria by investors. Mr. Wilcox believes that ESG practices should now be considered a crucial part of any analysis for investors to assess both financial risk and long-term sustainable performance. For instance, capex could grow substantially and/or profits and dividends may suffer if a company were to face negative regulatory action, not to mention reputational risks.

Market Practices: How Does ESG Fit In?

What governance practices are perceived as most relevant from an institutional and activist investor point of view? Awareness at the board level is crucial, as well as transparency and disclosure. In the past, many companies feared that key information metrics disclosed could be used by their competitors. Now, however, transparency should not be an issue – a company’s value should relate more to its operations, the way it creates value for stakeholders, and whether it is proactively managing risks or seizing opportunities.

Compared with other LatAm countries, what market and governance practices would you consider to be detrimental in Mexico? Mr. Lubrano from Cartica mentioned that it is important to know who sets the code of corporate governance in each country. For instance, in Mexico, the Consejo Coordinador Empresarial (CCE), an autonomous organization that represents the business community in Mexico, is in charge of setting corporate governance guidelines. This is not ideal, as it may give rise to a potential conflict of interest since the companies set the code. In contrast, in Brazil, the organization that sets the code in corporate governance is the Brazilian Institute of Corporate Governance, a civil organization created specifically to generate and share best practices in corporate governance among listed companies.

Is ESG helping to standardize market practices? As regulation and legislation become more global, coordination among regulators in different countries will become the new normal. This will facilitate share voting and cross-border transactions, reflecting the global demands and investment practices of institutional investors worldwide. Hence, we believe LatAm-based companies will have to adopt ESG-related international standards in order to be eligible for greater international investment.

Cartica Meets Alsea: A Case Study on Corporate Practices

Cartica, based in Washington DC, has a long history in Latin America. In Colombia, it pushed Cementos Argos to make changes, and in Mexico, in addition to the Alsea case (see below), it helped to institute extended notice periods for shareholder meetings and ensured the availability of electronic materials at the meetings.

The discussion between Mr. Lubrano from Cartica and Ms. Madrid from Alsea was of great value to our conference audience. The two speakers shared their experience on all the processes followed after Cartica approached Alsea. Below, we provide some excerpts from the discussion.

Could you please share your initial thoughts on Cartica's approach? For Alsea, it wasn't easy at first. For a company not used to dealing with activist investors, the first reaction is one of opposition. During that first interaction, companies may be reluctant to share information, processes, and other key metrics. That's why it is crucial for the company to listen carefully and understand what the investor wants. In the end, what principled activists seek is for the company to perform well.

How would you describe the internal evolution, or transformation, that was brought about by Alsea's dialogue with Cartica? For Alsea, the internal evolution began with improving management and transparency. The information flow improved at all levels across the company. The two parties worked together closely, as if they both were working for the same organization with a common goal. For Alsea, activist investors should be seen as allies of the company, rather than opponents.

What have been the consequences of this dialogue between Cartica and Alsea? One of the consequences of having an activist investor like Cartica was that it forced Alsea to think globally. The company implemented international corporate governance standards that helped management to professionalize and institutionalize the firm.

What advice would you give to an issuer approached by an activist investor? Listen, listen, and listen! Be open to all suggestions.

What advice would you give to an activist investor when approaching an issuer? Before approaching a company, interview the analysts that cover the company. Make sure the activist's team really understands the company before approaching it.

Conclusions

Do you expect an increase in investor activism in Mexico and LatAm? Yes. In Mexico, there is a myriad of great companies with good long-term prospects and very experienced control groups that can benefit from different views. These changes can lead to improvements in operations and make the companies more attractive to foreign investors.

Our Second Panel: The ESG Ecosystem in Mexico

The ESG Ecosystem is generally described as a set of different yet complementary groups that interact with each other and use ESG information reported by issuers. The major groups in this ecosystem are (1) issuers; (2) organizations that set standards, such as CDP, the Sustainability Accounting Standards Board (SASB), and the Global Reporting Initiative (GRI); (3) players creating a framework like the Task Force for Climate Related Disclosure (TCFD), and the International Integrated Reporting Council (IIRC); (4) organizations in charge of auditing ESG information; (5) data providers like Sustainalytics, MSCI, and Bloomberg; (6) the sell side; (7) the buy side; (8) credit rating agencies; (9) regulators; and (10) NGOs, organizations, associations, and consultancies that focus on ESG, such as Science Based Targets, World Business Council for Sustainable Development (WBCSD), and World Wildlife Fund (WWF).

Our second panel attempted to explore a tiny portion of the ecosystem described above, by answering a simple question: How do credit rating agencies, the buy side, and the sell side include ESG in their analysis? The panel featured Luis Martínez, Senior Director at Standard & Poor's; Irving Vázquez, Senior Equity Analyst at Afore Sura; and our equity analyst Francisco Suarez. Javier Ballesteros, on behalf of Valora, moderated the panel, and provided context.

Question: Why include ESG in investment decisions? How is interest in ESG evolving in Mexico and LatAm?

Afore Sura: Why ESG is important for Sura? Economically, it's about adding alpha and the ability to win mandates from foreigners. Lastly, it's about branding. On governance, it's about our fiduciary role in terms of making sure that off-balance sheet risks are adequately addressed. Socially, it's about our responsibility with the pensions of more than seven million workers. Perhaps the most pressing factor is the environment; all of us are responsible for climate change.

Standard & Poor's: ESG has been a part of the credit rating business for more than 20 years, although we have made more formal and explicit contributions over the past 10 years, particularly on corporate governance. Now we are providing more value-add for investors.

Scotiabank GBM: If a sell-side analyst wants to be relevant, he or she has to include ESG in their analysis and models. Ultimately, not including ESG in the analysis could mean missing major risks or opportunities that we have to capture in our projections and/or a company's cost of capital forecast. To some extent, it's a more efficient way to estimate risk-adjusted returns: all things equal, among securities with prospective similar results, those with better ESG scores should be preferred.

Question: How are ESG factors included in asset management, credit risk, and company valuations?

Standard & Poor's: This year, we are adding an ESG section to our publications; on May 13, 2019, we launched our **ESG Risk Atlas**, which gives investors a view on the relative risk exposure of different countries and regions to natural disasters. It also sheds light on the relative quality in corporate governance and the strength of ESG regulations. It is important to mention that our ESG assessment is different from and independent of our credit ratings; the time horizon is also different. For instance, our ESG assessment should last for the next 15 to 20 years, while credit ratings are usually shorter term in nature, say, two years in length.

Afore Sura: Non-financial disclosures are material to building a complete risk profile on an issuer. If we didn't include this type of information in our analysis, we would fail to meet our fiduciary duty.

Scotiabank GBM: So far, in our ESG-related LatAm research, we have ranked 100+ LatAm-based companies according to environmental factors. We still have to develop additional methodologies and

ultimately integrate all factors into our analysis. We think ESG could be material in terms of prospective returns, potentially affecting cash flows and the cost of capital of entire industries. Ultimately, it's about potential de-ratings or re-ratings. On environmental factors alone, entire industries could be exposed to carbon taxes, more regulation, and structural shifts in demand for their products and services. Based on our methodology, even for those industries with a higher risk to, say, CO₂ emissions, we see winners and losers, and this could serve as a value-add for the buy side – it's very risky for them to have zero exposure to entire sectors and/or companies with a high weighting on their benchmarks.

Question: What barriers prevent the full integration of ESG factors in corporate analysis?

All respondents: Perhaps the most pressing challenge relates to the proper disclosure and standardization of information related to ESG. For instance, it has been four years since it went mainstream in Europe, and companies have now harmonized their reporting standards to meet investor needs. LatAm needs to play catch-up. Panelists noticed that there is a very limited knowledge of ESG at some companies.

Scotiabank GBM: In our ranking, we included a section on how companies report non-financial information. For us, ESG awareness at the board level is paramount for any company that wants to truly embrace ESG. Essentially, we tried to answer a very simple question: can the board of any given company outline a clear business strategy on ESG? Awareness of and commitment to ESG, for us, starts with the quality of external information. For instance, we found out that even though the vast majority of the 100+ LatAm-based companies under coverage do publish a sustainability report, just 30% do so under GRI standards, and just 50% answer CDP questionnaires.

Question: What are the challenges in corporate governance for Mexican issuers, and what is the investor's role to help them overcome such challenges?

All respondents: To answer this question, our conference participants pointed to the board of directors. Lack of awareness at the board level can be a major problem, and in some cases, boards stand in the way of change. On the other hand, some boards are embracing change, and their business strategies are either aligned with Sustainable Development Goals (SDGs) or target major structural changes like the migration to a low-carbon economy. Some family-controlled boards may be reluctant to change, and for this type of company, Europe may serve as a good role model. Many companies based in Europe are family-run, but their long-term strategies are aligned with ESG principles. In some cases, this strategy is driven by regulation; in others, it's just for business reasons.

