Avery Dennison Corporation - Climate Change 2020

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Avery Dennison Corporation (NYSE: AVY) is a global materials science and manufacturing company specializing in the design and manufacture of a wide variety of labeling and functional materials. The company's products, which are used in nearly every major industry, include pressure-sensitive materials for labels and graphic applications; tapes and other bonding solutions for industrial, medical and retail applications; tags, labels and embellishments for apparel; and radio-frequency identification (RFID) solutions serving retail apparel and other markets. Our reportable segments for fiscal year 2019 were (i) Label and Graphic Materials ("LGM"); (ii) Retail Branding and Information Solutions ("RBIS"); and (iii) Industrial and Healthcare Materials ("IHM"). In 2019, the LGM, RBIS, and IHM segments made up approximately 67%, 23% and 10%, respectively, of our total sales. In 2019, international operations constituted a substantial majority of our business, representing approximately 76% of our sales. As of December 31, 2019, we operated approximately 180 manufacturing and distribution facilities worldwide with approximately 30,000 employees and had operations in over 50 countries, with 2019 sales of $7.1 billion.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2019	December 31 2019	Yes	1 year

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Argentina
Australia
Bangladesh
Belgium
Brazil
Bulgaria
Canada
Chile
China
China, Hong Kong Special Administrative Region
Colombia
Czechia
Denmark
Dominican Republic
Egypt
El Salvador
France
Germany
Honduras
India
Indonesia
Ireland
Italy
Japan
Luxembourg
Malaysia
Mexico
Morocco
Netherlands
New Zealand
Norway
Pakistan
Peru
Poland
Portugal
Republic of Korea
Romania
Singapore
South Africa
Spain
Sri Lanka
Switzerland
Taiwan, Greater China
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	Yes [Consumption only]

C-AC0.6b/C-FB0.6b/C-PF0.6b

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Row 1

Primary reason
Do not own/manage land

Please explain
Avery Dennison works with suppliers and does not own or manage its own land.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity
Timber

% of revenue dependent on this agricultural commodity
60-80%

Produced or sourced
Sourced

Please explain
The company's products include pressure-sensitive materials for labels and graphic applications; tapes and other bonding solutions for industrial, medical and retail applications; tags, labels . This is reflected in the high percentage of timber based products related to revenue. This timber-based material is sourced from paper manufacturers as Avery Dennison does not produce its own material.

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	In our CEO's annual Performance Evaluation, he is measured on progress towards 2025 sustainability goals, including 3% reduction of GHG in 2019. From the baseline year of 2015, the 2025 target is absolute GHG reduction of 26% and 95% of waste in our facilities being landfill-free.
Board-level committee	At Avery Dennison, board oversight over sustainability is primarily conducted by the Governance and Social Responsibility Committee (Governance Committee). At least once a year, the Governance Committee receives and reviews a report from management. Our full Board hears from our leaders on each of our businesses' sustainability initiatives during its regular review of their business strategies. Annually, the Board reviews progress towards our 2025 sustainability goals. The Board evaluates progress towards meeting our 2025 sustainability goals when evaluating our Chief Executive Officer's compensation. A portion of our CEO's annual incentive award is dependent on delivering our 2025 sustainability goals. During 2019, Board oversight included holding strategy sessions focused on our sustainability progress and our innovation efforts to address increasing demand for more sustainable products.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	Reviewing Avery Dennison's stated emission reduction targets, and progress against them at regularly scheduled meetings allows our board, acting through its Governance Committee, to be regularly updated and made aware of climate issues.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The CEO of Avery Dennison is directly involved in all sustainability actions through strategic guidance and direction, given their material impact on the company. As such, a portion of our CEO's annual incentive award is dependent on delivering our 2025 sustainability goals. Our CEO provides guidance and direction to our Vice President and General Manager of our Retail Branding and Information Solutions (RBIS) business, who leads our Sustainability Council and is responsible for ensuring our continued progress towards our 2025 sustainability goals. The Sustainability Council is composed of a cross-divisional and cross-functional group of leaders to drive broad accountability and continually accelerate our sustainability progress. The Sustainability Council meets bimonthly and provides updates to our executive leadership team, including our CEO, quarterly. Through this process, we complete a quarterly sustainability scorecard which is annually provided to the Board for review of progress towards our 2025 goals.

