

**2021**

Task Force  
on Climate-related  
Financial Disclosures (TCFD)  
Analysis & Report



## Introduction

Rockwell Automation has had a long-term commitment to sustainability. Our mission is to integrate control and information across the enterprise to help industrial companies and their people be more productive and sustainable. While this has been the company’s mission for many years, we recognize the increasing urgency and risks posed by climate change and have responded with more focus on both our own efforts to understand and mitigate the impacts of climate change as well as helping our customers achieve their own climate goals. Our products, services, and solutions are uniquely positioned to help our customers be more productive while also achieving efficiencies that will reduce cost, energy consumption, water, waste, and greenhouse gas (GHG) emissions and allow them to be better overall stewards of environmental resources.

As a component of our long-standing sustainability strategy, Rockwell Automation has adopted the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to enhance our climate change disclosures. This is our first report following the recommendations of TCFD. Using the TCFD framework, this report provides a progress update across each of the TCFD pillars: Governance, Strategy, Risk Management, and Metrics and Targets. We expect that the recommendations of the Task Force and other non-government and government organizations will evolve as they strive for better consistency and transparency in reporting on the possible impacts of climate change. We will continue to monitor best practices and regulations and evolve our reporting accordingly.

# Governance

Effective corporate governance is critical to executing on our strategy, fulfilling our responsibilities to all our stakeholders, and delivering for our customers. Rockwell Automation’s governance of sustainability-related matters, including those relating to climate change, reflects our commitment to strong leadership and oversight at the senior management and Board of Directors levels.

## BOARD OVERSIGHT

	Governance	Overview
<b>Board Oversight</b>	Board of Directors	The Board of Directors and its committees oversee and guide all elements of the company strategy.  The Board of Directors reviews (i) the adequacy of the company’s Enterprise Risk Management (ERM) program (ii) receives periodic reports from management regarding the ERM process; and (iii) receives reports from management regarding the risks that management has assessed as most significant.
	Board Composition and Corporate Governance Committee	The Board Composition and Corporate Governance Committee oversees our Sustainability program, including our Social and Governance pillars.

## MANAGEMENT OVERSIGHT

	Governance	Overview
<b>Executive Leadership</b>	Executive Leadership Team	The Executive Leadership Team is comprised of the CEO and his direct reports. The Executive Leadership Team owns the overall strategy and risk management responsibilities for the company, including to: (i) ensure that the company is devoting the appropriate resources to risk management activities; (ii) review risk management / mitigation strategies for effectiveness; (iii) actively participate in the annual risk assessment process; (iv) review and challenge the critical enterprise risks identified during the risk assessment process; (v) determine which risks are top company risks that require regular oversight by the Executive Leadership Team and the Board of Directors; and, (vi) appoint senior level employees as risk owners for the identified top Risks.
	Chief Financial Officer, and Chief People and Legal Officer	The Chief Financial Officer and the Chief People and Legal Officer are executive sponsors of the ERM program. Our Chief People and Legal Officer is the owner of the enterprise risk, Impact of Climate Change, for Rockwell Automation.
	Vice President, Sustainability	The Vice President, Sustainability is responsible for the holistic sustainability strategy for the company and the execution of that strategy.
<b>Management Committees and leaders</b>	Risk Council	Senior leaders who represent business groups and functions of the company who evaluate input from our enterprise risk management process and make recommendations to the Executive Leadership Team on key risks the company faces.
	Risk Managers	Leaders within the company who represent all of the business groups and functions who facilitate the identification and prioritization of key risks the company faces.
	Sustainability Council	A cross-section of senior leaders from across the company with direct responsibility for our sustainability program. The committee is chaired by our Director of Environmental Health and Safety, who reports to our Vice President, Sustainability.