Third Panel: Views on ESG from Leading Listed Companies in Mexico

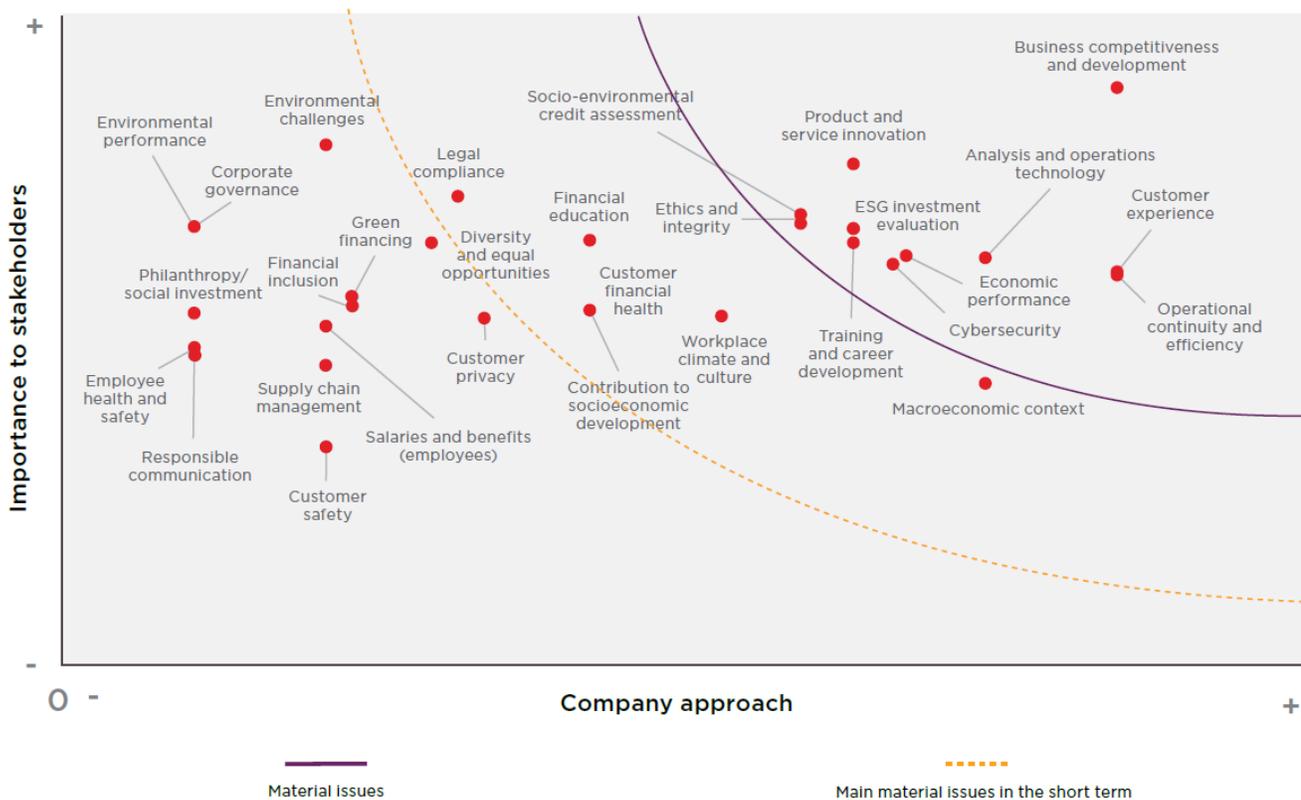
Grupo Financiero Banorte

Scotiabank GBM 2018 Environmental Ranking: First Quartile

CDP 2018 Score: C (Climate Change)

Rating: Sector Outperform Target Price: MXN 114.00 Analyst: Jason Mollin

Exhibit 5: ESG Is a Material Concern for Banorte



Source: Company reports.

How have ESG-related changes required by investors, raters, rating agencies, and ESG indexes affected Banorte?

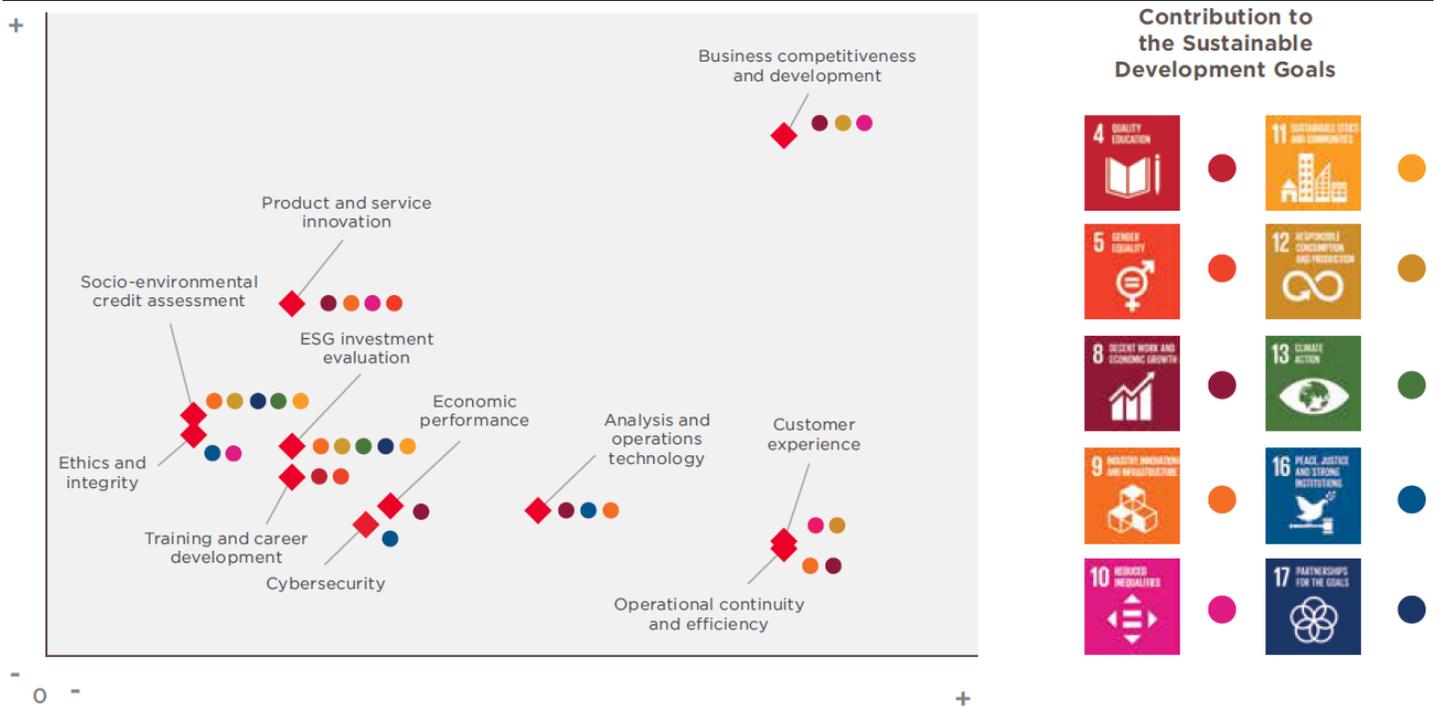
The changes have produced better integration across all business lines, which is in itself a huge challenge for a financial group as complex as Banorte. The requirements grow in size and scope every year, and Banorte has increased its level of disclosure. Collaboration across different business lines results in better and new practices, new programs, and new KPIs. Being approached by activists has helped as well. The development of a sustainability committee makes it a more integral part of the bank's strategic planning.

What ESG trends are underway at financial institutions, and what milestones has Banorte achieved?

At Banorte, it's about sustainable finance and the trend to align reporting standards to [Task Force on Climate-Related Disclosures](#) (TCFD), as well as developing a system of social and environmental risks in the loan portfolio. One major milestone that Banorte has achieved relates to the development of the [principles for responsible banking](#), of which Banorte is one of 28 global founders. Such principles imply that banks are a major driver behind development, thus their role should be aligned with the SDGs, pledges for CO₂e emission cuts, and national development goals.

Despite the complexities of the financial group, several areas are working to identify risks and opportunities related to younger generations, climate change, and technology.

Exhibit 6: Banorte's Contribution to SDGs



Source: Company reports.