Annually, members of the Sustainability Council present sustainability trends and our sustainability strategic plan to the Company Leadership team, which includes our CEO. Our 2025 sustainability goals include a 3% absolute reduction year-over-year and at least a 26% overall reduction, compared to our 2015 baseline, by 2025.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	One of the six strategic objectives by which our CEO's annual performance was measured is Sustainability and Diversity. Specifically in 2019, the following measures we considered: "Make progress toward 2025 sustainability goals, including reducing greenhouse gas (GHG) emissions by 3%; ensure at least 95% of waste generated at sites are landfill free, and evaluate gender pay equity and begin to adjust compensation as appropriate." In 2018, Avery Dennison exceeded its 3% GHG reduction target; achieved over 93% of sites as landfill-free; and evaluated our gender pay equity with positive results, developing plans to make identified adjustments to compensation for 2019.
Energy manager	Monetary reward	Please select	Environmental/Sustainability managers have overall accountability for ensuring public reduction targets are met.
Environment/Sustainability manager	Monetary reward	Please select	Each plant manager has strategic plans that include a number of key initiatives of which greenhouse gas reduction is one. Overall performance is measured against these key targets.
Facilities manager	Monetary reward	Please select	Each plant manager has strategic plans that include a number of key initiatives of which greenhouse gas reduction is one. Overall performance is measured against these key targets.
All employees	Monetary reward	Please select	Performance-based annual Avery Dennison "Thank You" awards for activities such as sustainable product development and implementing projects with increased efficiency that lead to significant energy savings and progress towards emissions reductions.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	5	
Long-term	5	10	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Avery Dennison defines substantive change as impacts on revenue, stakeholders and costs as well as availability of purchased goods. Indicators we recognize as having the potential to have a substantive impact include 5% revenue, concerns expressed by key stakeholders, and cost increases as much as 5% (or significant risk of material availability). Any one of these elements or a combination thereof would be the basis for evaluating mitigating measures.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Avery Dennison's process for identifying, assessing and responding to climate-related risks and opportunities is integrated into our Enterprise Risk Management (ERM) process. Our Board of Directors (Board) is responsible for overseeing this process while management is responsible for the management of the day-to-day risks our businesses face. Our Board is responsible for ensuring that the ERM processes designed and implemented by management are functioning effectively, and that our culture promotes risk-adjusted decision-making. The teams leading our businesses have incorporated ERM into developing and executing their strategies, assessing the risks impacting their businesses, and identifying and implementing appropriate mitigation strategies on an ongoing basis. In consultation with our head of risk management and members of senior management, our businesses' leadership teams prepare a risk profile, semiannually, consisting of a heat map and a summary of their key risks and mitigating strategies. These risk profiles are used to prepare a company risk profile based on identified business-specific risks as well as enterprise-wide risks. We prioritize risks that have the potential for substantive financial or strategic impact. Avery Dennison defines substantive change as impacts on net income. Indicators we recognize as having the potential to have a substantive impact include 5% revenue, concerns expressed by key stakeholders, and cost increases as much as 5% (or significant risk of material availability). Any one of these elements or a combination thereof would be the basis for evaluating mitigating measures. Our Board oversees risks related to our company and business strategies and operations, exercising this responsibility by considering the risks related to its decisions. Each year, our Board receives reports on the ERM process and the strategic plans and risks facing our businesses and company as a whole. These risks include financial risks, geopolitical risks, legal and regulatory risks, supply chain risks, competitive risks, information technology risks, and other risks related to the ways in which we do business. Employees who lead various risks areas - such as information technology; environmental, health and safety; tax; compliance; sustainability; and social responsibility - report periodically to Board Committees and occasionally to our full Board. In 2019, our Board held discussions on our business strategies and related risks, as well as progress towards achieving our 2025 sustainability goals, including with respect to plastic recyclability and how our businesses are adapting to the risks and opportunities presented by climate change. Elements of the Board's risk oversight function have been delegated to its Committees, allowing for better coordination with management. The Committee Chairs issue reports to our Board on topics discussed at Committee meetings, including the areas of risk discussed. Our Board's Governance Committee is primarily responsible for sustainability-related risks including climate change and our other material sustainability-related topics. Our annual long-term strategic planning process also feeds into our ERM process. The teams that lead our businesses and various risk areas present strategic plans to our company leadership team identifying risks, opportunities, and long-term trends. Our Global Senior Director, Head of Sustainability, participates in the discussions and presents the strategic plan for Sustainability at Avery Dennison. Our CEO uses the process to inform the enterprise's strategic plan and presents outcomes, risks, opportunities, and mitigation measures to the Board. Our head of risk management ties the strategic plans developed during this process into our ERM process. Through this process, Avery Dennison has identified changing consumer preference as a transitional, market risk with the potential to cause substantive financial or strategic impact. A substantial amount of our label materials are sold for use in plastic packaging in the food, beverage, and home and personal care market segments. In recent years, there has been an accelerated focus on sustainability and transparency in reporting, with greater consumer concern regarding climate change and single-use plastics, corporate commitments regarding the reuse and recyclability of plastic packaging and recycled content, and increased regulation across multiple geographies regarding the collection, recycling and use of recycled content. We are at risk that changes in consumer preferences or laws and regulations related to the use of plastics could reduce demand for our products. We have developed new products to advance the circular economy and address the need for increased recyclability of plastic packaging, and are developing new solutions to address this challenge in collaboration with our customers and the businesses in our supply chain.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Avery Dennison considers current regulation risks to be relevant to our business, primarily due to the potential impact this could have on our operations as well as customer demand for our products. As a corporation with global operations, we are subject to various national, state, provincial and/or local laws and regulations including those related to the emission of greenhouse gases. Failure to comply with or the cost required to comply with current regulation could adversely affect our business or reputation. Avery Dennison's business units are responsible for continuing to evaluate current regulations and identify ways to mitigate regulatory risks. As an example, we only have one facility that is over 25,000MT of Scope 1 emissions in a year. This is one of the key thresholds for emissions regulations and so we are not covered by Emissions Trading Schemes or mandatory reporting programs.
Emerging regulation	Relevant, sometimes included	We consider emerging regulations to be relevant to our business, primarily due to the potential impact they could have on our operations as well as customer demand for our products. As a corporation with global operations, we are subject to various national, state, provincial and/or local laws and regulations including those related to the emission of greenhouse gases. Failure to comply with or the cost required to comply with future regulation could adversely affect our business or reputation. Our business units are responsible for continually monitoring the global regulatory landscape to ensure that they are adjusting their strategies and implementing mitigating measures as appropriate to proactively address potential regulations that are likely to be implemented. The Avery Dennison Product Regulation "Early Warning" System tracks and alerts stakeholders of regulatory developments that may be relevant or impact our businesses. We subscribe to regulatory news and expert analysis to stay abreast of product related regulatory development tracking in over 120 countries. Designated individuals in our business units are notified as events occur within their area of expertise and are responsible for assessing the potential impact and relevance to Avery Dennison. For new developments determined to be relevant, these designated individuals and affected stakeholders are notified to ensure the required actions are taking place and the development is incorporated into business and product strategies. For example, our Early Warning System alerted us in 2015 that certain chemicals in our adhesives would become banned in the EU in 2021. By learning that this was coming almost two years before it became official, we were able to take a very structured approach to find alternatives and implement with virtually no impact to operations, performance, or our customers.
Technology	Relevant, sometimes included	As customer preferences change, with greater concern regarding climate change and single-use plastics, we must provide sustainable products and solutions that meet our customers' needs. We have established a goal to have 70% of the products we sell will conform to, or will enable end products to conform to, our sustainability principles. The Avery Dennison ClearIntent Portfolio offers customers products that meet at least one of our three sustainability standards -Responsible Sourcing: a specific amount of the content is verified to come from sustainably sourced materials; - Reduction of Materials: offers comparable or superior performance using less materials; or - Recycle: a specific amount of the content is recyclable, made of recycled content, or enables recycling. We apply concrete, measurable criteria to ensure that products meet these standards. The Avery Dennison Greenprint product life cycle assessment methodology helps our customers understand the environmental consequences of their labeling and packaging decisions. Avery Dennison Greenprint provides environmental impact data across six categories Amount of fossil content in the raw materials (barrels of oil) Number of trees used to make the raw materials Measure water use (liters or gallons) Measure of greenhouse gas emissions (tonnes of CO2) Solid waste generated (tonnes) Measure of primary energy used (kWh or MJ) These categories provide our customers with sustainability facts that they can translate into a powerful sustainability story that can elevate a company's brand and accelerate its product sales. By providing our customers with assurance and information of our sustainable products, we can better market these products and mitigate risks associated with developing new technologies.
Legal	Relevant, always included	We consider the laws of all the countries in which we do business in developing our business strategies and in the ways in which we are seeking to mitigate the risk of climate change. We implement measures that comply with local laws as we seek to reduce our own emissions, and in developing products that have a lower carbon footprint downstream.
Market	Relevant, sometimes included	Our business may be impacted by market changes including changing customer preferences. In recent years, there has been an accelerated focus on sustainability and transparency in reporting, with greater consumer concern regarding climate change and single-use plastics, corporate commitments regarding the reuse and recyclability of plastic packaging and recycled content, and increased regulation across multiple geographies regarding the collection, recycling and use of recycled content. We are at risk that changes in consumer preferences related to the use of plastics could reduce demand for our products. In 2019, we introduced a number of recycled-content products, including the first recycled liner solutions for both film and paper. Our recycled PET (rPET) liner uses 30% post-consumer waste and our rBG liner contains 15% post-consumer waste. These products cost the same as conventional liners and deliver the same ease of conversion and smooth dispensing, while offering savings in water use, energy, and greenhouse gas emissions.
Reputation	Relevant, sometimes included	Maintaining our reputation as an ethical business is at the core of everything we do. The impact of our actions is a central tenet of our risk assessments, including how our actions affect our reputation. In recent years, there has been an accelerated focus on sustainability and transparency in reporting, with greater consumer concern regarding climate change and single-use plastics. In an effort to mitigate our reputational risk around sustainability topics, including climate change, we increased our R&D and Marketing communication focus on our innovations that enable recycling and advance the circular economy, in particular products lines like CleanFlake and ThinkThin. We also continually improve the Avery Dennison Greenprint tool, which measures the environmental impact of the majority of our products in terms of energy, emissions, waste, water and fossil fuel. During 2019, we conducted a comprehensive materiality assessment to understand stakeholder expectations and determine our most material sustainability topics. Our Greenhouse Gas Emissions and Energy Use were determined to be topics of significance. In managing our reputational risk around this topic, we are committed to reporting annually on our progress and performance toward our Greenhouse Gas Emissions and Energy Use targets. Our 2019 performance is reported in our 2020 Integrated Sustainability and Annual Report. (link:https://www.averydennison.com/content/dam/avery_dennison/corporate/global/english/documents/sustainability/AveryDennision2020_Integrated_Sustainability_final.pd)
Acute physical	Relevant, sometimes included	Within regions of China where Avery Dennison operates, stricter environmental regulations are being proposed that would significantly impact our facilities. The regulations are targeting a reduction in volatile organic compounds (VOCs) from industrial operations. Avery Dennison is well-positioned to meet or exceed these proposed targets, providing us an opportunity in the market. Due to our global policies and procedures, our China plants are below the limits of the regulations that have come into effect in the relevant provinces, which gives a competitive advantage over competitors who had higher VOC emissions.
Chronic physical	Not evaluated	At this time Avery Dennison's focus has been on regulatory, technological, legal, market-based, reputational, and acute physical risks.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Mandates on and regulation of existing products and services

