

# TCFD REPORT

## SUMMARY

This Task Force on Climate-related Financial Disclosures (TCFD) report outlines Donaldson Company's Governance, Strategy, Risk Management, and Metrics and Targets associated with our climate-related risks and opportunities. With the help of a third-party consultant, Donaldson began with the TCFD universe of physical and transition risks and opportunities and prioritized them based on potential impact, likelihood and stakeholder relevance.

We have incorporated the TCFD framework into our overall governance, risk assessment and strategy. We will continue to evaluate our position and strategy and increase our readiness for potential physical and transition risks associated with climate change.

# GOVERNANCE

## a) Describe the board's oversight of climate-related risks and opportunities.

The Donaldson Company Board of Directors has oversight of sustainability and Environmental, Social and Governance (ESG), including climate-related risks and opportunities. Sustainability, ESG and climate-related risks and opportunities inform our strategy and enterprise risk management.

- The Corporate Governance Committee has oversight of sustainability and ESG, including climate-related risks and opportunities.
- The Audit Committee has oversight over legal, regulatory and compliance including disclosure considerations and requirements related to ESG, including climate related risks.

## b) Describe management's role in assessing and managing climate-related risks and opportunities.

Donaldson's **Executive Leadership Team** has oversight and accountability over the day-to-day management of company risks, including climate-related risks, and how these risks inform overall business strategy. The Sustainability Steering Committee and the Enterprise Risk Management (ERM) Committee provide oversight on the management of the company's climate-related risks.

The **Sustainability Steering Committee** is responsible for guiding sustainability and ESG commitments, investments, efforts and progress. The steering committee, comprised of members of the executive leadership team, meets periodically and governs sustainability strategy and execution. Oversight at this level ensures that sustainability initiatives are aligned and integrated into the overall company strategy and practices.

The **Sustainability Leadership Team** is comprised of a group of global, cross-functional leaders from the environmental, health and safety (EHS), finance, human resources, operations, procurement and sustainability functions. The leadership team is responsible for the development and execution of the sustainability strategy, and its members are responsible for developing, executing and advancing the company's sustainability aspirations, ambitions, actions and achievements. The progress of this work is reported to the steering committee on a periodic basis. Some leadership team members take on the role of Ambition Champion for a strategic sustainability ambition or goal. The Ambition Champions help lead, collaborate, align resources and report progress to the steering committee and leadership team.

The **Sustainability and ESG Team** is the centralized function responsible for influencing, coordinating and driving sustainability progress. A core function of this group is collecting and organizing ESG data for reporting. The Director of ESG and Sustainability and Senior Director of ERM lead the review of climate-related responsibilities, with oversight from the Sustainability Steering Committee.

# STRATEGY

**a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.**

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

Donaldson performed a climate-related risk and opportunity assessment to identify the priority risks and opportunities to which Donaldson is exposed. With the help of a third-party consultant, Donaldson began with the TCFD universe of physical and transition risks and opportunities and supplemented with insights drawn from peer disclosures, industry research and internal stakeholder interviews. These risks and opportunities were then prioritized based on potential impact, likelihood and stakeholder relevance. Three risks and three opportunities were identified for a further qualitative and quantitative scenario analysis.

Each of the prioritized risks and opportunities was assessed against three of the Intergovernmental Panel on Climate Change's (IPCC's) Shared Socioeconomic Pathways (SSPs) and considered over a short (until 2025), medium (2026-2030) and long (2030 to 2050) time horizon. The SSPs considered were an Aggressive Climate Action Scenario (SSP1-2.6), Moderate Climate Action Scenario (SSP2-4.5) and Insufficient Climate Action Scenario (SSP5-8.5). These scenarios and time horizons are described in Strategy section C.

## **Risk 1**

### **Transition to Alternative Powertrain Technologies May Cause Decreased Demand for Diesel Engine Filtration Products**

**Risk type:** Market

**Description:** As the world transitions to a low-carbon economy, equipment using conventional carbon-intensive fuels will likely be replaced with alternatives. The shift to alternative powertrain technologies may reduce demand for Donaldson's diesel engine products, such as engine air or liquid filtration products, provided by our Mobile Solutions segment.

Transition to alternative powertrain technologies in the agricultural, construction and mining machinery, commercial vehicle, and aerospace and defense industries, that our Mobile Solutions products support, will likely follow a longer transition pathway when compared to the passenger vehicle market. In the Aggressive and Moderate Climate Action Scenarios, we expect this demand shift from diesel to alternative powertrains to occur in the medium and long term. In the Insufficient Climate Action Scenario, we expect a more modest transition to alternative powertrain technologies, emerging more in the long term.