Cemex

Scotiabank GBM's 2018 Environmental Ranking: First Quartile

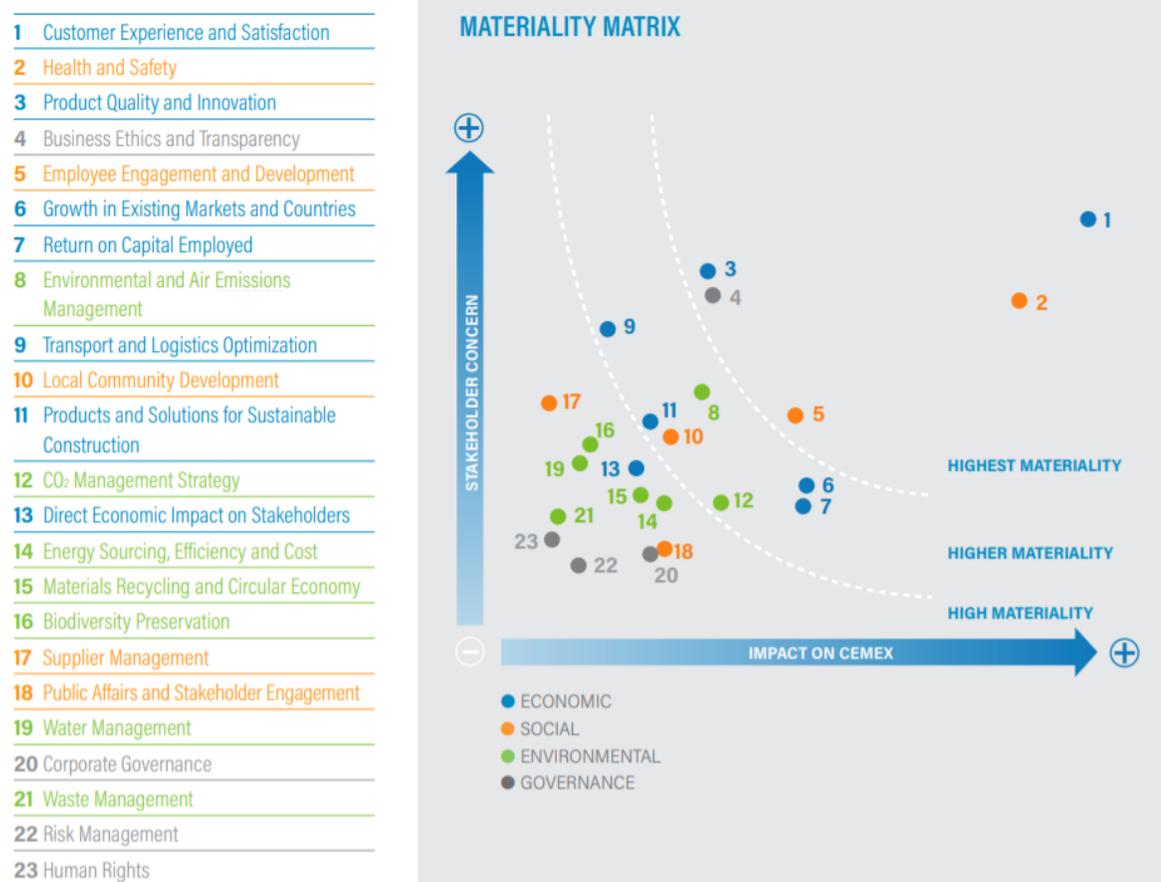
CDP 2018 Score: B (Climate Change)

Rating: Sector Perform

Target Price: US\$6.80

Analyst: Francisco Suarez

Exhibit 7: CX Materiality Matrix – ESG Is Extremely Important



Source: Company reports.

What progress has Cemex made on corporate governance in recent years?

Although the company recognizes that further improvement is needed in corporate governance, Cemex created an EVP position in sustainability that reports directly to the board of directors. It has learned to communicate better and standardize the important information needed – a case in point is the publication of its first integrated report for year-end 2017. Also, Isabel María Aguilera Navarro was recently appointed as Cemex's first female independent board member. In our view, Cemex's board should benefit from someone with an outsider's view, who is not Mexican (Ms. Aguilera is from Spain), and who has experience in multinationals, information technology, and digitization, given the CEO's big push to go digital.

What measures has Cemex taken to reduce its environmental impact?

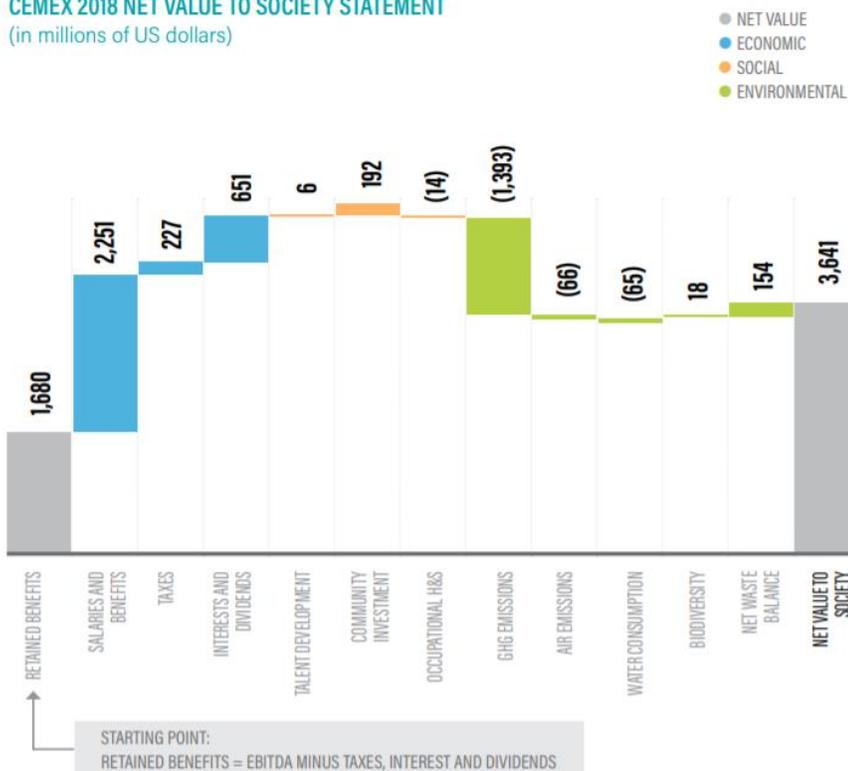
The company has invested US\$83M in sustainability projects to strengthen its environmental performance, and 98% of its clinker was produced at plants with continuous emissions monitoring systems, close to the company target of 100% by 2020. Cemex has avoided direct and indirect CO₂ emissions (versus the 1990 baseline), mainly through clinker factors, alternative fuels, and renewable energy. As a result, the company reduced net CO₂ emissions per ton of cementitious products by more than 21.6% in 2018 (versus the 1990 baseline). It is now targeting a reduction of 29% by 2030, which, in terms of emissions, is equivalent to the annual electricity consumption of 1.4M homes. Cemex has also set aggressive targets to reduce indirect CO₂ emissions: by 2030, 40% of Cemex's cement operations should be supplied by renewable sources (the company achieved 26% in 2018). Other targets include a 95% reduction of dust emissions per ton of clinker from 2005 levels by 2030 (87% achieved in 2018); a 47% reduction of NOX emissions per ton of clinker from 2005 levels by 2030 (45% achieved in 2018); and a 67% reduction of SOX emissions per ton of clinker from 2005 levels by 2030 (64% achieved in 2018). All targets on climate change mitigation are calculated using the Science Based Targets (SBT) methodology.

Cemex has also made great strides in improving disclosure, and the investor relations and sustainability teams are working closer together. For example, Cemex has calculated the net value to society starting from retained earnings (EBITDA minus taxes, interest, and dividends) and adding or subtracting all the economic, social, and environmental impacts of the company's operations (see Exhibit 8).

Exhibit 8: Cemex Net Value to Society

CEMEX 2018 NET VALUE TO SOCIETY STATEMENT

(in millions of US dollars)



Source: Company reports.

Fibra Prologis

Scotiabank's 2018 Environmental Ranking: Third Quartile

CDP 2018 Score: C (Climate Change [Parent Company])

Rating: Sector Outperform Target Price: MXN 43.00

Analyst: Francisco Suarez

Exhibit 9: Benefiting from the Parent's Expertise – the Obvious, the “E”

| Features | Benefits |
|---|--|
| Cool roofs. | Reduce energy demand and the urban heat island effect. |
| Energy-efficient lighting. | Reduce energy consumption and operating costs. |
| Hybrid and carpool parking and bicycle storage. | Promotes low-carbon transportation solutions. |
| Low-emitting sealants, adhesives, and carpet systems. | Reduce reliance on non-renewable resources, contribute to better air quality, and ensure a healthier work environment. |
| Onsite recycling. | Reduce waste sent to landfills and incinerators. |
| Recycled and locally sourced construction materials. | Decrease carbon footprint and support local economies. |
| Skylights and clerestory windows. | Maximize use of natural sunlight. |
| Solar and other renewables. | Generate sustainable energy. |
| Water conservation. | Reduce natural resource usage. |

Source: Company reports; Scotiabank GBM.

Exhibit 10: Benefiting from the Parent's Expertise – the Not-So-Obvious, the “S”

| Four Tactics to Source, Train, and Retain Labor | Initiatives and Trends |
|---|--|
| Better transport connections: Commuting needs to be as efficient as possible. | The WELL Building Standard is a performance-based system to measure, certify and monitor features of the built environment that impact human health and well-being, including air, water, nourishment, light, fitness, comfort, and mind. |
| More and higher-quality amenities: As labor qualifications increase, amenities become more important. | |
| Logistics, career, and community commitment: A long-term initiative improves the overall image of the logistics sector and creates lasting solutions. | Access to labor is essential and the availability is shaping location strategies. Offering well-equipped warehouses in accessible locations is the answer. In the long term, real estate providers can offer support with continued investment in education and community commitment. Facilitating labor solutions improves long-term relationships with customers and drives a positive investment thesis, and above all, it is a responsibility that all parties in the sector should embrace. |
| Improvement of building characteristics: A basic component of a pleasant and healthy workplace hinges on the facility's environment. | |

Source: Company reports; Scotiabank GBM.

How does Fibra Prologis benefit from the relationship with its parent company, in terms of ESG?

