

Investing in Sustainability

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Thanks to investors like you, the world of investing is changing for the better.

Investors have always had to consider a number of factors in their decision-making. Increasingly, Canadians are aware that environmental, social and governance (ESG) aspects of economic activities, both positive and negative, are relevant to their investment decisions.

If you're one of these conscientious investors, you're in very good company. Sustainable investing is an approach that

has gained strong momentum in recent years among an increasing number of asset managers and asset owners who are managing trillions of dollars in assets worldwide.

These investors are aware of the link between addressing and mitigating ESG risks and a company's long-term viability, potentially the health of the economy as a whole.

What is sustainable investing? It is an investment approach that considers (ESG) factors to generate long-term financial returns and positive societal outcomes. Sustainable investing also encompasses a more values-based approach, commonly referred to as socially responsible investing, used by investors looking to align their investments with their personal values and beliefs.

In a recent study, Harvard concludes that firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues.

*Corporate Sustainability: First Evidence of Materiality (2015)

What is ESG?

ESG refers to the environmental, social and governance issues associated with business activities.

ESG factors are more common and relevant than you might think. Here are some examples of what each section of E, S, and G are made up of:

 Environmental Factors	 Social Factors	 Governance Factors
<ul style="list-style-type: none">• Climate change and carbon emissions• Air/water pollution• Energy efficiency• Water scarcity• Waste management• Deforestation	<ul style="list-style-type: none">• Product safety• Data protection/privacy• Gender and diversity• Employee engagement• Supply chain management• Labour standards	<ul style="list-style-type: none">• Board composition• Audit committee structure• Executive compensation• Lobbying• Political contributions• Bribery and corruption

ESG aspects of corporate performance are sometimes also referred to as “extra-financial” factors, given that they have not traditionally been incorporated into financial analysis and portfolio management. However, ESG-related factors are increasingly recognized as relevant and material. For investors and companies, they are a source of both risk and opportunities.

Yes, it is possible to achieve strong financial returns while doing good

The perception that sustainable investing strategies under-perform compared to 'traditional' investing strategies is outdated and evolving. Did you know that empirical results now show that sustainable investing is not detrimental to financial performance?

For instance, in reviewing +10,000 open-end mutual funds and 2,874 separately managed accounts over the past seven years, Morgan Stanley found that sustainable equity mutual funds met, or exceeded, the median return 64% of the time. Further, they had equal, or lower, median volatility ~66% of the time.*

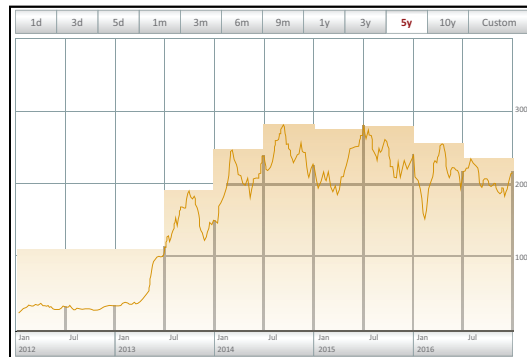
Financial performance case in point:

Example: Tesla

Tesla's mission to accelerate the world's transition to sustainable energy is prevalent in their business management practices and product innovation. Tesla's

Gigafactory - powered by renewable energy sources

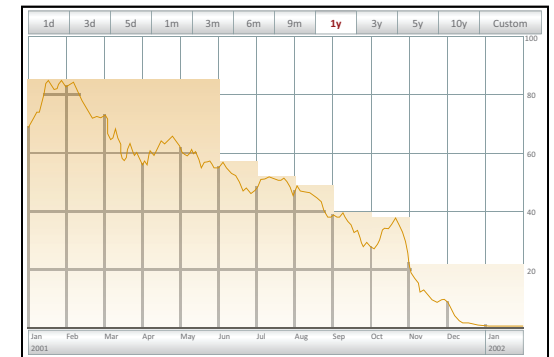
- was born out of necessity to develop enough lithium ion batteries for their electric cars. The share price over the last 3+ years has skyrocketed from \$22.79 January 2012 to \$213.79 December 2016.



Note: Above example/diagram is for illustrative purposes only.

Example: Enron

The Enron scandal is an example of governance neglect. The share price plummeted from a high of US\$90.75 per share in mid-2000, to less than \$1 by the end of November 2001.



Note: Above example/diagram is for illustrative purposes only.

Investors also see upside in other areas, believing that sustainable companies are more innovative, and attract better talent. Companies that understand how sustainability issues could potentially pose risks to their business may have a competitive advantage.

How can ESG affect financial performance?

The table below lists examples of ESG factors analyzed by investors, along with the ways in which careful management of each issue can contribute to business success.