# STRATEGY

**a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.**

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

## **Impact**

Time horizon: Medium to long term

Magnitude of potential impact: High

Primary potential financial impact: Decreased revenues due to reduced demand for diesel engine products

## **Approach**

Donaldson continues to invest in research and development to continue identifying technologies, products, and solutions for emerging market segments, such as filtration products for alternative powertrain technologies, to ensure we can maintain or increase our market share in a lower carbon economy. Alternatives, such as hydrogen fuel cells and electric batteries, represent versatile power solutions as the world moves to reduce its reliance on carbon-intensive energy sources. Donaldson has decades of advanced engineering expertise and proven solutions related to hydrogen fuel cells and electric vehicle batteries that support the efficiency and reliability of zero-emissions vehicles. Our innovative cathode air intake filtration technologies promote system longevity by protecting fuel cell components from harsh contaminants, including dust, water and chemicals. Donaldson's expanded polytetrafluoroethylene (ePTFE) membranes are integral to fuel cell proton exchange membranes and help generate electricity by supporting efficient ion transfer within fuel cell electrode assemblies. Our fuel cell and battery vent technologies support the drive to zero emissions mobility by helping protect highly sensitive fuel cell and electric vehicle battery packs.

Beyond our alternative power solutions, Donaldson is continuing to advance into the life sciences industry. These investments hold advantage and help diversify our product offering. Our investments in life sciences will allow us to provide more comprehensive solutions to food and beverage customers and expand our access to biopharma and other key life sciences markets. With a strong pipeline of opportunities for both focused organic growth and acquisitions, we have confidence we can deliver on our strategic priorities while creating value for our stakeholders as the world transitions to a low-carbon economy.

# STRATEGY

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**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

## **Risk 2:** Carbon Pricing Mechanisms

**Risk type:** Policy and Legal

**Description:** As more countries consider implementing regulations around the cost of carbon, Donaldson faces risks related to increased operational costs, which may differ across jurisdictions in which we operate. We view these potential regulations as an industry challenge rather than a specific risk to Donaldson. Raw materials and goods such as iron, steel, aluminum, electricity, natural gas and hydrogen could be subject to additional taxes. These directives also may increase the price of goods Donaldson procures or manufactures.

In the Aggressive Climate Action Scenario, we expect these types of carbon pricing mechanisms to increase globally, leading to a quicker reduction in the use of carbon-intensive fuels. Under the Insufficient Climate Action Scenario, we expect little to no increase in carbon prices in the short and medium term, with large spikes in the price of carbon in the long term.

### **Impact**

Time horizon: Medium to long term

Magnitude of potential impact: Low to medium

Primary potential financial impact: Increased capital, raw material and operational costs to comply with carbon pricing mechanisms or the need to modify operations and product specifications to decrease the impact of carbon pricing mechanisms

### **Approach**

Donaldson is committed to helping mitigate climate change. We are targeting an absolute reduction of our Scope 1 and 2 GHG emissions by 42% by the end of fiscal year 2030 from a fiscal year 2021 baseline. This ambition, along with the execution roadmap, is science-based and aligns with the Intergovernmental Panel on Climate Change (IPCC) 1.5°C global warming scenario. By working toward our 2030 Ambition, we believe we can continue mitigating the risk associated with carbon pricing mechanisms. Our GHG reduction ambition and roadmap include executing operational energy efficiency projects to reduce our energy demand and a mix of renewable energy procurement strategies.

# STRATEGY

**a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.**

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

**Risk 3:**  
Business and Supply Chain Disruptions from Physical Risks

**Risk type:** Acute and Chronic Physical Risks

**Description:** Donaldson may see increased business interruption and workforce and service impacts on operations due to climate-related events such as extreme weather events (e.g., floods, heatwaves and storms). These climate-related risks may also cause supply chain disruptions as severe weather events may hinder the movement of goods, both to our customers and from our suppliers, causing strain on our supply chain, delivery of goods and overall ability to conduct business. Under the Insufficient, Moderate and Aggressive Climate Action Scenarios, Donaldson will likely see increased exposure and severity to acute and chronic climate-related physical risks on our global operations and supply chain over the short, medium and long terms.