Prologis Inc. (PLD; rated Sector Perform, one-year target price of US\$72.00 per share, covered by Scotiabank GBM analyst Nicolas Yulico) holds a ~47% stake in Fibra Prologis. This year, PLD is the top-ranked U.S. company and sixth overall on the “2019 Global 100 Most Sustainable Corporations in the World” list published by Corporate Knights, announced at the World Economic Forum in Davos. PLD is committed to demonstrating alignment on matters such as climate change, which it views as important to its customers, employees, investors, and communities. In 2018, PLD became the first logistics real estate company with an approved SBT to reduce greenhouse gas (GHG) emissions. The standards at Fibra Prologis are identical to its parent's.

In real estate, “E” is the key letter in ESG – that is, operating energy-efficient buildings that are good for the environment. Tangible implications come from benefits to the cost of capital when issuing **green bonds**. Tenant demand for certifications gives players a competitive advantage as well. Prologis has various certifications worldwide, including the following:

- Building Research Establishment Environmental Assessment Method (BREEAM).
- Leadership in Energy and Environmental Design (LEED) from the U.S. Green Building Council (USGBC).
- Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB), from German Sustainable Building Council.
- Comprehensive Assessment System for Built Environment Efficiency (CASBEE), an industry standard in Japan.

Which factor is most relevant to Fibra Prologis? Environmental, social, or governance?

We think the “S” factor will become more important in the future, because Fibra Prologis has already made good progress on the other two. The “G” factor is crucial in today’s world, especially in markets like Mexico where good governance is not necessarily a given. For 16 years now, Prologis has been ranked #1 REIT on corporate governance by Green Street Advisors.

How to address the “S” factor? Prologis aims to improve the community by helping people to have better jobs and a better life. Prologis has been part of the International WELL Building Institute since 2014, helping people have a better “life” at work through improvements to the indoor environment, lighting, air, space, and walkways – in short, making workspaces more enjoyable and helping tenants retain their workforce.

Some numbers on Fibra Prologis: 21 LEED-certified buildings, 16% of GLA; 83% of GLA has efficient lighting; 8M sf, or 23% of space overhead, covered by cool roofing; smart materials are installed on the properties to promote better energy use. Fibra Prologis has been part of the Dow Jones Sustainability Index since 2017.

Some numbers on Prologis: More than 112M sf of sustainable buildings across 304 projects in 17 countries; first industrial developer approved by USGBC for LEED volume program; first WELL-certified warehouse in the world. The strategy is to minimize water and energy consumption and GHG emissions, implying health and productivity benefits, and minimize GHG effects by being closer to the customer. PLD provides 648,000 sf of rent-free space to 19 non-profit organizations, and donates US\$2M to non-profit organizations, while its employees donate more than 11,000 hours to various organizations throughout the year.

Grupo Rotoplas

Scotiabank's 2018 Environmental Ranking: Not Ranked

CDP 2018 Score: Rotoplas was not required to answer a questionnaire from CDP

Rating: Not Covered

Exhibit 11: Who Says that a Sound Business Strategy Can't Be Aligned with SDGs and the UN 2030 Agenda?



"Considering this analysis and our experience in the water and sanitation sector, the most remarkable contribution is to **SDG 6**, which focuses on ensuring access to water and its sustainable management, and sanitation for all. Our products and services, their implementation through programs for vulnerable communities, and the actions to foster responsible use of water resources are noteworthy."



"We also contribute strategically to **SDG 9**: Build resilient infrastructure, promote sustainable industrialization, and foster innovation. At Grupo Rotoplas, innovation is a key pillar, which triggers the development of solutions, process improvement, and the proposal of business models, open to collaborating with third parties."



"Moreover, we also contribute to **SDG 3** on health and wellbeing, **SDG 4** on quality education, and **SDG 5** on gender equality, differentially as Grupo Rotoplas. With easier access to water, women and children in communities gain more control over their time, which improves school attendance and empowers women to develop outside the home. Moreover, adding the sanitation solutions we deliver, we contribute to reducing the incidence of gastrointestinal and respiratory infectious diseases."

Source: Company reports.

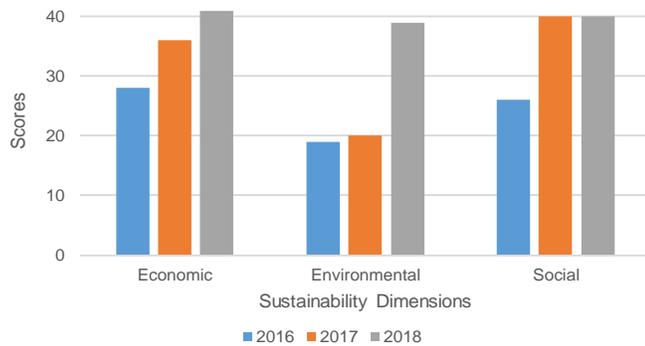
How has Rotoplas embraced ESG since its inception? What changed when the company went public in 2014? Finally, what are the tangible financial benefits for a company aligned with SDGs with social and environmental pledges?

Rotoplas considers sustainability to be part of its DNA. When it went public, the company created a committee on sustainability and has since improved its disclosure and boosted its commitment to transparency and communication. Being a public company and an organization with better checks and balances resulted in better accountability, and this has helped Rotoplas move forward with a sustainability strategy.

A tangible benefit for us is in the cost of capital. **Issuing the first sustainable bond in LatAm** allowed Rotoplas to reduce funding costs (see [Sustainalytics' opinion](#) on Rotoplas' sustainable bond). It makes sense to issue sustainable or green bonds: when ESG factors are strong, investors are willing to demand a lower return in exchange for lower perceived risk. Thus, ESG has positive implications for the cost of capital of all companies aligned with sustainability principles. Also, Rotoplas has been part of the Dow Jones Sustainability Index since 2017. Things change quickly, and activists seem to like companies that are

strongly aligned with SDGs (as Rotoplas is). The challenge to supply more and better water is significant. Ten countries control 60% of the freshwater supply globally. Urbanization trends worldwide show that water demand for non-agricultural use is increasing at 2.5 times the rate of population growth, and water supply and sewage systems around the world are, on average, between 60 and 80 years old.

Exhibit 12: Rotoplas Has Scored Well on Dow Jones Sustainability Indices



Source: Company reports; Scotiabank GBM.

Exhibit 13: As Clear As That – Carbon and Water Footprint in Rotoplas' Most Important Products

| Product | Capacity (l) | CO2e (kg) | Eutrophication (PO _{4eq} kg) | Ecotoxicology (1,4 -DCB kg) | Scarcity (m ³) |
|--------------------|--------------|-----------|---------------------------------------|-----------------------------|----------------------------|
| Water Tank | 1,100 | 102 | 0.20 | 4.38 | 438 |
| Water Tank | 750 | 89 | 0.17 | 3.58 | 522 |
| Cistern | 5,000 | 330 | 0.68 | 17.16 | 1,229 |
| Biodigester | 600 | N.A. | 0.23 | 4.52 | 20 |

Source: Company reports; Scotiabank GBM.

Walmex

Scotiabank's 2018 Environmental Ranking: First Quartile

CDP 2018 Score: B (Climate Change)

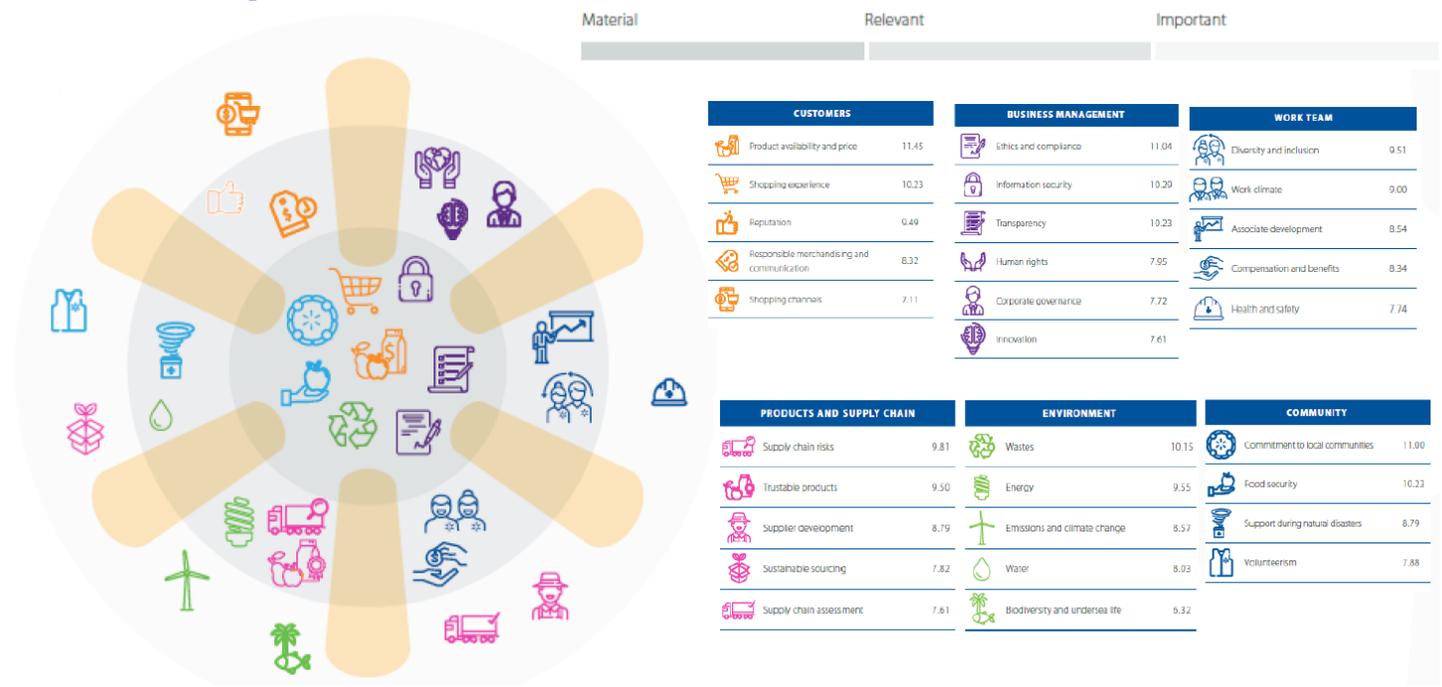
Rating: Sector Perform

Target Price: MXN 56.00

Analyst: Rodrigo Echagaray

Exhibit 14: Taking Materiality to the Next Level – Improved Methodology Since the First Materiality Analysis in 2009

Materiality



Source: Company reports.