# Strategy

Sustainability is central to our mission to make the world more productive and more sustainable, and to our promise of Expanding Human Possibility. We have long understood that sustainability is a key imperative for our business and our stakeholders and we continuously adapt our sustainability approach to meet new challenges and make a meaningful, lasting difference in the world. Under the three sustainability pillars of Environment, Social and Governance (ESG), we prioritize the topics we believe will create the most value and help us deliver three outcomes: Sustainable Customers, Sustainable Company, and Sustainable Communities.

## IDENTIFYING CLIMATE RISKS TO OUR STRATEGY

Our Enterprise Risk Management (ERM) process is designed to identify and address significant risks that might impact our strategy. Our ERM process assesses, manages, and monitors risks consistent with the integrated risk framework in the Enterprise Risk Management – Integrated Framework (2017) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). After a process that engages all areas of our business and operations, and based on the recommendations of our Risk Council, the Executive Leadership Team prioritizes identified risks and assigns an executive to address each major identified risk area and lead action plans to manage risks. Our Board of Directors provides oversight of the ERM process and regularly reviews both the process itself and significant identified risks.

## OUR RISK ANALYSIS

Once we identify a possible significant risk to our enterprise and a senior executive is assigned, the next step in our ERM process is to assemble the right team to further assess the risk and any opportunities, determine what mitigation plans we have in place already, and develop a list of additional actions or changes we believe we need to make to address a given risk. Our Chief Legal and People Officer was assigned to assemble and lead a team to conduct this analysis for climate change risk. In order to fully understand the impact that climate change might have on our company and our strategy, we reviewed climate change scenarios from multiple global sources. While we did not rely on one scenario in our analysis, we did leverage Carbon Brief's study titled ['The Impacts of Climate Change at 1.5C, 2.0C and Beyond'](#) as we performed our work. That information informed the set of assumptions we asked our cross-functional team to use to assess and quantify climate change risks and opportunities. This work was undertaken by a team including key representatives from each of our business segments, our sales team, our integrated supply chain team, risk management, and environmental health and safety teams.

Leveraging our cross-functional team experience with our operations, our products and solutions and our risk management approach and philosophy, we undertook an assessment of the risks and opportunities associated with climate change that is premised on the Paris Agreement goal of limiting the global temperature increase to 1.5 degrees Celsius. Our assessment was based on two key assumptions, drawn from our initial analysis:

1. Assume policy and legal requirements to achieve the Paris Agreement goal would drive companies, including our own, to establish or increase carbon neutral and sustainability goals, having an impact on risk mitigation and buying behavior immediately.
2. Assume, despite these changes in behavior, adverse weather events would continue to increase year over year in the near term having an impact on customer buying behavior and increasing risks to our supply chain and our operations.

## CLIMATE CHANGE RISKS AND OPPORTUNITIES

The teams focused on the possible impact to our Company in the short (1-3 years), medium (3-5 years), and long (6-10 years) term in the categories of:

1. Industries that we serve
2. Our operations and supply chain

The specific risks and opportunities identified and analyzed were as follows:

Transition Risks / Opportunities	Risks and opportunities with potential for impact to us or our customers
<b>Policy/Legal</b>	<ul style="list-style-type: none"> <li>• Sustainability/net neutral goals and initiatives across all industries.</li> <li>• Increase in operating costs due to increased pricing of GHG emissions and compliance/reporting obligations.</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>• Substitution of existing products with lower emission options.</li> <li>• Investment in renewable energy generation and distribution.</li> <li>• Need for efficient use, preservation, and distribution of clean water.</li> <li>• Need for data-driven architectures to allow for visibility of energy usage in production processes.</li> <li>• Need for identification of energy use per unit produced.</li> </ul>
<b>Market</b>	<ul style="list-style-type: none"> <li>• Stronger environmental awareness at the government, industry, and consumer levels.</li> <li>• Increased need for temperature / humidity control in plant operations.</li> <li>• Shift from combustion to electric vehicles.</li> <li>• Reduction in fossil fuels for transportation and electricity generation.</li> <li>• Growth in many recycling industry segments such as paper, plastics, EV batteries, and tire.</li> <li>• Increased focus on efficiency in manufacturing operations.</li> </ul>
<b>Reputation</b>	<ul style="list-style-type: none"> <li>• Pressure on resource intensive industries to become more efficient or transition to other methods/sources.</li> <li>• Transparency requirements, especially for consumer facing industries.</li> </ul>
Physical Risks / Opportunities	Risks and opportunities with potential for significant impact to us or our customers
<b>Acute</b>	<ul style="list-style-type: none"> <li>• Extreme weather events.</li> </ul>
<b>Chronic</b>	<ul style="list-style-type: none"> <li>• Rising sea levels.</li> <li>• Increase in sustained temperatures.</li> <li>• Demographic shifts due to agricultural changes.</li> </ul>