## **Impact**

Time horizon: Short, medium and long term

Magnitude of potential impact: Medium to high

Primary potential financial impact: Decreased revenues and higher costs due to business interruptions and productivity losses

## **Approach**

As the climate changes and severe weather events have increased in frequency and severity, Donaldson continuously takes steps to mitigate the risks to operations and supply chain. This assessment has identified priority acute and chronic physical risks to Donaldson's operations and suppliers. We continue to build contingency plans at manufacturing facilities to increase our ability to provide customers with our products during disruptions from extreme weather events. As part of our risk management process, we consider the concentration of our suppliers' locations and exposure to physical risks to gain insight into additional related risks to our supply chain. We also have built redundancies in our supply chain and made strategic investments in our inventory so that we may continue procuring the materials needed to manufacture our products.

# STRATEGY

**a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.**

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

## **Opportunity 1:**

### Increased Demand for Alternative Power Solutions

**Opportunity type:** Markets, Products and Services, Resilience

**Description:** As the world transitions to a low-carbon economy, our customers will look to Donaldson to provide filtration solutions for alternative powertrain technologies. Donaldson has a tremendous opportunity to grow in this new market by providing filtration products to support alternative powertrains, namely in hydrogen fuel cell and battery venting applications. By becoming the filtration provider of choice for these emerging technologies, Donaldson can maintain a high market share in mobile filtration solutions to support revenues.

Under the Aggressive Climate Action Scenario, we expect this market for alternative powertrain filtration products to emerge in the medium term. The market may take longer to mature under the Moderate and Insufficient Climate Action Scenarios due to decreased regulatory incentives and mandates and customers taking longer to develop these technologies to commercial scale. Donaldson has already developed product solutions for multiple alternative powertrain technologies, but we will continue to monitor the evolving landscape to meet the demands of our customers.

#### **Impact**

Time horizon: Medium to long term

Magnitude of potential impact: High

Primary potential financial impact: Revenues and market share from increased sales on alternative powertrain technologies

#### **Approach**

Donaldson continues to invest in research and development to continue identifying technologies, products and solutions for emerging market segments, such as filtration products for alternative powertrain technologies. Donaldson's product offerings in this space already include fuel cell air intake filtration, proton exchange membranes and fuel cell and battery vents. Through the continuous planned expansion of products in the alternative powertrain market, Donaldson is preparing to capitalize on the opportunity emerging from the transportation sector to transition away from conventional carbon-intensive fuels.

# STRATEGY

**a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.**

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

## **Opportunity 2:**

**Cost Savings Due to Improved Operational Energy Efficiency and Increased Procurement of Renewable Energy**

**Opportunity type:** Resource Efficiency and Energy Source

**Description:** Donaldson has an opportunity for cost savings as we reduce our energy consumption as part of our GHG reduction goal, as discussed in the approach to Risk 2. As we advance our renewable energy procurement strategy to reduce our GHG emissions, we will work to develop a portfolio of sources that can potentially deliver a predictable cost for access to renewable energy. Under the Aggressive and Moderate Climate Action Scenarios, Donaldson expects to see increasing returns on investments made to reduce energy consumption through the medium and long term. These scenarios also incorporate a faster transition to a majority use of renewable energy and transition risks are greater as companies face reputational risks based on increased climate action expectations. In the Insufficient Climate Action Scenario, the global economy may see increased costs of resources like electricity and other fuels as changes in climate increase the need for fuels and electricity to maintain the heating and cooling of buildings during extreme weather events.

## **Impact**

Time horizon: Short to medium term

Magnitude of impact: Low to medium

Primary potential financial impact: Increased returns on efficiency investments and ongoing reduction of operating costs due to reduced energy consumption

## **Approach**

Donaldson's GHG reduction ambition and roadmap include executing operational energy efficiency projects to reduce energy demand. In FY22, we continued progressing against opportunities identified in our energy efficiency assessment. Each Donaldson facility's annual energy reduction goal aligns with our emission reduction roadmap. Most of this work focuses on reducing electricity usage. The speed and scale at which Donaldson can incorporate energy efficient improvements will determine cost savings.

# STRATEGY

**a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.**

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.**

## **Opportunity 3:**

Increased Demand for Climate-friendly Filtration Products

**Opportunity type:** Market

**Description:** Customers may increasingly search for lower carbon products, and Donaldson may see increased market share if we can incorporate and market the environmentally preferred attributes of our product offerings. From our analysis, we may see markets for these products emerge in the medium term under the Aggressive and Moderate Climate Action Scenarios, with the markets maturing in the long term. These markets may take longer to emerge in the Insufficient Climate Action Scenario, with more demand in the long term.

