The UBC Investment Management Trust Inc. (UBC IMANT) Team is pleased to present our first carbon footprint report. This report is a result of many years of diligent work in implementing the principles of Responsible Investing, with a particular focus on climate risk and carbon dioxide emissions, which contribute to global warming.

Under the direction of the UBC Board of Governors, UBC IMANT has been spearheading carbon footprinting efforts and was among leading Canadian institutions that evaluated the CO₂ emissions data as a component of climate risk analysis being incorporated into our investment processes and external manager evaluation.

Today, we present our comprehensive carbon footprint report, which describes the Responsible Investing activities we have undertaken in 2020, discusses our initial CO₂ emissions estimates and establishes a baseline for evaluating our progress against our ambitious carbon reduction goal of reducing carbon footprint by 45% by 2030.
2020 Responsible Investing Update

2020 was an important year for UBC IMANT in terms of the continued implementation of our responsible investment approach. Through a collaborative approach with our stakeholders, we developed the UBC IMANT Responsible Investing Framework and identified the key objectives for our responsible investment strategy and related action items.

The Responsible Investing Framework and accompanying objectives and actions were the basis for the UBC IMANT Responsible Investing Roadmap developed in cooperation with our University stakeholders.

Responsible Investing at UBC IMANT incorporates:

- The fiduciary responsibility to ensure that the financial requirements of all stakeholders are met
- Sustainability through incorporation of best practices in Environmental, Social and Governance (ESG) considerations
- Active ownership and engagement

To help us evaluate our progress in mitigating climate risk, carbon emissions arising from our investments in public equities were targeted to serve as key performance indicators (KPIs).

To that end, we have evaluated the quality and coverage of the available data and assessed the methodologies behind various carbon emission and carbon intensity measures to guide our decisions as to which metrics to adopt to best assess our external managers, communicate with our stakeholders and to track our emission reduction goals.

Based on our Responsible Investing objectives and the related timeline, we developed an ESG scorecard to be used for communication with our stakeholders. This scorecard will be expanded as we continue to expand our Responsible Investing activities.

Why Carbon Footprint?

In response to the climate crisis declared by UBC President Santa Ono in 2019 and in consultation with our University stakeholders, UBC IMANT set an aggressive carbon emission reduction target for the UBC Endowment’s portfolio. Our approach to a reduction in carbon emissions goes beyond a simple divestment approach, achieving greater emissions reductions aimed at combating climate change.

Through in-house analysis we arrived at the ambitious goal of reducing our portfolio carbon emissions by 45% by 2030. This journey is already underway, with an evaluation of our existing external manager relationships and their alignment with this CO2 emissions reduction goal.

With the establishment of explicit and measurable climate risk mitigation targets, we decided that direct emissions reduction. This journey is already underway, with an evaluation of our existing external manager relationships and their alignment with this CO2 emissions reduction goal.

"UBC IMANT is firmly committed to working alongside our clients, investment managers and peers in mitigating climate risk. As a data driven organization, we will continue to focus not only on reaching our stated climate goals but advocating for the steady improvement of climate data consistency and availability."

Dawn Jia, President and CEO, UBC IMANT
How We Measure Carbon Footprint

The carbon footprint of a company is an estimate of the greenhouse gas (GHG) emissions generated from the activities of a company. Greenhouse gas emissions included in carbon footprint estimates include carbon dioxide (CO₂), hydrofluorocarbons (HFCs), methane (CH₄), nitrogen trifluoride (NF₃), nitrous oxide (N₂O), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆). These GHG emissions are then expressed in terms of CO₂ equivalents.

In estimating a carbon footprint, we consider the following sources of emissions that are typically divided into three categories, or scopes (as defined by MSCI):

**Scope 1** GHG emissions are those directly occurring "from sources that are owned or controlled by the institution, including: on-site stationary combustion of fossil fuels; mobile combustion of fossil fuels by institution owned/controlled vehicles; and "fugitive" emissions. Fugitive emissions result from intentional or unintentional releases of GHGs, including the leakage of hydrofluorocarbons (HFCs) from refrigeration and air conditioning equipment as well as the release of CH₄ from institution-owned farm animals".

**Scope 2** GHG emissions are "indirect emissions generated in the production of electricity consumed by the institution".

**Scope 3** GHG emissions are all the other indirect emissions that are "a consequence of the activities of the institution, but occur from sources not owned or controlled by the institution" such as commuting; waste disposal; embodied emissions from the extraction, production, and transportation of purchased goods; outsourced activities; contractor owned vehicles; line loss from electricity transmission and distribution.

UBC IMANT’s analysis currently includes Scope 1 and Scope 2 emissions. Scope 3 emissions in its current form suffers from low data availability and inconsistent methods of estimation; however our goal is to incorporate this data as it becomes more robust.