## INDUSTRIES THAT WE SERVE

We serve customers in a wide range of industries, which we group into the three categories of discrete, hybrid, and process.

We analyzed our climate change risks and opportunities on an industry-by-industry basis. Each industry faces unique risks and opportunities driven by climate change, policy changes, pressure from third parties, and consumers and market shifts. However, all industries have a sustainability focus and climate goals to a greater or lesser degree that present market opportunities for Rockwell Automation.

Overall, our market opportunities will increase in two significant ways. The first is that we have a suite of hardware and software products, services and solutions that enable our customers to increase efficiency and reduce waste and energy consumption. The second is the expected growth of sustainable industries, such as renewable energy and electric vehicles. This market growth presents significant potential upside to our business.

Based on our analysis the upside opportunities from our customers as we help them address their own risks out weigh the transition risks we face.

The chart below summarizes the estimated net direction of our financial risk and opportunity resulting from the climate change risks and opportunities identified by our team impacting each industry in the short, medium, and long-term.

## BUSINESS ANALYSIS

	Industry	Short Term (1-3yrs.)	Medium Term (3-5yrs.)	Long Term (6-10 years)
<b>Discrete</b>	Automotive (includes Electric Vehicle)	+	+	+
	Semiconductor	+	+	+
	Warehousing & E-Commerce	=	+	+
	General Industries	=	=	=
<b>Hybrid</b>	Food & Beverage	+	+	+
	Life Sciences	+	+	+
	Household & Personal Care	+	+	+
	Tire	=	+	+
	Eco Industrial <ul style="list-style-type: none"> <li>• Water/Wastewater</li> <li>• Waste Management</li> <li>• Mass Transit</li> <li>• Renewable Energy</li> </ul>	+	+	+
<b>Process</b>	Oil & Gas	+	+	=
	Mining & Cement	+	+	+
	Metals	+	+	=
	Chemicals	+	+	=
	Pulp/Paper	+	+	+

+ signifies potential net upside for our products and solutions

= signifies no net upside or downside

- indicates there is potential net downside

## OUR OPERATIONS AND SUPPLY CHAIN

In our operations we have identified the most significant sources of energy use, and therefore greenhouse gas emissions, and we have identified opportunities to reduce energy consumption and related emissions. More information on these initiatives is provided in the “Metrics and Targets” section of this report.

In our supply chain, our Integrated Supply Chain Business Continuity team conducted a location-by-location risk assessment based on the climate change risk scenarios we provided. There were three significant takeaways from the risk assessment:

1. Consensus from all locations was that during the period evaluated risks due to the impact of climate change were low. However, it is clear risks will increase over time if the effects of climate change are not mitigated in the short term.
2. A few of our locations situated in warmer climates identified slightly higher risk in the long term of our evaluation period (6-10 years) due to the potential for continued increase in weather events and costs associated with higher than historical temperatures. Because we have been conducting business continuity risk assessments for several years, we have already taken steps to mitigate many risks associated with weather events.
3. Anticipated costs to mitigate risks identified for the risk assessment period are not material to the company’s financial position or results of operations.