For industrial products, especially filtration products for natural gas applications, we expect to see increased demand across all considered climate scenarios. This demand could peak in the medium term for the Aggressive Climate Action Scenario as coal and oil applications are replaced with natural gas before eventually moving toward cleaner energy sources. Under the Moderate Climate Action Scenario, we expect demand for industrial filtration products related to natural gas to peak later, moving toward the longer term. Finally, under the Insufficient Climate Action Scenario, we expect demand for such products to continue increasing through the long term.

## **Impact**

Time horizon: Medium to long term

Magnitude of potential impact: Low to medium

Primary potential financial impact: Increased revenues

## **Approach**

Donaldson offers products that help our customers manage their environmental impacts and reach their sustainability goals. Further, Donaldson invests in research and development to continue our long history of innovating products to help customers achieve their environmental goals. Such investments are evidenced by our life science and food and beverage acquisitions. These investments will allow us to continue providing products with climate-related benefits.

# STRATEGY

## c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Donaldson assessed the potential impacts of climate-related risks and opportunities through scenario analysis, examining three time horizons and three climate scenarios. The time horizons are short (until 2025), medium (2026-2030), and long (2030-2050). The scenarios use information consistent with the Intergovernmental Panel on Climate Change's (IPCC's) Shared Socioeconomic Pathways (SSPs). These scenarios are:

- **Aggressive Climate Action Scenario:** This scenario is consistent with the IPCC's SSP1-2.6, assuming an average global temperature increase of 1.7°C between 2041-2060 and 1.8°C between 2081-2100 compared to the preindustrial age.<sup>1</sup> This scenario is characterized by ambitious global collaboration by governments, society and industry towards climate-related commitments, laws and regulations determined to reduce GHG emissions and negative environmental impacts. These measures could intensify transitional changes like new regulations for Donaldson. The rapid reduction of GHG emissions is expected to lead to lower climate-related events or physical risks in the long term.
- **Moderate Climate Action Scenario:** This scenario is consistent with IPCC's SSP2-4.5, assuming an average global temperature rise of 2°C between 2041-2060 and 2.7°C between 2081-2100 compared to the preindustrial age.<sup>1</sup> This scenario is characterized by moderate emissions reductions and consistent application of laws and provisions among governments. The moderate pace of action is expected to result in a slower pace of emissions reductions and higher frequency and intensity of physical risks, severe ecosystem and biodiversity loss, and large reduction of available agricultural lands.
- **Insufficient Climate Action Scenario:** This scenario is consistent with the IPCC's SSP5-8.5, assuming an average global temperature increase of 2.4°C between 2041-2060 and 4.4°C between 2081-2100 compared to the preindustrial age.<sup>1</sup> This scenario is characterized by less ambitious emissions reductions and a wide range of laws and provisions across the globe. The lack of action is expected to result in the slowest pace of emissions reductions and highest frequency and intensity of physical risks and severe ecosystem and biodiversity loss.

Donaldson's priority climate-related risks and opportunities impact Donaldson in various ways over the time horizons and scenarios considered. Overall, we believe we are well-positioned to mitigate the risks and seize the opportunities across the evaluated scenarios discussed above. Donaldson will consider the quantitative and qualitative results of the scenario analyses as we continue to evaluate our position and strategy, always with the mission of advancing filtration for a cleaner world.

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<sup>1</sup> IPCC, [IPCC Sixth Assessment Report \(AR6\)](#), 2021

# RISK MANAGEMENT

## **a) Describe the organization's processes for identifying and assessing climate-related risks.**

The ERM Committee monitors the risk environment for Donaldson and provides direction for activities to mitigate, to an acceptable level, the risks, including climate-related risks, that may impair our ability to achieve our goals. The committee facilitates ongoing identification of key climate-related risks and continuous improvement capabilities for managing those risks.

The ERM Committee meets periodically and is composed of the Chief Executive Officer, Chief Financial Officer, Chief Legal Officer and other key members of leadership, which represent global business and functional areas. The composition of the ERM Committee is intended to provide a broad knowledge of operations, strategy and sensitivity to the management of key risks, including climate-related risks, and related events that could significantly impair our ability to meet our goals.

A cross-functional TCFD group, which included external advisors, was formed to advance the identification and assessment of climate-related risks and opportunities. The group's efforts are intended to improve our capability for identifying and managing climate-related risks and enhance company ERM and strategy-setting processes.

## **b) Describe the organization's processes for managing climate-related risks.**

Climate-related risks are identified and monitored through the ERM process and at the business unit level, with the management of the specific risks occurring at the business unit level as part of its normal strategy setting process. The process includes oversight and support from the Sustainability Steering Committee and Executive Leadership Team as noted in the Governance section.