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Nonyl phenol ethoxylates (NPEO) are components of surfactants in Avery Dennison's emulsion adhesives. Since NPEOs were found to have impacts on aquatic

organisms, this class of chemicals will be banned in the EU starting in 2021 and is also regulated in some other markets, particularly in those served by our RBIS business. While Avery Dennison began moving to emulsion adhesives many years ago to reduce the VOC content of our adhesives where possible, we are now working to remove NPEOs from all products globally by 2025 and by next year in the EU and all RBIS products. This is a significant technical challenge that will require reformulating these adhesives once again. Avery Dennison considers this (and other potential chemical contamination of water) as not only a water treatment risk but also a climate risk. As water continues to become a scarce resource, we may need to treat polluted water for human use. This process requires a lot of energy and could exacerbate emissions.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1000000

Potential financial impact figure – maximum (currency)
2000000

Explanation of financial impact figure
Avery Dennison has formed regional teams that are developing plans to replace or reformulate the impacted adhesives, which are used on about 7% of total label stock production, by the required deadlines. The teams estimate costs in the range of $1 to $2 million, but the actual figure could be outside this range. Refined estimates to narrow the range of the expected costs is expected by Q4, 2020.

Cost of response to risk

Description of response and explanation of cost calculation
Avery Dennison expects that the entire financial impact of $1 to $2 million will be internal costs to reformulate adhesives and conduct trial production and testing to re-qualify the reformulated products internally and with customers. It will be necessary to identify alternative surfactants, conduct pilot scale testing to confirm that the adhesives will meet performance criteria, conduct trial production once an alternative is selected, conduct performance testing to confirm that the production products meet performance criteria and re-qualify the products with our customers. The estimate was arrived based on prior experience with reformulating adhesives, but a firmer estimate is being developed by the regional teams and will be available at the end of the year.

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Increased customer attention on the environmental performance of products, including the carbon footprint, could affect their selection of Avery Dennison's products. While consumer concern is still wide ranging, no single area has risen to prominence faster than plastic packaging sustainability in the consumer packaged goods industry. One of the greatest changes in our end markets since 2018 has been the acceleration of the awareness of, need for and urgency to deliver more sustainable solutions. Consumer sentiment on the need for broader climate change action has escalated, and is not only driving increased expectations from companies but also pressuring governmental bodies around the world to take more legislative action. While consumer concern is still wide ranging, no single area has risen to prominence faster than plastic packaging sustainability in the consumer packaged goods industry. Given the lack of current technology/substitutes to address this, there is a pressing need to establish a circular economy to manage and deal with recycling and reusing plastic.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
70000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We are already responding to changing consumer behavior driven by a demand for more sustainable products. The financial implications of the risk would be determined by the market shift. With sales of approximately $7.1 billion in 2019, a 1% shift, absent mitigation, would represent a loss of approximately $70 million in sales.