Our Integrated Supply Chain Business Continuity team also analyzes the risks associated with our key suppliers and inventory levels. The risks evaluated by this team go beyond the risks associated with climate change and include financial risk, risks associated with natural disasters, pandemics, and the like. Currently, the physical risks associated with climate change are considered a subset of the risks associated with natural disasters and the increasing frequency and severity of adverse weather events. At this time, these risks are not considered significant to our business operations.

## BUSINESS AND STRATEGY IMPACT

Three significant takeaways emerged from our climate scenario assessment:

1. The outcome of this analysis supported our expectations that the most immediate and significant impact of climate change are transition risks and opportunities rather than physical. Transition risks are those risks associated with changing strategies, policies, or investments as governments and industry work to reduce carbon dependence. At the same time more opportunities for our sustainability offerings, solutions, and services will emerge from our manufacturing customers as they address these same transition risks. Physical risks are increasing in the near term with more frequent severe weather events, presenting real, tangible challenges for us and our customers. However, the more significant physical risks resulting from a sustained increase in temperature and rising sea levels are not anticipated by most experts until the middle of the century.
2. Given our product portfolio, solutions and service offerings, we are well positioned to help our customers mitigate risks, increase efficiency, and achieve their own climate goals. Our analysis predicts that this will provide both risks and opportunities for our business in the short, medium, and long term. Much of the near-term opportunity comes from helping our customers transition to a lower or net zero emissions economy and to help them meet sustainability related goals by harnessing the solutions and innovations we offer.
3. The most significant near-term impact to our own business operations comes from our net neutral GHG emissions goal, which is a key element of our strategy to manage risk in our own operations. However, on an annual basis, the investments required are not projected to be material to our operating costs.



# Rockwell Automation's Opportunity to Help Customers Mitigate Climate Change Risk and Achieve Climate Goals

We are recognized as a global leader in manufacturing automation and information systems that drive efficiency and productivity in our customers manufacturing processes. Helping our customers to address sustainability issues in the manufacturing process and in supply chain management, including issues related to climate change, is a natural extension of our core offering.

Engagement with our leading customers has helped to determine the specific ways in which we can support them in leveraging our new and emerging technology, new solutions, and new offerings in the energy, water, and waste/recycling areas of their manufacturing processes. Our analysis of the opportunities we have to help our customers address their sustainability issues has led us to determine that this presents the biggest impact that we can have in addressing sustainability on a global basis.

Over the past year, we have developed a comprehensive strategic plan to address these opportunities more directly and intentionally. We announced in July of this year the creation of a new dedicated Sustainability function that combines our internal teams and efforts with a newly created Customer Sustainability team. This team is focused on identifying and developing new offerings across our businesses in the areas of energy, water, and waste/recycling, and we have technology releases planned in 2021 and beyond.

FactoryTalk Energy Manager was our first major new offering release. Launched in August 2021, FactoryTalk Energy Manager is a software tool that provides a scalable approach to energy monitoring, in context to production. The platform is designed to help our customers identify and act on opportunities for process improvement and optimization, to drive energy use reduction and improve efficiencies within their production systems.

Additionally, we are building out our Energy and Sustainability consulting practice within Kalypso, our recent digital business consulting practice we acquired. We have a unique methodology in identifying the greatest value in manufacturing operations to increase efficiency and achieve sustainable outcomes simultaneously.

## RISK MANAGEMENT

Rockwell Automation has taken a proactive approach to risk management. We were an early adopter of the COSO framework as we built out our ERM program in the early 2000s. Out of that process we identified aspects of business continuity as a risk to our enterprise and built out a business continuity program that assesses, mitigates, and manages a variety of threats, including severe weather events. Because we have been assessing risks associated with severe weather events and the increasing intensity and frequency of those events, our team has been managing one aspect of climate change risk well before this most recent risk assessment.

Our Environmental Health and Safety team has been reviewing our own impact on climate change and have been implementing measures to reduce our energy usage, waste, and carbon footprint for many years.