We monitor two carbon emission measures: total "carbon emissions" defined as carbon emissions per $1 million invested and "carbon intensity" defined as carbon emissions per $1 million of sales.

Emission estimates allow for understanding what the carbon footprint of investment activities is, to evaluate if emissions are declining, to compare against different investment strategies and to attribute emissions to various sectors of the economy. Our carbon emission reduction targets are set against this estimate in order to lower GHG emissions associated with our investments.

The total carbon emissions of an investment portfolio are calculated as the sum total of the carbon emissions of each company we are invested in, proportionate to our investment in that company.

Emission intensity is a secondary measure allowing UBC IMANT to identify best-in-class companies overall and within industry sectors. It also has the benefit of being more stable as it links emissions that are driven by the overall state of the economy.

The total carbon intensity of an investment portfolio is calculated as the sum total of the carbon emissions per unit of sales revenue of each company we are invested in, proportionate to our investment in that company.

Where:
- $investmentᵢ = value of the UBC Endowment investment in a company (Issuer).
- Issuer's full mcapᵢ = market capitalization (value of all the shares issued by a company) of a company.
- Issuer's emissionsᵢ = total annual GHG emissions of a company.
- Issuer's salesᵢ = total value of annual sales of a company.
At the beginning of the 2020-21 fiscal year, we estimated the 2019 baseline for emissions reduction measurement. The UBC Endowment public equity holdings are estimated to emit 234 tonnes of CO\textsubscript{2} per million dollars invested. A year later, 2020 emissions are estimated to decline to 210 tonnes of CO\textsubscript{2} per million dollars invested, on track to achieve our goal of a 45% emissions reduction by 2030. This goal aims to reduce portfolio CO\textsubscript{2} emissions to below 128 t CO\textsubscript{2}/m invested, which translates to a reduction of nearly 165-thousand tonnes of CO\textsubscript{2} emitted per year. For context, this is equivalent to removing over 35,000 cars from our roads.

Our emission targets are not limited to an absolute reduction in carbon emissions; we are also mindful of our portfolio emissions relative to passive investments in equity indexes. With respect to that measure, our baseline of 234 tonnes of CO\textsubscript{2} per $1 million invested (t CO\textsubscript{2}/m invested) is higher than comparable passive investment strategies (i.e. portfolio benchmarks) which are estimated to emit 189 t CO\textsubscript{2}/m invested.

This unfavourable comparison is driven by a greater portfolio allocation to defensive equity strategies. Such defensive strategies tend to prefer stable businesses with predictable cash flows, such as utility companies. Unfortunately, many of these companies are also among the highest CO\textsubscript{2} emitters by virtue of the industry in which they operate.

Our emission estimation tools allow us to determine that our external investment managers selected utility companies that emit 34% less CO\textsubscript{2} than the overall utility sector which is consistent with our goals of investing in best-in-class companies with respect to climate risk mitigation.

In addition to absolute and relative levels of CO\textsubscript{2} emissions, we monitor CO\textsubscript{2} emissions intensity which is defined as the amount of CO\textsubscript{2} emitted by a company to generate $1 million of sales. This measure enables UBC IMANT to identify companies that are efficient in using their emissions budget. That indicator shows that to generate $1 million in sales portfolio companies emit 304 tonnes of CO\textsubscript{2}, which is slightly greater than passive investments. Using detailed emissions data, we focus on the sources of excessive emissions and engage with external managers to consider implementing portfolio changes that reduce emissions intensity with an eye to improving investment returns.

Individual company carbon data enables us to aggregate all public equity investments and identify which companies are the largest emitters of GHGs within the equity portfolio. This knowledge helps us evaluate if removing those holdings will materially reduce our carbon footprint without compromising returns.

Utilizing our carbon emissions data we identified immediate opportunities to improve our portfolio climate risk profile and have added managers that explicitly incorporate climate risks and opportunities into their investment decisions. Where appropriate, we engage with external investment managers to adjust investment mandates to better align them with our Responsible Investment objectives. In some instances, we opt to redeem from existing investment programs and reinvest in opportunities that are better aligned with our Responsible Investing goals.
Next Steps

This baseline carbon footprint report will serve as a reference point for estimating carbon emissions reductions objectives embedded in our Responsible Investing Framework. Carbon footprinting improves our engagement efforts and enhances our Responsible Investing implementation. As per the UBC IMANT Responsible Investing Roadmap, we will continue to expand our risk assessment beyond carbon emissions to include climate risks. Further ahead, we will aim to include other asset classes in carbon emissions estimates as data becomes available.

UBC IMANT is positioned for the future