Cost of response to risk
10000000

Description of response and explanation of cost calculation
Plastic packaging sustainability in the consumer goods industry presents the greatest strategic challenge to our LGM business. Plastic is widely used for packaging because of its barrier properties (reduced food waste), lightweight (reduced logistics cost), versatility, durability and low cost. Our strategy to address this challenge is to develop a comprehensive portfolio of pressure-sensitive label materials for use on consumer plastic packaging in line with the targets of a circular economy. This involves label materials which separate during the recycling process as well as the use of recycled content in manufacturing our products. Our aim is to provide both at price parity to existing label materials in order to quickly penetrate the space and establish the industry standard. Avery Dennison has made much progress on our current 8 sustainability goals by expanding our competitive product portfolio of recycled content products, adding new solutions to enable circularity, increasing our transparency in reporting, enhancing our product and social compliance processes to drive greater supply chain transparency for brands and factories. We have reduced our environmental impact with focus on reducing GHG impacts, zero contamination of water, recycling of industry waste and responsible management of our films and chemicals. We believe that by implementing the strategies above, Avery Dennison is well set up to be the future sustainability leader in its industry. We are investing over $10M annually in developing and marketing products that help reduce environmental impact. We have spent over $100K on our GreenPrint tool and invested in full life cycle assessments which cost approximately $30,000 per product.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Avery Dennison works with the major apparel brands and must ensure that all our sites can meet the ZDHC wastewater discharge requirements, which go beyond legal requirements. Avery Dennison considers this (and other potential chemical contamination of water) as not only a water treatment risk but also a climate risk. As water continues to become a scarce resource, we may need to treat polluted water for human use. This process requires a lot of energy and could exacerbate emissions.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
450000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This figure is estimated based off of the revenue from the brands signed up to ZDHC across Avery Dennison's sites.

Cost of response to risk
860000

Description of response and explanation of cost calculation
Current Capital Expenditures for the next 2 years is $860k to upgrade and maintain systems to ensure the requirements are met. Disclosure to customers on the ZDHC platform is very important to Avery Dennison's business continuity. There are plans to update all RBIS Avery Dennison sites wastewater treatment facilities to ensure discharge meets ZDHC requirements now and in the future.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Resource substitutes/diversification

Primary potential financial impact
Other, please specify (Reduced Operational Costs)

Company-specific description
Avery Dennison efficiently meets reporting obligations due to our multiple year experience with carbon and energy management tracking and reporting on a voluntary basis. This experience could create a cost advantage relative to less prepared competitors. This also helps us to work proactively to explore partnerships for emerging opportunities in clean energy procurement. We have implemented multiple on-site, owned solar projects, and we have experience with direct Power Purchase Agreements (PPAs) for wind and solar (e.g., in Turnhout, Belgium and Kunshan, China). We have also leveraged our experience to sign a wind vPPa into commercial operation in the U.S.

Time horizon
Short-term

Likelihood
Very unlikely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
20000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Specific costs associated with emissions reporting obligations will vary based on the type of program, scope, and implementation. Avery Dennison has several years of experience measuring and voluntarily reporting emissions data, and may be more prepared for reporting requirements than competitors resulting in a potential competitive advantage. We have become increasingly more efficient at preparing our corporate GHG inventory.

Cost to realize opportunity
100000

Strategy to realize opportunity and explanation of cost calculation
Avery Dennison will continue to use the extensive amount of energy and GHG information collected over the last decade to prioritize energy reduction efforts to sites and regions where the largest reductions can be realized with available resources. We anticipate that this continuing effort will generate reduced operational costs through energy savings and less need for pollution management.

Comment
Included in the cost of doing business, so we estimate cost to be $0. The cost of these actions are combined with other sustainability and business initiatives and strategies. We estimate we invested approximately $100,000 to update our sustainability database.

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact
Other, please specify (Reduced capital costs)

Company-specific description
Within regions of China where Avery Dennison operates, stricter environmental regulations are being proposed that would significantly impact our facilities. The regulations are targeting a reduction in volatile organic compounds (VOCs) from industrial operations. Avery Dennison is well-positioned to meet or exceed these proposed targets, providing us an opportunity in the market. Due to our global policies and procedures, our China plants are below the limits of the regulations that have come into effect in the relevant provinces, giving us a competitive advantage over competitors who had higher VOC emissions.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
100000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Based on the cost of environmental compliance at other Chinese facilities, it is expected that avoided fees could exceed $100,000 annually.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
To maintain compliance with additional regulation, establishing relative standards and monitoring systems will be required. Additionally, promotion of sustainability efforts and concepts by the Chinese government can effectively demonstrate the need for compliance.

Comment
Avery Dennison is in the process of reducing VOCs from select products through its Research and Development efforts. This is already a part of our R&D budget and would not require additional costs to realize this opportunity.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Customers increasingly judge products based on their environmental performance. Avery Dennison has the opportunity to increase sales by developing products that have relatively lower carbon footprint than our competitors.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
70000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We are responding to changing consumer behavior driven by a demand for more sustainable products, such as our CleanFlake and ThinkThin product lines. CleanFlake enables recyclability of PET and HDPE containers. ThinkThin label constructions are up to 50% thinner than conventional labels. Using 1,000,000 square meters of a filmic ThinkThin label materials reduces the usage of fossil materials by 39%, energy usage of 46% and water usage of 30%. The financial implications of the opportunity would be determined by the market shift. With sales of approximately $7.1 billion in 2019, a 1% shift, absent mitigation, would represent approximately $70 million in sales.

Cost to realize opportunity
200000

Strategy to realize opportunity and explanation of cost calculation
To manage these opportunities we are expanding our sustainable product offerings through detailed customer research and life cycle analysis of our products. Our analysis has helped us focus our product innovation on reducing the environmental impact of the materials found in our products by designing thinner and lighter labeling materials; developing bio-based adhesive formulations that reduce consumption of fossil-based materials; and designing products that facilitate recycling. We utilize our environmental assessment tool known as “Avery Dennison Greenprint” to help our customers estimate the relative energy savings and GHG emissions reductions of the products they buy to help brands and retailers communicate their product sustainability to consumers. The Avery Dennison Greenprint tool has been used in our two major business units: Label and Packaging Materials and Retail Branding and Information Solutions.