What have been the most significant lessons learned from interactions with ESG investment funds and rating agencies?

First lesson: Identify the topics most relevant to improving ESG management.

We took several steps. First, we set up an **ESG matrix** with a list of the issues that rating agencies and ESG funds ask about most frequently – this enabled us to determine trends. Second, we created benchmarks of national and international retail industries, to identify and learn better practices. Third, armed with this analysis, our ESG team approached the managers responsible for the issues in question. Then, using all the information, we defined the action plan, goals, and metrics that will help us improve performance. We communicated our results in Walmex's annual report.

The first step is crucial to the whole process: it is about selecting the content in our annual reports that will be read by analysts, rating agencies, investors, and investment funds. We strive to provide continuity in the clear and transparent publishing of our performance results.

Second lesson: Take a proactive role when dealing with responsible-investment decision makers.

This means approaching rating agencies, investment funds, and analysts to encourage two-way communication. Maintaining this dialogue allows us to understand their interests and to identify trends. For instance, when we receive ESG-related results pertaining to Walmex, we have access to many of our scores. As a result, we have learned to request the “right of reply” – we want to have the opportunity to review, analyze, and send feedback to the raters. This has been a key feature of our ESG engagement process, because we need to understand what the raters, analysts, and investors need, how they want to see it, and make sure that they understand what we publish and vice versa. It’s important to mention that most of the rating agencies, funds, and analysts are open to dialogue and discussion as long as we provide the evidence to support our findings (which, in turn, is based on public and accurate information). We also work to make them understand the peculiarities of our market and our industry, and we can only do this through openness and dialogue.

Third lesson: Investor relations and sustainability teams need to work together.

It can be tough to handle so many different questionnaires from investors and methodologies from the entities that provide ESG-related ratings, and it’s also a challenge to disclose all this information. When aligning materiality matrixes and SDGs, we learned that there is no dichotomy between investor requirements and the firm’s relationships with its clients, suppliers, and workers.

Walmex’s ESG initiatives, by the numbers:

- 84% of stores in Mexico use renewable energy. Walmex’s targets on GHG emission cuts are science based and entail an 18% reduction by 2020, along with a 25% reduction in energy intensity (KWh/m²).
- 70.2% of waste generated is recycled; Walmex targets a 50% reduction in waste by 2025 (from 2016 levels).
- Walmex aims for zero deforestation resulting from palm oil and paper in the supply chain by 2020.
- On the board of directors, 36% of members are women. Also, 46% of Board members are independent.
- Donations to communities: MXN 1.3B in 2018, up from MXN 624M in 2012; investment in sustainable initiatives in 2018: MXN 1.0B.
- First integrated report: 2011. The first materiality matrix study for Mexico and Central America was published in 2009.

Alsea

Scotiabank's 2018 Environmental Ranking: Fourth quartile

CDP 2018 Score: No Response

Rating: Sector Outperform

Target Price: MXN 56.00

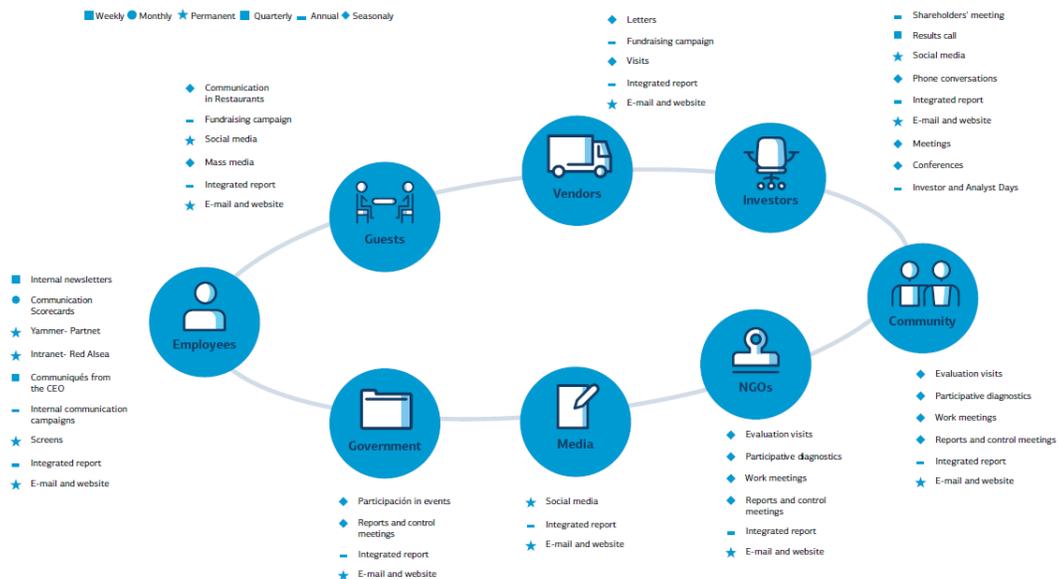
Analyst: Rodrigo Echagaray

Exhibit 15: SDGs in Four Areas Reporting to the Sustainability Committee; A Broader View of What Is Material...



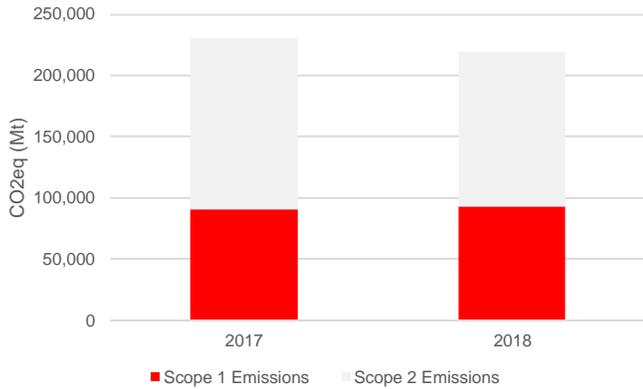
Source: Company reports.

Exhibit 16: ... and That Also Takes into Account Alsea's Complex Interactions with Its Stakeholders



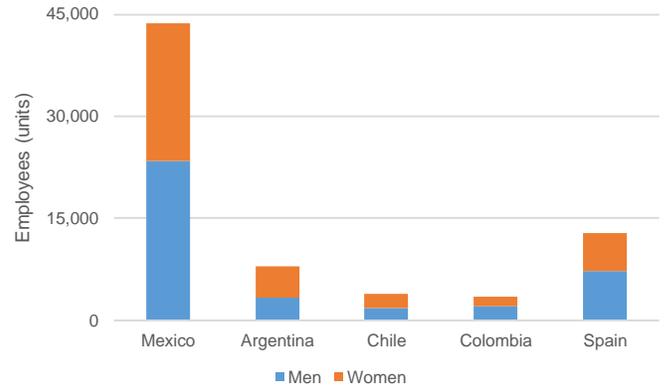
Source: Company reports.

Exhibit 17: Cutting Alsea's Carbon Footprint in Mexico



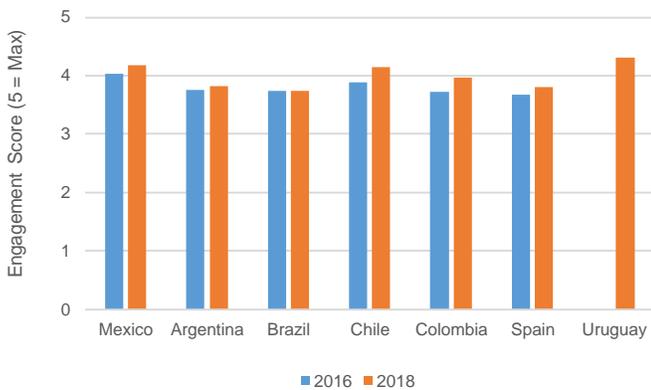
Source: Company reports; Scotiabank GBM.

Exhibit 18: Women in Alsea Management Positions: 43%



Source: Company reports; Scotiabank GBM.