Identifying climate change as a key risk has led us to sharpen the focus and increase our efforts to both reduce our own emissions as well as help our customers quantify and achieve their own climate goals. In part, as a result of the climate change risk assessment recently completed, day-to-day responsibility for management of climate change risks and opportunities is assigned to our VP, Sustainability, with the support of appropriate business and functional teams, and overseen by our Sustainability Council and Executive Leadership Team. Our Board Composition and Corporate Governance Committee will continue to provide input on our goals and get annual updates on our progress. •



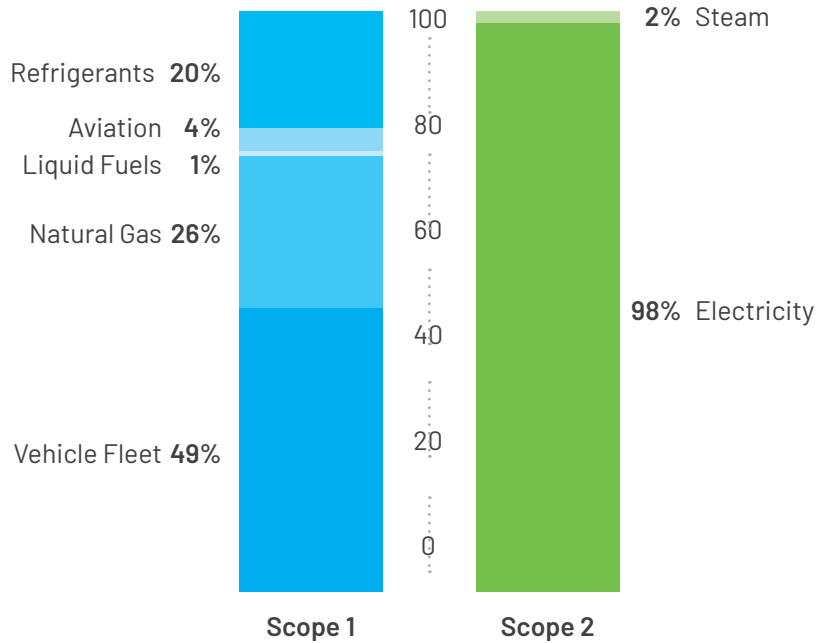
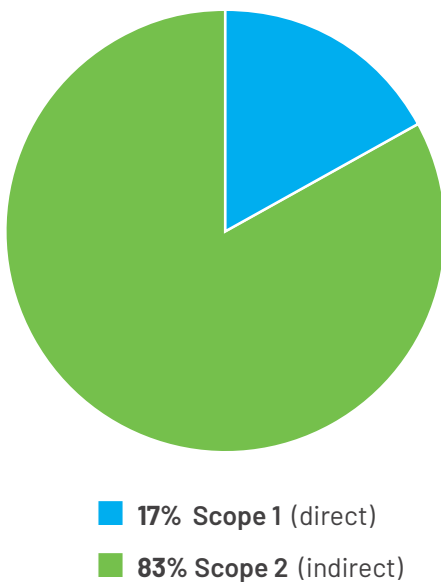
# Metrics and Targets

Detailed insights into the climate change-related metrics and targets that we monitor and manage are included in our [Sustainability Report](#) and further disclosed in our [2020 Carbon Disclosure Project \(CDP\) Climate Change report](#).

We use most of our energy for electricity to light, heat, and cool our buildings—which means most of our CO<sub>2</sub>e emissions are indirect. Known as Scope 2, these emissions are generated by the utilities, not our locations. We measure and report energy use and carbon emissions at our largest locations including core manufacturing and office sites. We calculate the balance of our carbon footprint using emission factors based on location and occupied office space. Energy is a minor percentage of the total operational costs at these locations.