Comment

The costs associated with these actions include investing $10M annually in developing and marketing products that help reduce environmental impact. Conducting full Life Cycle Assessments of our products costs approximately $30,000 per product.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
Other, please specify (The 3% Solution from WWF, CDP, and McKinsey & Company)	For Scope 1, 2, 3 emissions, we modeled scenarios for GHG reduction in each category using Climate Earth. These scenarios included an analysis of 10%, 30% and 75% use of recycled content in our products; 10%, 25%, and 30% reduction of materials, and increased recycling rates of 70%, 80% and 90% of waste in our value chain. From there we linked our innovation roadmap to continued progress toward higher-level scenarios. We have an annual process for evaluating industry scenarios across our business units. Ranging from business-as-usual to potential impacts from legislation and brand focus on eliminating single-use plastic. We model the likelihood and impact of our current businesses to inform our marketing, technology, sales, and legal strategies. Our approach is based on the 3% Solution developed by World Wildlife Fund, CDP and McKinsey & Company. Because our facilities require different solutions based on their design and location, we're pursuing reductions through a variety of means, such as improving energy efficiency, sourcing renewable power and procuring renewable energy certificates.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	We develop products with climate impact in mind, from the materials we use, to how they're constructed or recycled at end-of-life. For example, increasing the recycled content of a product or re-engineering its composition to reduce the amount of material needed can enable less energy use in its production. Our ClearIntent™ Portfolio was developed to identify products that have been sourced and developed to lower environmental impact, including (1) responsible material selections, (2) amount of materials used, (3) use of recycled content and (4) enabling consumer packaging to be recyclable. All categories are focused on reducing emissions and waste. For products with reduced materials and other materials selections, Avery Dennison verifies the environmental benefit through a partial life cycle analysis or use of an external party to verify the benefit. Launching in 2017, the ClearIntent™ Portfolio now contains hundreds of products that help our customers and their end users reduce materials consumption and environmental footprint.
Supply chain and/or value chain	Evaluation in progress	We are assessing the current state of carbon in our supply chain in an iterative manner. A baseline assessment for upstream GHG impact was developed in 2019 through a 3rd party with secondary (industry standards) data. This has led to a plan to evaluate the majority of our upstream supply chain (Goods and Services) with primary data in the next two years through the CDP Supply Chain measurement system. This will be used as a stepping stone to address our Scope 3 impact.
Investment in R&D	No	Climate-related risks and opportunities have not yet influenced our R&D investment strategy, as we are initially focused on evaluating the risks and opportunities relating to our operations, supply chain and existing products and services, ensuring our business strategy is aligned in accordance with these. Once these other categories have been fully vetted we may review opportunities to invest in R&D in this regard.
Operations	Yes	A substantive business decision made during the reporting year includes our commitment to renewable energy in the form of signing a 30 MW US wind virtual power purchase agreement (vPPA). This vPPA will have an estimated emissions reduction of 98,800 metric tons CO2e annually. Additional substantial business decisions were our Pune, India and Kunshan, China onsite solar rooftop panels, where 1 MW of onsite solar panels were installed and 0.8 Mwh of an on-site solar power purchase agreement was implemented, respectively

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs	Avery Dennison's climate related risks and opportunities have influenced financial planning in the area of direct costs. Avery Dennison has allocated capital for services related to assessing and reducing its Scope 1, 2, and 3 GHG impact. This involves both the contracted third parties who have helped gather information and provide feedback on next steps as well as data analysis tools used internally to inform decision making going forward. This will continue in the future as CDP Supply Chain's services are contracted for the acquisition of primary GHG data for Avery Dennison's top suppliers.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2015

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (market-based)

Base year
2015

Covered emissions in base year (metric tons CO2e)
691553

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2025

Targeted reduction from base year (%)
26

Covered emissions in target year (metric tons CO2e) [auto-calculated]
511749.22

Covered emissions in reporting year (metric tons CO2e)
473924

% of target achieved [auto-calculated]
121.036943717201

Target status in reporting year
Achieved

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)
Our goal is to achieve at least a 3% absolute reduction year over year. By basing our approach on The 3% Solution developed by World Wildlife Fund, CDP and McKinsey & Company, we plan to cut emissions by a minimum of 26 percent by 2025.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	4	692
To be implemented*	5	523
Implementation commenced*	10	38409
Implemented*	49	133845
Not to be implemented	7	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

247

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

65000

Investment required (unit currency – as specified in C0.4)

312000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

On-site solar panel installations in Bangi, Malaysia and Roodport, South Africa sites

Initiative category & Initiative type

Low-carbon energy consumption	Wind

Estimated annual CO2e savings (metric tonnes CO2e)

24078

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

10600

Payback period
No payback

Estimated lifetime of the initiative
<1 year

Comment
Purchase of I-RECs (wind resource) for multiple manfuacturing facilities in China

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Initiative category & Initiative type

Low-carbon energy consumption	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
684

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
15000

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
21-30 years

Comment
On-site rooftop solar direct PPA in Kunshan, China manufacturing facility

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Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
2599

Scope(s)
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
408147

Investment required (unit currency – as specified in C0.4)
293400

Payback period
<1 year

Estimated lifetime of the initiative
11-15 years

Comment
Multiple projects were executed across our manufacturing footprint to reduce natural gas consumption in drying processes. Projects included dryer exhaust rate reductions to limit waste heat, exhaust heat recovery systems, and upgrades to regenerative thermal oxidizers.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
428

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
134391

Investment required (unit currency – as specified in C0.4)
257178

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
Upgrades to interior and exterior LED lighting across multiple facilities globally

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Initiative category & Initiative type

Low-carbon energy consumption	Wind

Estimated annual CO2e savings (metric tonnes CO2e)
61802

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
63200

Payback period
No payback

Estimated lifetime of the initiative
<1 year

Comment
Purchase of unbundled renewable energy attributes (RECs) for US facilities (wind resource)

Initiative category & Initiative type

Low-carbon energy consumption	Wind

Estimated annual CO2e savings (metric tonnes CO2e)
39284

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
108175

Payback period
No payback

Estimated lifetime of the initiative
<1 year

Comment
Purchase of unbundled renewable energy attributes (GOs) for multiple manufacturing facilities in Europe (wind resource)

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
2157

Scope(s)
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
504073

Investment required (unit currency – as specified in C0.4)
862525

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment
Aggregation of multiple process energy efficiency projects executed voluntarily in manufacturing facilities, including compressor upgrades and compressed air leak minimization, optimization of cooling systems, and miscellaneous process improvements.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
637

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
73559

Investment required (unit currency – as specified in C0.4)
23000

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
Aggregation of multiple building energy efficiency projects, predominantly HVAC

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
1928.82

Scope(s)
Scope 1

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in C0.4)
420000

Investment required (unit currency – as specified in C0.4)
378000

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
Upgrade of multiple steam and thermal oil boilers to low NOx burners, including waste heat recovery systems for natural gas consumption savings