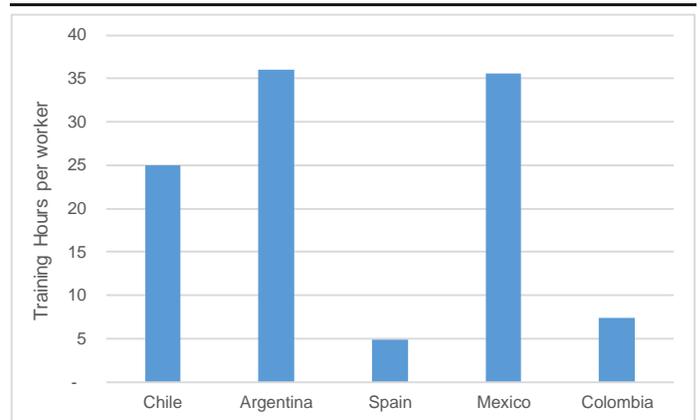
Exhibit 19: A High Level of Workforce Engagement



Note: No data for Uruguay in 2016.

Source: Company reports; Scotiabank GBM.

Exhibit 20: Hours of Training by Country



Source: Company reports; Scotiabank GBM.

Alsea invests in its workforce in many areas: talent development, mentoring programs, engagement surveys, training, diversity and inclusion initiatives, and offering flex time/flex Fridays. According to the company, personnel turnover indicators have improved by 26.6 percentage points in Mexico, Argentina, Chile, and Colombia in the last four years.

New programs unveiled in Mexico will be extended to other markets in which Alsea operates. For example, the first stage of the Circle of Leaders program reduced turnover rates by 50% in Alsea's operation centers. The second stage aims to build a store-centric production team.

Pertinent Data**Alsea (ALSEA *-MX)**

Valuation: 9x NTM EV/EBITDA

Key Risks: Changes in consumer trends, growth in disposable income, M&A integration.

CEMEX (CX-N)

Valuation: DCF: CoE 11.69%; WACC 8.57%

Key Risks: Downturn in the United States, market risk on convertible debt, FX mismatches

Fibra Prologis (FIBRAPL 14-MX)

Valuation: 50% Dividend Discount Model (DDM); 50% Net Asset Value (NAV)

Key Risks: Interest rates, execution risks in property acquisitions, overpaying for acquisitions

Grupo Financiero Banorte (GFNORTE O-MX)

Valuation: 1.7x P/BV based on GGM: COE 14.2%, LT ROE 19.0%, g 7.0%

Key Risks: Economic, political, systemic, interest rates, competition, and regulatory

Prologis, Inc. (PLD-N)

Valuation: NAV estimate

Key Risks: China tariffs (Southern California exposure); development pipeline leasing.

Walmex (WALMEX *-MX)

Valuation: 13x NTM EV/EBITDA & 22x NTM P/E

Key Risks: Lower GDP growth, weak consumer environment, tax reforms, LatAm FX volatility.

Appendix A: Important Disclosures

| Company | Disclosures (see legend below)* |
|----------------|---------------------------------|
| Aalsea | VS0398 |
| CEMEX | M10, M11, VS0150, VS0151 |
| Fibra Prologis | M10, M11, VS0347 |
| Prologis, Inc. | G, I, U |
| Walmex | VS0376 |

I, Francisco Suarez, certify that (1) the views expressed in this report in connection with securities or issuers that I analyze accurately reflect my personal views and (2) no part of my compensation was, is, or will be directly or indirectly, related to the specific recommendations or views expressed by me in this report.

This document has been prepared by Research Analysts employed by The Bank of Nova Scotia and/or its affiliates. The Bank of Nova Scotia, its subsidiaries, branches and affiliates are referred to herein as "Scotiabank." "Scotiabank" together with "Global Banking and Markets" is the marketing name of the global corporate and investment banking and capital markets business of The Bank of Nova Scotia and its affiliates. Scotiabank, Global Banking and Markets produces research reports under a single marketing identity referred to as "globally branded research" under U.S rules. This research is produced on a single global research platform with one set of rules which meet the most stringent standards set by regulators in the various jurisdictions in which the research reports are produced. In addition, the Research Analysts who produce the research reports, regardless of location, are subject to one set of policies designed to meet the most stringent rules established by regulators in the various jurisdictions where the research reports are produced. Scotiabank publishes and distributes research reports by Research Analysts of Scotia Howard Weil, a brand of Scotia Capital (USA) Inc.

Scotiabank relies on information barriers to control the flow of non-public or proprietary information contained in one or more areas within Scotiabank into other areas, units, groups or affiliates of Scotiabank. In addition, Scotiabank has implemented procedures to prevent research independence being compromised by any interactions they may have with other business areas of The Bank of Nova Scotia. The compensation of the Research Analyst who prepared this document is determined exclusively by Scotiabank Research Management and senior management (not including investment or corporate banking).

Research Analyst compensation is not based on investment or corporate banking revenues; however, compensation may relate to the revenues of Scotiabank as a whole, of which investment banking, corporate banking, sales and trading are a part. Scotiabank Research will initiate, update and cease coverage solely at the discretion of Scotiabank Research Management. Scotiabank Research has independent supervisory oversight and does not report to the corporate or investment banking functions of Scotiabank.

For Scotiabank, Global Banking and Markets Research Analyst Standards and Disclosure Policies, please visit www.gbm.scotiabank.com/disclosures.

For additional questions, please contact Scotiabank, Global Banking and Markets Research, 4 King Street West, 12th Floor, Toronto, Ontario, M5H 1A1.

Time of dissemination: June 19, 2019, 16:01 ET. Time of production: June 19, 2019, 15:52 ET. Note: Time of dissemination is defined as the time at which the document was disseminated to clients. Time of production is defined as the time at which the Supervisory Analyst approved the document.

*Legend

- G** Scotia Capital (USA) Inc. or its affiliates has managed or co-managed a public offering in the past 12 months.
- I** Scotia Capital (USA) Inc. or its affiliates has received compensation for investment banking services in the past 12 months.
- M10** Francisco Suarez, an analyst, prepared this report and is an employee of the Research Department of Scotiabank Inverlat S.A., which forms a part of Grupo Financiero Scotiabank Inverlat.
- M11** Ramon Obeso, an analyst, prepared this report and is an employee of the Research Department of Scotiabank Inverlat S.A., which forms a part of Grupo Financiero Scotiabank Inverlat.
- U** Within the last 12 months, Scotia Capital Inc. and/or its affiliates have undertaken an underwriting liability with respect to equity or debt securities of, or have provided advice for a fee with respect to, this issuer.
- VS0150** Research Analyst Francisco Suarez visited the New Braunfels, Texas, cement facilities, on November 20, 2012. Partial payment was received from the issuer for the travel-related expenses incurred by the Research Analyst to visit this site.
- VS0151** Research Analyst Francisco Suarez visited the Monterrey, Mexico, cement facilities, on January 23, 2013. No payment was received from the issuer for the travel-related expenses incurred by the Research Analyst to visit this site.

- VS0347** Research Analyst Francisco Suarez visited several of Fibra Prologis industrial real estate assets in Mexico City, including logistics and light manufacturing facilities, on August 14, 2015. No payment was received from the issuer for the travel-related expenses incurred by the Research Analyst to visit this site.
- VS0376** Research Analyst Rodrigo Echagaray visited various stores in San Jose, Costa Rica, to conduct channel checks and interview local management, on March 9, 2016. No payment was received from the issuer for the travel-related expenses incurred by the Research Analyst to visit this site.
- VS0398** Research Analyst Rodrigo Echagaray visited a Vips restaurant location, an operating restaurant, in Mexico City on July 4, 2016. No payment was received from the issuer for the travel-related expenses incurred by the Research Analyst to visit this site.

Rating and Price Target History

Alsea (ALSEA *-MX) as of June 18, 2019 (in MXN)

| | | | | |
|---|---|---|---|---|
| 04-20-2016 Price: 67.59 Rating: SO Target: 81.00 | 03-13-2017 Price: 56.65 Rating: SO Target: 75.00 | 02-26-2018 Price: 64.18 Rating: SO Target: 85.00 | 11-27-2018 Price: 48.42 Rating: SO Target: 70.00 | 05-17-2019 Price: 41.79 Rating: SO Target: 56.00 |
|---|---|---|---|---|



*Represents the value(s) that changed.
 Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage
 Source: Scotiabank GBM estimates; FactSet.

CEMEX (CX-N) as of June 18, 2019 (in USD)

| | | | | | | | | | | |
|---|---|---|--|--|--|--|--|---|---|---|
| 06-15-2016 Price: 5.90 Rating: SO Target: 8.10 | 08-08-2016 Price: 7.58 Rating: SO Target: 9.50 | 11-29-2016 Price: 7.54 Rating: SO Target: 9.30 | 03-06-2017 Price: 8.69 Rating: SO Target: 10.50 | 07-19-2017 Price: 9.84 Rating: SO Target: 11.90 | 10-16-2017 Price: 7.81 Rating: SO Target: 11.50 | 11-30-2017 Price: 7.59 Rating: SO Target: 10.70 | 02-06-2018 Price: 8.02 Rating: SO Target: 10.30 | 04-05-2018 Price: 6.88 Rating: SO Target: 9.80 | 05-31-2018 Price: 5.96 Rating: SO Target: 9.30 | 07-30-2018 Price: 7.53 Rating: SO Target: 9.50 |
|---|---|---|--|--|--|--|--|---|---|---|



| | |
|---|---|
| 10-29-2018 Price: 4.89 Rating: SP Target: 7.50 | 11-26-2018 Price: 4.56 Rating: SP Target: 6.80 |
|---|---|

*Represents the value(s) that changed.
 Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage
 Source: Scotiabank GBM estimates; FactSet.