## Emissions Summary

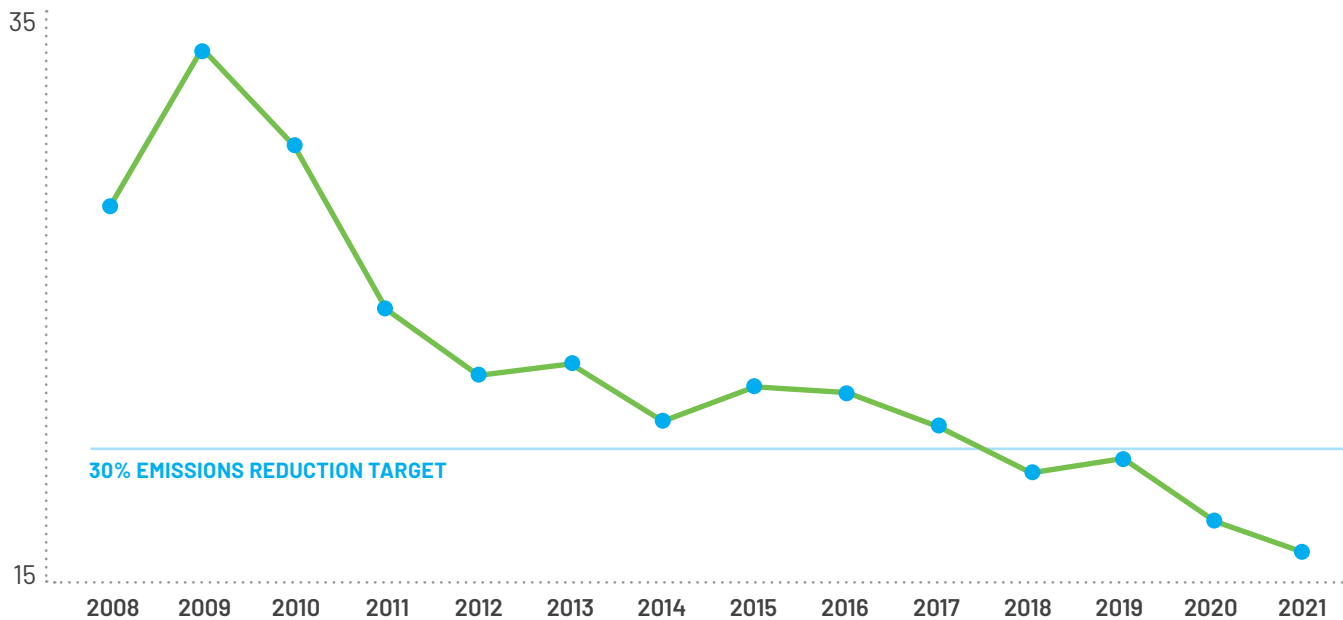
109,700 total metric tons of CO<sub>2</sub> equivalent



In order to drive energy use, and associated CO<sub>2</sub>e emission reductions we have been setting and disclosing environmental goals for more than 15 years. We met our 2022 goal to reduce emissions normalized to sales by 30% four years early.

## Normalized Emissions Trend

Scopes 1 and 2 emissions, as metric tons of carbon dioxide equivalent, per million USD of sales




In late 2020, we announced a new goal to be carbon neutral by 2030 for Scope 1 (direct) and Scope 2 (indirect) emissions. Our plan to achieve this goal is to continue to pursue best practices to reduce energy demand through ongoing monitoring, efficiency, and optimization at our sites. We'll look for new opportunities that build on our previous efforts, which included green and reflective roofs, solar energy fields, geothermal heating and cooling, sensing technologies, and HVAC and lighting upgrades.

Moving toward 2030, we will work to reduce emissions from our global vehicle fleet, including increasing the number of hybrid and green vehicles. And we'll explore investments in renewable energy through virtual power purchasing agreements, targeted renewable energy installations at our own locations, and renewable energy credits.

*This report contains statements (including certain projections, guidance, and business trends) that are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Words such as "believe," "estimate," "project," "plan," "expect," "anticipate," "will," "intend" and other similar expressions may identify forward-looking statements. Actual results may differ materially from those projected as a result of certain risks and uncertainties, many of which are beyond our control, including but not limited to those detailed from time to time in our Securities and Exchange Commission (SEC) filings.*



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