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C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for other emissions reduction activities	Avery Dennison has a dedicated budget for emission reduction activities, particularly as it relates to our GHG reduction targets, including purchase of unbundled renewable energy attributes in several markets. In 2018, we signed a 30MW US wind vPPA, which went into commercial operation in June of 2020.
Compliance with regulatory requirements/standards	Avery Dennison complies with local government regulations.
Dedicated budget for energy efficiency	We have annual capital budgets used for operational efficiency improvement projects, several of which are related to the reduction of energy intensity.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Group of products

Description of product/Group of products
In developing labeling and graphic materials with a smaller carbon footprint, Avery Dennison enables its customers to reduce the carbon footprint of their products. Avery Dennison has conducted a number of life cycle assessments (LCA) to identify opportunities to reduce the energy and carbon footprint of our major product lines. Findings to date have shown that the principal opportunities for reducing the environmental impact of our pressure-sensitive labeling and graphics materials lie in the selection of raw materials and the end-of-life disposal of those materials. In contrast, we estimate the manufacturing phase of our products' life cycle contributes approximately 10% of the overall impact on the major environmental indicators. These findings have helped us focus our product innovation on reducing the environmental impact of the materials found in our products by designing thinner, lighter labeling and trim materials; developing bio-based adhesives formulations that reduce consumption of fossil-based materials; and designing products that facilitate recycling. For example, Avery Dennison ThinStream products combine an ultra-thin PET liner material with patented machine technology to yield 17% more labels per roll. With more labels per roll, customers can operate more efficiently by reducing the frequency of roll change-overs and decreasing associated GHG emissions by transporting fewer rolls of materials. We utilize our environmental assessment tool, known as "Avery Dennison Greenprint" to help leading customers worldwide estimate the relative energy savings and GHG emissions reductions of the products they buy. Showing a customer the reduction in their environmental footprint will hopefully influence the customer's choice of product. Avery Dennison also provides materials (inlays and tags) for use in radio frequency identification (RFID) applications. RFID technology can enable large-scale retail organizations and consumer product companies to track products more efficiently throughout the supply chain. Tracking products more efficiently enables optimization of product shipping and transportation, potentially reducing transportation-related GHG emissions. Access to more sophisticated supply chain data can also assist companies in calculating their products' carbon footprint and capturing other supply chain efficiencies.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Avery Dennison GreenPrint)

% revenue from low carbon product(s) in the reporting year
40

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
295976

Comment

Scope 2 (location-based)

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
395577

Comment

Scope 2 (market-based)

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
395577

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
195629

Start date
January 1 2019

End date
December 31 2019

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
213067

Start date
January 1 2018

End date
December 31 2018

Comment
An error was found in the 2019 CDP submittal. This number reflects the corrected value.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
405344

Scope 2, market-based (if applicable)
278295

Start date
January 1 2019

End date
December 31 2019

Comment

Past year 1

Scope 2, location-based
407020

Scope 2, market-based (if applicable)
290368

Start date
January 1 2018

End date
December 31 2018

Comment
An error was found in the 2019 CDP submittal. This number reflects the corrected value.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Small or leased sites

Relevance of Scope 1 emissions from this source
No emissions from this source

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Emissions were estimated and determined to be less than 1% of the total emissions inventory.

Source
Unintended leakage of refrigerant from cooling systems

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions from this source

Explain why this source is excluded
Emissions were estimated and determined to be less than 0.2% of the total emissions inventory.

Source
Fire supression systems

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions from this source

Explain why this source is excluded
Emissions were estimated and determined to be less than 0.1% of the total emissions inventory.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
2886673.94

Emissions calculation methodology
Avery Dennison has partnered with Climate Earth for calculating Scope 3 totals which are relevant to our business. For calculating upstream impacts Climate Earth utilizes environmental extended input-output LCA (EEIO). EEIO analysis relies on financial data to make assessments of cradle-to-gate environmental impacts. We utilize the US EPA's model as the basis for calculation. The EPA model has calculated environmental impacts of industries in the form of impact/dollar. Climate Earth maps a customer's spend by purchase category to these factors to produce an upstream LCA. The result is a complete analysis of the upstream supply chain including analysis by supplier, category, and tier. Impact is calculated by the basic formula of: Activity Data x impact factor = impact So, for example, spend($) x impact factor(kgCO2e/$) = impact(kgCO2e). This includes totals from our RBIS, LGM, and IHM lines of business.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
20979.42

Emissions calculation methodology
Avery Dennison has partnered with Climate Earth for calculating Scope 3 totals which are relevant to our business. For calculating upstream impacts Climate Earth utilizes environmental extended input-output LCA (EEIO). EEIO analysis relies on financial data to make assessments of cradle-to-gate environmental impacts. We utilize the US EPA's model as the basis for calculation. The EPA model has calculated environmental impacts of industries in the form of impact/dollar. Climate Earth maps a customer's spend by purchase category to these factors to produce an upstream LCA. The result is a complete analysis of the upstream supply chain including analysis by supplier, category, and tier. Impact is calculated by the basic formula of: Activity Data x impact factor = impact So, for example, spend($) x impact factor(kgCO2e/$) = impact(kgCO2e). This includes totals from our RBIS, LGM, and IHM lines of business.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Metric tonnes CO2e
18952.47

Emissions calculation methodology
Avery Dennison has partnered with Climate Earth for calculating Scope 3 totals which are relevant to our business. For calculating upstream impacts Climate Earth utilizes environmental extended input-output LCA (EEIO). EEIO analysis relies on financial data to make assessments of cradle-to-gate environmental impacts. We utilize the US EPA's model as the basis for calculation. The EPA model has calculated environmental impacts of industries in the form of impact/dollar. Climate Earth maps a customer's spend by purchase category to these factors to produce an upstream LCA. The result is a complete analysis of the upstream supply chain including analysis by supplier, category, and tier. Impact is calculated by the basic formula of: Activity Data x impact factor = impact So, for example, spend($) x impact factor(kgCO2e/$) = impact(kgCO2e). This includes totals from our RBIS, LGM, and IHM lines of business.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
379083.03

Emissions calculation methodology
Avery Dennison has partnered with Climate Earth for calculating Scope 3 totals which are relevant to our business. For calculating upstream impacts Climate Earth utilizes environmental extended input-output LCA (EEIO). EEIO analysis relies on financial data to make assessments of cradle-to-gate environmental impacts. We utilize the US EPA's model as the basis for calculation. The EPA model has calculated environmental impacts of industries in the form of impact/dollar. Climate Earth maps a customer's spend by purchase category to these factors to produce an upstream LCA. The result is a complete analysis of the upstream supply chain including analysis by supplier, category, and tier. Impact is calculated by the basic formula of: Activity Data x impact factor = impact So, for example, spend($) x impact factor(kgCO2e/$) = impact(kgCO2e). This includes totals from our RBIS, LGM, and IHM lines of business.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