## **c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.**

Climate-related risks are managed as part of the company's overall process for management of key business risks. Business units have primary responsibility to identify and manage risks, including climate-related risks, while the ERM Committee monitors risk management activities through periodic reviews. The Board of Directors has responsibility for the oversight of risk management and, either as a whole or through its committees, regularly discusses with management the company's risk assessments and risk management procedures and controls. Further integration and planning of climate-related risks into overall risk management is ongoing.

# METRICS AND TARGETS

**a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.**

**c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.**

**b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.**

Donaldson is committed to helping mitigate climate change and operating sustainably. We continue to make investments, refine practices and prioritize climate action to reduce GHG emissions across our operations and facilities through renewable energy investments and energy efficiency improvements.

Donaldson monitors energy consumed and GHG emissions metrics. In our Sustainability Report, Donaldson reported results on our near-term fiscal year 2022 GHG emissions reduction goal of reducing Scope 1 (direct) and Scope 2 (indirect) GHG emissions intensity by 5% by the end of fiscal year 2022 from a fiscal year 2019 baseline. It was estimated this would require a reduction of approximately 6,000 mt CO<sub>2</sub>e emissions. We achieved an 18.1% reduction in GHG emissions intensity and reduced more than 8,000 mt CO<sub>2</sub>e emissions from the fiscal year 2019 baseline – surpassing the goal for both metrics.

Donaldson’s new sustainability strategy – Filtration for a Thriving Future – establishes a set of 2030 Ambitions, including a GHG emissions reduction target. We are targeting an absolute reduction of our Scope 1 and 2 GHG emissions by 42% by the end of fiscal year 2030 from a fiscal year 2021 baseline. This ambition, along with an execution roadmap, is science-based and aligns with the Intergovernmental Panel on Climate Change (IPCC) 1.5°C global warming scenario.

This target was established in fiscal year 2022 by a cross-functional team of operations, procurement, sustainability and EHS leads. The group engaged with external subject matter experts to develop a long-term carbon reduction strategy and detailed execution roadmap. The 2030 GHG emissions reduction target, strategy and execution plan positions Donaldson to make the necessary investments to help manage climate-related risks.

Donaldson’s fiscal year 2022 GHG emissions inventory covers the GHG emissions from our direct operations within our manufacturing facilities. This includes the Scope 1 and 2 emissions from all Donaldson manufacturing sites, distribution facilities and regional headquarters and excludes standalone country headquarters and sales offices.

Donaldson uses market-based emissions factors in setting the 2030 GHG emissions reduction ambition and for reporting and tracking progress on the target.

Fiscal Year 2022 GHG Emissions	Metric Tons CO <sub>2</sub> e
Scope 1	26,864
Scope 2	86,780
Scope 3	Donaldson does not currently track or report Scope 3 GHG emissions.

The methodology used to calculate our GHG emissions is in accordance with the World Resources Institute (WRI) GHG Protocol.

# ABOUT THIS REPORT

Donaldson's TCFD Report was published on April 4, 2023, and reflects activities and initiatives in the fiscal year 2022 (August 1, 2021, through July 31, 2022). All quantitative company data, unless otherwise stated, reflects FY22. Unless noted, goals and other data in the report reflect our global operations as relevant. Additional information on Donaldson policies and governance can be found at [www.donaldson.com](http://www.donaldson.com) and [ir.donaldson.com](http://ir.donaldson.com).

## FORWARD-LOOKING STATEMENTS

Statements in this report regarding future events and expectations, such as forecasts, plans, trends and projections relating to business performance and sustainability ambitions, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, and are identified by words or phrases such as "will likely result," "are expected to," "will continue," "will allow," "estimate," "project," "believe," "expect," "anticipate," "forecast," "plan," "ambition," and similar expressions. These factors include, but are not limited to, economic, industrial and governmental developments that may impact our operations. These and other risks and uncertainties are described in Item 1A of the Donaldson Annual Report on Form 10-K for the period ended July 31, 2022, as may be updated from time to time in other periodic reports filed with the Securities and Exchange Commission (SEC). Donaldson makes these statements as of the date of this report and undertakes no obligation to update them unless otherwise required by law.

## MATERIALITY

The inclusion of information in this report should not be construed as a characterization regarding the materiality or financial impact of that information for SEC reporting purposes. For purposes of this report, we use the definitions of materiality in the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) standards, which differ from the definition used for SEC filings.

## TRADEMARKS

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