How **Environmental Factors** may affect financial performance

Issue	Potential impact on financial performance	Some examples where ESG factors mattered
<ul style="list-style-type: none">- Resource management and pollution prevention- Reduced emissions and climate impact- Environmental reporting/disclosure	<ul style="list-style-type: none">- Avoid or minimize environmental liabilities- Lower costs/increase profitability through energy and other efficiencies- Reduce regulatory, litigation and reputational risk	Gulf of Mexico oil spill in 2010 caused BP's share price to fall sharply and reinforced the need to analyze ESG performance indicators.



How **Social Factors** may affect financial performance

Issue	Potential impact on financial performance	Some examples where ESG factors mattered
<p>Employees:</p> <ul style="list-style-type: none">- Diversity- Health and safety- Labour-management relations- Labour rights- Working conditions in the supply chain <p>Customer Issues:</p> <ul style="list-style-type: none">- Data privacy- Product safety- Product quality- Fair treatment of customers- Emerging technology issues <p>Community Impact:</p> <ul style="list-style-type: none">- Community relations- Indigenous peoples' rights- Human rights- Responsible lending- Corporate philanthropy	<p>Employees:</p> <ul style="list-style-type: none">- Improved productivity and morale- Reduce turnover and absenteeism- Openness to new ideas and innovation- Reduce potential for litigation and reputational risk <p>Customer Issues:</p> <ul style="list-style-type: none">- Create brand loyalty- Increase sales based on product safety or superior customer service- Reduce potential for litigation- Reduce reputational risk <p>Community Impact:</p> <ul style="list-style-type: none">- Improve brand loyalty- Protect and enhance license to operate- Reduce reputational risk	<p>South African mining company Lonmin, experienced repeated breakdown of relationship with its unionized workforce in 2012 and 2014 causing significant and direct impact on the company's financial performance. In combination with weak platinum prices, the company reported operating losses in both FY2014 and FY2015.</p>



How **Governance Factors** may affect financial performance

Issue	Potential impact on financial performance	Some examples where ESG factors mattered
<ul style="list-style-type: none">- Executive compensation- Board accountability- Shareholder rights- Business Ethics- Avoidance of bribery and corruption	<ul style="list-style-type: none">- Align interests of shareowners and management- Avoid negative financial surprises or “blow-ups”- Reduce reputational risk	Governance issues relating to Enron’s balance sheet contributed to the company’s bankruptcy in 2001 resulting in severe losses for shareholders.

Scotia iTRADE® has made it simpler than ever to integrate sustainable investing practices into your portfolio – without sacrificing the financial performance you expect.

What do ESG ratings measure?

Sustainalytics' ESG Ratings measure how well companies proactively manage the environmental, social and governance issues that can have the most impact on their business and stakeholders. Based on a structured, objective and transparent methodology, Sustainalytics' ESG Ratings provide an assessment of companies' ability to mitigate ESG risks.

Analyst knowledge is a critical component of the Ratings. The analyst applies expertise based on extensive company and sector knowledge to assess indicators and provides an opinion of the issuer's performance on its key ESG issues. The analyst opinion puts the ESG score into perspective.



What methodology is used?

Based on a structured, objective and transparent methodology, Sustainalytics' Score provides an assessment on a company's ability to mitigate ESG risks.

By comparing the company's ESG score against other firms within its global industry group a company is then classified in one of the five performance classes:



The following ESG indicators are used to assess company performance:

- Preparedness indicators – How a company manages ESG risks that can have the most impact on their business

- Disclosure indicators: Whether a company meets best practice standards for reporting and transparency on ESG issues most relevant to them

- Quantitative performance: Based on quantitative metrics such as carbon intensity (measure of carbon emissions)
Qualitative performance: Any potential company involvement in controversial incidents

Meet your ESG research partner, Sustainalytics.

Sustainalytics is an independent ESG and corporate governance research, ratings and analysis firm whose mission is to provide the insights required for investors and companies to make more informed decisions that lead to a more just and sustainable global economy.

Their international perspective is strengthened by 25 years of local experience and expertise in the Responsible Investment (RI) and Socially Responsible Investment (SRI) markets.

With 13 offices globally, Sustainalytics partners with institutional investors who integrate environmental, social and governance information and assessments into their investment processes.

Today, the firm has more than 300 staff members, including 170 analysts with varied multidisciplinary expertise of more than 40 sectors.

Through the IRRRI survey, investors selected Sustainalytics as the best independent responsible investment research firm for three consecutive years, 2012 through 2014 and in 2015 and 2016, Sustainalytics was named among the top three firms for both ESG and Corporate Governance research.

For more information, visit them at www.sustainalytics.com.

To learn more about sustainable investing, visit www.scotiabank.com/itrade/sustainableinvesting, or Sign into your Scotia iTRADE account.