Waste generated in operations

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
15888.05

Emissions calculation methodology
Avery Dennison has partnered with Climate Earth for calculating Scope 3 totals which are relevant to our business. For calculating upstream impacts Climate Earth utilizes environmental extended input-output LCA (EEIO). EEIO analysis relies on financial data to make assessments of cradle-to-gate environmental impacts. We utilize the US EPA's model as the basis for calculation. The EPA model has calculated the environmental impacts of industries in the form of impact/dollar. Climate Earth maps a customer's spend by purchase category to these factors to produce an upstream LCA. The result is a complete analysis of the upstream supply chain including analysis by supplier, category, and tier. Impact is calculated by the basic formula of: Activity Data x impact factor = impact So, for example, spend($) x impact factor(kgCO2e/$) = impact(kgCO2e). This includes totals from our RBIS, LGM, and IHM lines of business.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

Employee commuting

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Use of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based on Avery Dennison's review of operations.

Other (upstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

C-AC6.6/C-FB6.6/C-PF6.6

(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area?
Partially

C-AC6.6a/C-FB6.6a/C-PF6.6a

(C-AC6.6a/C-FB6.6a/C-PF6.6a) Disclose your Scope 3 emissions for each of your relevant business activity areas.

Activity
Agriculture/Forestry

Scope 3 category
Purchased goods and services

Emissions (metric tons CO2e)
11477950

Please explain
Avery Dennison has partnered with Climate Earth for calculating Scope 3 totals which are relevant to our business. For calculating upstream impacts Climate Earth utilizes environmental extended input-output LCA (EEIO). EEIO analysis relies on financial data to make assessments of cradle-to-gate environmental impacts. We utilize the US EPA's model as the basis for calculation. The EPA model has calculated environmental impacts of industries in the form of impact/dollar. Climate Earth maps a customer's spend by purchase category to these factors to produce an upstream LCA. The result is a complete analysis of the upstream supply chain including analysis by category. Impact is calculated by the basic formula of: Activity Data x impact factor = impact So, for example, spend($) x impact factor(kgCO2e/$) = impact(kgCO2e). This includes totals from our RBIS, LGM, and IHM lines of business. We can isolate the Agriculture / Forestry impact of our purchased goods and services based off of the category breakdown of these goods and services. This provides specific data related to this activity.

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?
No

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities
Timber

Do you collect or calculate GHG emissions for this commodity?
No, not currently but intend to collect or calculate this data within the next two years

Please explain
Currently there are calculations based on overall agricultural commodities / forestry, which timber is included in, but we don't currently possess the granularity of isolating impacts specifically for timber. We will be seeking a method to gain this granularity as we collect and incorporate primary data to our Scope 3 analysis. This will be, at a minimum, covering our two largest business units, LGM and RBIS. Data collection will begin in 2021 as we engage with CDP Supply Chain to calculate our Purchased Goods and Services impact.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
66.7

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
473924

Metric denominator
unit total revenue

Metric denominator: Unit total
7100

Scope 2 figure used
Market-based

% change from previous year
4.5

Direction of change
Decreased

Reason for change
Reduction in market based emissions. (NOTE: Revenue in denominator is in millions of USD)

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	194200	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	302	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	1127	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Asia Pacific (or JAPA)	68820
Europe, Middle East and Africa (EMEA)	48870
Latin America (LATAM)	6135
North America	71804

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Corporate (Corp)	0
Industrial and Healthcare Materials (IHM)	71471
Label and Graphic Materials (LGM)	121131
Retail Branding and Information Solutions (RBIS)	3027

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

No

C-AC7.4c/C-FB7.4c/C-PF7.4c

(C-AC7.4c/C-FB7.4c/C-PF7.4c) Why do you not include greenhouse gas emissions pertaining your business activity(ies) in your direct operations as part of your global gross Scope 1 figure? Describe any plans to do so in the future.

	Primary reason	Please explain
Row 1	Judged to be unimportant	We find that breakdown by business unit provides a more actionable picture for our approach to Scope 1 reduction. While this is our current process, this is subject to change in the future.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Asia Pacific (or JAPA)	210026	185304	279796	29262
Europe, Middle East and Africa (EMEA)	56104.3	15579	143452	119110
Latin America (LATAM)	4409.3	4409	15658	0
North America	134804.3	73003	183877	80000

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Corporate (Corp)	0	0
Industrial and Healthcare Materials (IHM)	83865	70049
Label and Graphic Materials (LGM)	205781	119181
Retail Branding and Information Solutions (RBIS)	115698	89065

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	18669	Decreased	4	This number represents the incremental benefits from an increase in the renewable energy credits that were purchased by Avery Dennison in 2019 versus 2018, plus incremental scope 1 solar consumption, converted into CO2e using site specific electricity emission factors in Avery Dennison's GHG management system.
Other emissions reduction activities	7749	Decreased	2	This number represents the CO2e emission reductions that were attained by the completed energy efficiency projects as outlined in 4.3a. The CO2e emissions reductions were calculated by applying the site specific emission values in Avery Dennison's GHG management system to the estimated annual energy consumption reduction for each of the completed projects.
Divestment	0	No change		No divestment in 2019
Acquisitions	0	No change		No acquisitions in 2019
Mergers	0	No change		No mergers in 2019
Change in output		<Not Applicable>		
Change in methodology	0	No change		No changes in methodology in 2019
Change in boundary	0	No change		No boundary changes in 2019
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other	3094	Decreased	1	This number represents the emission reductions that were not accounted for in another category, which is primarily from normal variation in production.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	0	1054458	1054458
Consumption of purchased or acquired electricity	<Not Applicable>	233416	372436	605852
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	16929	16929
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	1481	<Not Applicable>	1481
Total energy consumption	<Not Applicable>	234897	1443823	1678720

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Natural Gas

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
1020555

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
970174

MWh fuel consumed for self-generation of steam
50381

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.1813

Unit
kg CO2e per KWh

Emissions factor source
IPCC AR5

Comment

Emission factor is typical global value and may vary by region or country. Breakdown of fuel usage to produce electricity, steam, and heating is not tracked by Avery Dennison, so engineering estimates were calculated for these values.