Fibra Prologis (FIBRAPL 14-MX) as of June 18, 2019 (in MXN)

| | | | | | |
|---|---|---|---|---|---|
| 10-21-2015 Price: 27.00 Rating: SO Target: 33.00 | 10-11-2016 Price: 32.27 Rating: SO Target: 37.00 | 06-08-2017 Price: 32.51 Rating: SO Target: 39.00 | 08-24-2017 Price: 35.49 Rating: SO Target: 40.00 | 07-04-2018 Price: 37.40 Rating: SO Target: 42.00 | 10-23-2018 Price: 36.17 Rating: SO Target: 43.00 |
|---|---|---|---|---|---|



*Represents the value(s) that changed.
 Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage
 Source: Scotiabank GBM estimates; FactSet.

Grupo Financiero Banorte (GFNORTE O-MX) as of June 18, 2019 (in MXN)

| | | | | | | | | | |
|--|---|--|---|--|--|--|--|--|---|
| 04-20-2016 Price: 95.53 Rating: SO Target: 126.70 | 07-19-2016 Price: 101.57 Rating: SO Target: 128.20 | 07-26-2016 Price: 98.76 Rating: SO Target: 128.00 | 09-28-2016 Price: 104.09 Rating: SP Target: 110.00 | 12-09-2016 Price: 100.34 Rating: SP Target: 87.00 | 01-24-2017 Price: 102.63 Rating: SU Target: 80.00 | 04-20-2017 Price: 110.10 Rating: SU Target: 85.00 | 06-27-2017 Price: 113.08 Rating: SU Target: 96.00 | 08-02-2017 Price: 120.04 Rating: SU Target: 95.00 | 09-18-2017 Price: 123.62 Rating: SU Target: 100.00 |
|--|---|--|---|--|--|--|--|--|---|



| | | | | | | |
|---|---|---|---|---|---|--|
| 11-27-2017 Price: 110.02 Rating: SU Target: 104.00 | 12-05-2017 Price: 110.87 Rating: SU Target: 113.00 | 02-26-2018 Price: 115.40 Rating: SU Target: 108.00 | 06-12-2018 Price: 110.62 Rating: SP Target: 106.00 | 08-23-2018 Price: 135.41 Rating: SO Target: 156.00 | 11-28-2018 Price: 90.60 Rating: SP Target: 91.00 | 03-12-2019 Price: 97.92 Rating: SO Target: 114.00 |
|---|---|---|---|---|---|--|

*Represents the value(s) that changed.
 Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage
 Source: Scotiabank GBM estimates; FactSet.

Prologis, Inc. (PLD-N) as of June 18, 2019 (in USD)

| | | | | |
|---|---|---|---|---|
| 10-15-2018 Price: 63.07 Rating: SP Target: 65.00 | 10-24-2018 Price: 65.27 Rating: SP Target: 66.00 | 02-07-2019 Price: 70.43 Rating: SP Target: 69.00 | 04-12-2019 Price: 74.43 Rating: SP Target: 71.00 | 04-23-2019 Price: 74.20 Rating: SP Target: 72.00 |
|---|---|---|---|---|



*Represents the value(s) that changed.
 Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage
 Source: Scotiabank GBM estimates; FactSet.

Walmex (WALMEX *-MX) as of June 18, 2019 (in MXN)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 04-27-2016 Price: 43.02 Rating: SO Target: 47.00 | 06-30-2016 Price: 43.91 Rating: SO Target: 50.00 | 10-17-2016 Price: 41.38 Rating: SP Target: 47.00 | 01-11-2017 Price: 35.51 Rating: SO Target: 42.00 | 05-15-2017 Price: 43.29 Rating: SO Target: 47.00 | 01-09-2018 Price: 46.67 Rating: SP Target: 53.00 | 07-05-2018 Price: 53.00 Rating: SP Target: 59.00 | 12-12-2018 Price: 50.29 Rating: SP Target: 53.00 | 05-29-2019 Price: 54.74 Rating: SP Target: 56.00 |
|---|---|---|---|---|---|---|---|---|



*Represents the value(s) that changed.
 Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage
 Source: Scotiabank GBM estimates; FactSet.

Definition of Scotiabank, Global Banking and Markets Equity Research Ratings

Scotiabank has a three-tiered rating system, with ratings of Sector Outperform, Sector Perform, and Sector Underperform. Each Research Analyst assigns a rating that is relative to his or her coverage universe or an index identified by the Research Analyst that includes, but is not limited to, stocks covered by the Research Analyst.

The rating assigned to each security covered in this report is based on the Scotiabank, Global Banking and Markets Research Analyst's 12-month view on the security. Research Analysts may sometimes express in research reports shorter-term views on these securities that may impact the price of the equity security in a manner directly counter to the Research Analyst's 12-month view. These shorter-term views are based upon catalysts or events that may have a shorter-term impact on the market price of the equity securities discussed in research reports, including but not limited to the inherent volatility of the marketplace. Any such shorter-term views expressed in research report are distinct from and do not affect the Research Analyst's 12-month view and are clearly noted as such.

Ratings

Sector Outperform (SO)

The stock is expected to outperform the average 12-month total return of the analyst's coverage universe or an index identified by the analyst that includes, but is not limited to, stocks covered by the analyst.

Sector Perform (SP)

The stock is expected to perform approximately in line with the average 12-month total return of the analyst's coverage universe or an index identified by the analyst that includes, but is not limited to, stocks covered by the analyst.

Sector Underperform (SU)

The stock is expected to underperform the average 12-month total return of the analyst's coverage universe or an index identified by the analyst that includes, but is not limited to, stocks covered by the analyst.

Focus Stock (FS)

As of April 29, 2019, Scotiabank, Global Banking and Markets discontinued the Focus Stock rating. A stock assigned this rating represented an analyst's best idea(s); stocks in this category were expected to significantly outperform the average 12-month total return of the analyst's coverage universe or an index identified by the analyst that included, but was not limited to, stocks covered by the analyst.

Other Ratings

Tender – Investors are guided to tender to the terms of the takeover offer.

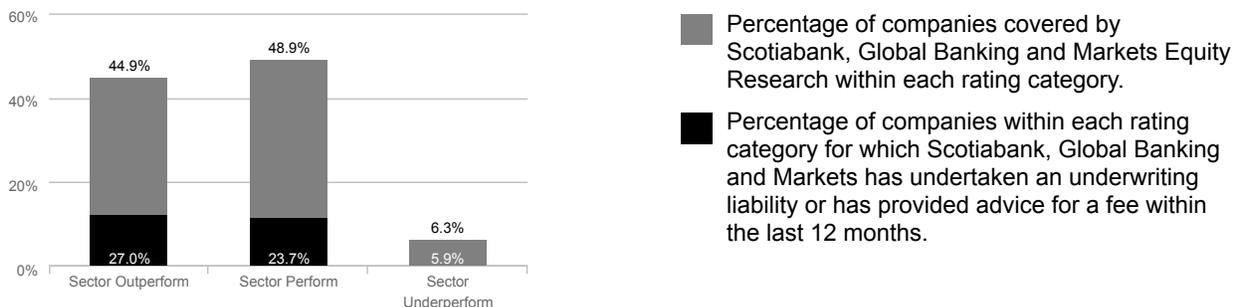
Under Review – The rating has been temporarily placed under review, until sufficient information has been received and assessed by the analyst.

Risk Ranking

The Speculative risk ranking reflects exceptionally high financial and/or operational risk, exceptionally low predictability of financial results, and exceptionally high stock volatility. The Director of Research and the Supervisory Analyst jointly make the final determination of the Speculative risk ranking.

Scotiabank, Global Banking and Markets Equity Research Ratings Distribution*

Distribution by Ratings and Equity and Equity-Related Financings*



* As of May 31, 2019.

Source: Scotiabank GBM.

For the purposes of the ratings distribution disclosure FINRA requires members who use a ratings system with terms different than “buy,” “hold/neutral” and “sell,” to equate their own ratings into these categories. Our Sector Outperform, Sector Perform, and Sector Underperform ratings are based on the criteria above, but for this purpose could be equated to buy, neutral and sell ratings, respectively.

General Disclosures

This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject Scotiabank to any registration or licensing requirement within such jurisdiction. It is published solely for information purposes; it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy.

No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained in this document except with respect to information concerning Bank of Nova Scotia (TSX: BNS; NYSE: BNS). This document is not intended to be a complete statement or summary of the securities, markets or developments referred to in this document. Scotiabank does not undertake to update or keep current the information contained herein, nor make any commitment as to the frequency of publication.