Glossary of terms

Controversy

A controversy is an event or an aggregation of events that relate to an ESG topic. Controversies are assessed on stakeholder impact and reputational risk to the company. They are also assessed on business risk, frequency of incidents, and an issuer's management of the ESG issue, including its response to certain incidents. A controversy is rated on a scale of Low, Moderate, Significant, High and Severe. Major Controversies may indicate more pervasive behavioural problems at the company.

Controversy Scale

A company's ESG performance based on qualitative information relating to events and incidents that have resulted in negative ESG impacts:

- Severe: The event has a severe impact on the environment and society, posing serious risks to the company. This category represents the most egregious corporate behavior.
- High: The event has a high impact on the environment and society, posing significant risks to the company. This category often reflects structural problems in the company.
- Significant: The event has a significant impact on the environment and society, posing moderate risks to the company.
- Moderate: The event has a moderate impact on the environment and society, posing minimal risks to the company.
- Low: The event has a low impact on the environment and society, posing negligible risks to the company

Environmental Performance Assessment

Environmental Performance Assessment measures how well issuers proactively manage environmental issues that are material to their business, relative to global industry peers. The Environmental Performance Assessment is based on the issuer's ability to manage environmental risks through applicable policies, programs and management systems, the effectiveness or performance of such risk management, as well as on an assessment of any involvement in negative impacts on the environment. An issuer's level of transparency and the extent to which its reporting aligns with best practice is also an important factor in the overall Environmental Performance Assessment.

ESG

Environmental, Social and Governance

ESG Rating (Score)

The assessment of a company's (issuer's) overall ESG preparedness and performance, represented by an absolute score of between 0 and 100. ESG Ratings measure how well issuers proactively manage the environmental, social and governance issues that are material to their business. Based on a structured and objective methodology, ESG Ratings provide an assessment on companies' ability to mitigate ESG risks.

The following dimensions are assessed for the Environmental, Social and Governance Scores:

- Preparedness measures an issuer's ability to manage ESG risks through policies, programs and management systems
 - Performance is a way to measure the effectiveness of an issuer's preparedness to manage ESG risks.
 - Disclosure is tracked to measure an issuer's level of transparency and the extent to which its ESG reporting aligns with best practice by tracking an issuers reporting and the use of third-party and verification standards.
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Glossary of terms

ESG Performance Assessment The company's performance classification is relative to its global industry peers, based on the company's absolute ESG score. Each industry, or peer group, has a fixed band of scores that links to a relative position range. Companies can fall in five categories: laggards, under-performers, average performers, outperformers and leaders. The industry-specific bands are based on the ESG scores of approximately 4,200 companies that are assessed under Sustainability's Comprehensive ESG Ratings framework. The bands are reviewed and updated annually.

Relative position based on ESG Rating:

PERFORMANCE CLASSIFICATION	ESG SCORE BAND
Leader	Within the top 5% in the industry
Outperformer	Within the top 5% to 16% of its industry
Average Performer	Within the mid-range, 16% to 84% of its industry
Underperformer	Within the bottom 5% to 16% of its industry
Laggard	Within the bottom 5% of the industry

ESG (Rating) Report The report reflecting the research on an issuer's preparedness and performance, as well as the ESG Rating (Score) of an issuer.

Governance Performance Assessment Governance Performance Assessment measures how well issuers proactively manage governance issues that are material to their business, relative to global industry peers. The assessment is based on the issuer's ability to manage governance risks through applicable policies, programs and management systems, the effectiveness or performance of such risk management, as well as on any involvement in negative impact related to governance issues. An issuer's level of transparency and the extent to which its reporting aligns with best practice is also an important factor in the overall Governance Performance Assessment.

Industry (Peer) Group Classification of the ESG Rating Research Universe. This classification is also referred to as "Peer Group" in ESG Rating reports. Issuers are identified using 42 global peer groups based on internationally accepted standards, but has modified this classification for more meaningful comparability within the industry group.

Peer Group Score Range The range of company scores specific to a given peer group and that fall within the Research Universe (TSX and Russell 1000). This can be thought of as a regional peer group score range.

Relative Rank The company's performance classification is relative to its global industry peers, based on the company's absolute ESG score. The relative performance allows for comparability in the peer group or across multiple peer groups.

Research Universe Overall ESG Ratings are based on global peer groups. The research universe provided is the TSX and the Russell 1000.

Social Performance Assessment Social Performance Assessment measures how well issuers proactively manage social issues that are material to their business, relative to global industry peers. The assessment is based on the issuer's ability to manage social risks through applicable policies, programs and management systems and the effectiveness or performance of such risk management, as well as on an assessment of any involvement in negative impacts on society and stakeholders. An issuer's level of transparency and the extent to which its reporting aligns with best practice is also an important factor in the overall Social Performance Assessment.

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