If you are affected by MiFID II, you must advise us in writing at trade.supervision@scotiabank.com

Any opinions expressed in this document may change without notice and may differ or be contrary to opinions expressed by other business areas or groups of Scotiabank. Any statements contained in this document attributed to a third party represent Scotiabank's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party. Nothing in this document constitutes a representation that any investment strategy or recommendation is suitable or appropriate to an investor's individual circumstances or otherwise constitutes a personal recommendation. Investments involve risks, and investors should exercise prudence and their own independent judgement in making their investment decisions and carefully consider any risks involved.

The financial instruments that may be described in this document may not be eligible for sale in all jurisdictions or to certain categories of investors. Instruments such as options, derivative products, and futures are not suitable for all investors, and trading in these instruments is considered risky. Mortgage and asset-backed securities may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates or other market conditions. Foreign currency rates of exchange may adversely affect the value, price, or income of any security or related instrument referred to in this document. For investment advice, trade execution, or other enquiries, clients should contact their local sales representative. The value of any investment or income may go down as well as up, and investors may not get back the full amount invested. Past performance is not necessarily a guide to future performance.

To the full extent permitted by law, neither Scotiabank nor any of its directors, employees or agents accepts any liability whatsoever for any direct or consequential loss arising from any use of the information or this document. Nothing in this document constitutes financial, investment, tax, accounting or legal advice. Investors should seek their own legal, financial and tax advice regarding the appropriateness of investing in any securities or pursuing any strategies discussed in the document. Any prices stated in this document are for information purposes only and do not represent real-time valuations for individual securities or other financial instruments. There is no representation that any transaction can or could have been effected at those prices, and any prices do not necessarily reflect Scotiabank's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by Scotiabank or any other source may yield substantially different results. All pricing of securities in reports is based on the closing price of the securities' principal marketplace on the night before the publication date, unless otherwise explicitly stated.

The Research Analyst(s) responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting market information.

In the normal course of offering investment and banking products and services to clients, Scotiabank may act in several capacities (including issuer, market maker, underwriter, distributor, index sponsor, swap counterparty, and calculation agent) simultaneously with respect to a product, giving rise to potential conflicts of interest. Scotiabank uses controls such as information barriers to manage conflicts should they arise. Scotiabank and its affiliates, officers, directors, and employees may have long or short positions (including hedging and trading positions), trade as principal and buy and sell in instruments or derivatives identified herein; such transactions or positions may be inconsistent with the opinions expressed in this document.

Recipients of this document should expect that Scotiabank will from time to time perform services (including investment banking or capital market services) in connection with the services and activities described in this document and that they may perform services for and engage in transactions with other market participants, including the issuers of certain of the investments underlying the transactions herein.

The information in this document has been prepared without taking into account any investor's objectives, financial situation or needs, and investors should, before acting on the information, conduct independent due diligence when making an investment decision and consider the appropriateness of the information, having regard to their objectives, financial situation and needs. For further information, please contact your sales representative.

Scotiabank specifically prohibits the redistribution of this document in whole or in part without Scotiabank's prior written permission, and Scotiabank accepts no liability whatsoever for the actions of third parties in this respect. Images may depict objects or elements that are protected by third-party copyright, trademarks and other intellectual property rights.

Equity research reports published by Scotiabank are initially and simultaneously made available electronically to intended recipients through its proprietary research website, ScotiaView, e-mail, and through third-party aggregators. The mediums in which research is disseminated to clients may vary depending on client preference as to the frequency and manner of receiving research reports. Institutional clients with questions regarding distribution of equity research or who wish to access the proprietary model used to produce this report should contact Scotiabank at 1-800-208-7666.

A list of all investment recommendations in an equity security or issuer that have been disseminated during the preceding 12 months is available at the following location: gbm.scotiabank.com/disclosures.

Additional Disclosures

Australia: This report is provided in Australia by the Bank of Nova Scotia, an APRA-regulated Authorised Deposit-Taking Institution (Foreign Bank ADI) holding an Australian Financial Services License (AFSL).

Canada: Distributed to eligible Canadian persons by Scotia Capital Inc. a registered investment dealer in Canada.

Chile: This report is distributed by Scotia Azul Corredores de Bolsa Ltda and Scotia Corredora de Bolsa Chile S.A., subsidiaries of The Bank of Nova Scotia.

Colombia: This report is distributed in Colombia by Scotiabank Colpatría, S.A. as authorized by the Superintendencia Financiera de Colombia to The Bank of Nova Scotia ("Scotiabank") by Resolution 058 of 2014 and to Scotia Capital Inc. by Resolution 0226 of 2015. Said Resolutions authorize Scotiabank and Scotia Capital Inc. to promote and advertise their products and services through Scotiabank Colpatría, S.A. This report is prepared by analysts employed by The Bank of Nova Scotia and certain of its affiliates including Scotia Capital Inc.

Hong Kong: This report is distributed by The Bank of Nova Scotia Hong Kong Branch, which is authorized by the Securities and Future Commission to conduct Type 1, Type 4 and Type 6 regulated activities and regulated by the Hong Kong Monetary Authority.

Japan: This research report is provided for information purposes only and it is not intended to solicit any orders for securities transactions or commodities futures contracts. While we believe that the data and information contained in this research report is obtained from reliable sources, we do not guarantee the accuracy or completeness of the data and information.

Mexico: The information contained in this report is for informational purposes only and is not intended to influence the decision of the addressee in any way whatsoever with respect to an investment in a certain type of security, financial instrument, commodity, futures contract, issuer, or market, and is not to be construed as an offer to sell or a solicitation of an offer to buy any securities or commodities futures contracts. Scotiabank Inverlat Casa de Bolsa, S.A. de C.V. is not responsible for the outcome of any investment performed based on the contents of this research report.

Peru: This report is distributed by Scotia Sociedad Agente de Bolsa S.A., a subsidiary of The Bank of Nova Scotia. This report is prepared by analysts employed by The Bank of Nova Scotia and certain of its affiliates including Scotia Capital Inc.

Singapore: For investors in the Republic of Singapore, this document is provided via an arrangement with BNS Asia Limited pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act (Chapter 289 of Singapore). If there are any matters arising from, or in connection with this material, please contact BNS Asia, located at 1 Raffles Quay, #20-01 North Tower, One Raffles Quay, Singapore 048583, telephone: +65 6305 8388.

This document is intended for general circulation only and any recommendation that may be contained in this document concerning an investment product does not take into account the specific investment objectives, financial situation, or particular needs of any particular person, and advice should be sought from a financial adviser based in Singapore regarding the suitability of the investment product, taking into account the specific investment objectives, financial situation, or particular needs of any person in receipt of the recommendation, before the person makes a commitment to purchase the investment product.

BNS Asia Limited and/or its affiliates may have in the past done business with or may currently be doing or seeking to do business with the companies or issuers covered in this report. The information provided or to be provided or actions taken by or to be taken by BNS Asia Limited and/or its affiliates in such circumstances may be different from or contrary to the discussion set out in this report.

United Kingdom and the rest of Europe: Except as otherwise specified herein, this material is distributed by Scotiabank Europe plc to persons who are eligible counterparties or professional clients. Scotiabank Europe plc is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

United States: Distributed to U.S. persons by Scotia Capital (USA) Inc. or by an authorized subsidiary or affiliate of The Bank of Nova Scotia that is not registered as a U.S. broker-dealer (a 'non-U.S. affiliate') to major U.S. institutional investors only. Scotia Capital (USA) Inc. accepts responsibility for the content of a document prepared by its non-U.S. affiliate (s) when distributed to U.S. persons by Scotia Capital (USA) Inc. To the extent that a U.S. person wishes to transact in the securities mentioned in this document through Scotiabank, such transactions must be effected through Scotia Capital (USA) Inc., and not through a non-U.S. affiliate. The information in this document has not been approved, disapproved, or recommended by the U.S. Securities and Exchange Commission ("SEC"), any state securities commission in the United States or any other U.S. or non-U.S. regulatory authority. None of these authorities has passed on

or endorsed the merits or the accuracy or adequacy of this document. Any representation to the contrary is a criminal offense in the United States.

TM Trademark of The Bank of Nova Scotia. Used under license, where applicable. Scotiabank, together with "Global Banking and Markets," is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including Scotia Capital Inc., Scotia Capital (USA) Inc., Scotiabanc Inc., Citadel Hill Advisors L.L.C., The Bank of Nova Scotia Trust Company of New York, Scotiabank Europe plc, Scotiabank (Ireland) Designated Activity Company, Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank Group and authorized users of the mark. The Bank of Nova Scotia is incorporated in Canada with limited liability. Scotia Capital Inc. is a member of the Canadian Investor Protection Fund and regulated by the Investment Industry Regulatory Organization of Canada. Scotia Capital (USA) Inc. is a broker-dealer registered with the SEC and is a member of FINRA, NYSE, NFA and SIPC. Scotiabank Europe plc is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

© The Bank of Nova Scotia 2019

This report and all the information, opinions, and conclusions contained in it are protected by copyright. This report may not be reproduced in whole or in part, or referred to in any manner whatsoever, nor may the information, opinions, and conclusions contained in it be referred to without the prior, express consent of Scotiabank, Global Banking and Markets. The Bank of Nova Scotia, Scotiabank, and Global Banking and Markets logo and names are among the registered and unregistered trademarks of The Bank of Nova Scotia. All rights reserved.