Fuels (excluding feedstocks)
Propane Liquid

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
21185

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
20126

MWh fuel consumed for self-generation of steam
1059

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.2277

Unit
kg CO2e per KWh

Emissions factor source
IPCC AR5

Comment
Emission factor is typical global value and may vary by region or country. Breakdown of fuel usage to produce electricity, steam, and heating is not tracked by Avery Dennison, so engineering estimates were calculated for these values.

Fuels (excluding feedstocks)
Diesel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
12718

MWh fuel consumed for self-generation of electricity
12718

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.2678

Unit
kg CO2e per KWh

Emissions factor source
IPCC AR5

Comment
Emission factor is typical global value and may vary by region or country. Breakdown of fuel usage to produce electricity, steam, and heating is not tracked by Avery Dennison, so engineering estimates were calculated for these values.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	14199	14199	1481	1481
Heat	990300	990300	0	0
Steam	51440	51440	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Europe

MWh consumed accounted for at a zero emission factor
114829.19

Comment
Purchase of unbundled energy attribute certificates applied across multiple manufacturing sites within the EU

Sourcing method
Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type
Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling
United States of America

MWh consumed accounted for at a zero emission factor
80000

Comment
Purchase of unbundled energy attribute certificates applied across multiple manufacturing sites.

Sourcing method
Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type
Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling
China

MWh consumed accounted for at a zero emission factor
28500

Comment
Purchase of unbundled energy attribute certificates applied across multiple manufacturing sites

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Sourcing method
Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

Low-carbon technology type
Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling
China

MWh consumed accounted for at a zero emission factor
761.69

Comment
Direct rooftop solar PPA

Sourcing method
Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

Low-carbon technology type
Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Belgium

MWh consumed accounted for at a zero emission factor
4280.97

Comment
Direct wind PPA

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value

Metric numerator
95 percent landfill-free

Metric denominator (intensity metric only)

% change from previous year

Direction of change
<Not Applicable>

Please explain

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for current reporting year – first year it has taken place

Type of verification or assurance
Third party verification/assurance underway

Attach the statement

Page/ section reference

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for current reporting year – first year it has taken place

Type of verification or assurance
Third party verification/assurance underway

Attach the statement

Page/ section reference

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for current reporting year – first year it has taken place

Type of verification or assurance
Third party verification/assurance underway

Attach the statement

Page/ section reference

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Purchased goods and services

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for current reporting year – first year it has taken place

Type of verification or assurance
Third party verification/ assurance underway

Attach the statement

Page/section reference

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement

% of suppliers by number
22

% total procurement spend (direct and indirect)
85

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement
Avery Dennison assesses, at a minimum, 80% of our direct spend based through the EcoVadis assessment program, which includes an evaluation of environmental impact and policies. Avery Dennison uses the EcoVadis platform to encourage suppliers to be assessed and improve on scores year over year. At this point, specific data on Scope 3 GHG emissions cannot be obtained to connect to suppliers as most of the Scope 3 data is broken down by raw material. We are implementing the CDP Supply Chain tool to measure and evaluate the Scope 3 data by supplier.

Impact of engagement, including measures of success
For companies that do not meet criteria deemed acceptable by Avery Dennison, corrective actions are assigned.

Comment

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Avery Dennison considers the climate impact of waste generated from our products downstream in the supply chain. In-process waste is generated at the next two levels in the value chain and has a negative climate impact. Challenges in recycling include the fragmented locations of the waste and finding local recycling solutions. Avery Dennison has engaged other value chain members (suppliers, competitors, customers and industry experts and partners) which has resulted in an ad hoc consortium focused on combining all current routes of recycling and creating industry solutions to support recycling where there are existing gaps. The consortium has been established for North America and Europe with plans to expand to Latin America and Asia Pacific in 2021 - with the goal to recycle this waste globally and advance down the path to circularity.

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?
Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number
MP1

Management practice
Practices to increase wood production and forest productivity

Description of management practice
Avery Dennison works directly with suppliers under a variety of frameworks to encourage certification of sustainable raw materials, thus encouraging practices to increase wood production and forest productivity.

Your role in the implementation
Knowledge sharing

Explanation of how you encourage implementation
Avery Dennison offers training and educational opportunities to align suppliers with FSC Chain of Custody, FSC Controlled Wood, FSC Recycled, and PEFC Sustainable Forest Management.

Climate change related benefit
Increasing resilience to climate change (adaptation)

Comment

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?
Yes

Avery Dennison has used an external auditor RainForest Alliance (RFA) to validate the geographical locations in which timber has been sourced from, and the percentage of material that comes from certified or FSC sources.The annual audit is the verification standard to ensure that the progress to the Company's goal - 100% certified paper of which 70% is FSC certified - is met.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?
Trade associations

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?
Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association
Sustainable Apparel Coalition

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
SAC goals as outlined in the SAC's Higg Facilities Module that includes, among other things, energy management systems and GHG reduction. The modules' aspirational-level questions give manufacturers clear guidance on hotspots for improvement and outline the current best practices in the field when strategizing for the GHG reduction promoted by SAC and the apparel industry as a whole.

How have you influenced, or are you attempting to influence their position?
We have participated on a number of working groups in the SAC and hold a co-chair position on the adoption working group. Through this involvement, we are working to influence the position of the SAC and as an extension, its members. We plan to be an industry leader when it comes to disclosure and progress in GHG reduction as the Index is used as a comparison tool.

Trade association
Tag and Label Manufacturers Association Label Initiative for the Environment

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
TLMI's position on climate change is demonstrated through their sustainability subteam. They are focused on recycling for reduced carbon impact of liners and matrix as well as awarding companies with a demonstrated improvement in energy efficiency through partnerships within the value chain. Their position is that much more can be done to reduce GHG emissions when members of the value chain work together.

How have you influenced, or are you attempting to influence their position?
Avery Dennison brought value chain members (suppliers, recyclers, and competitors) together in late 2019 to begin an ad hoc consortium to solve issues with in-process waste that is experienced throughout the value chain. We have invited TLMI to be a member of the North American arm of this ad hoc consortium to further the goals we share.

Trade association
Association of Postconsumer Plastic Recyclers Design for Recyclability

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Replacing plastics packaging with function-similar and adequate non-plastic alternatives will increase Greenhouse Gas emissions by a factor of 2.2 with maximum decomposition of degradable alternative materials.

How have you influenced, or are you attempting to influence their position?
We support this position by creating products that enable clean recycling of plastics (PET and HDPE) which can offset the extraction of new materials. This promotes plastic options as the less carbon intensive options for packaging.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The processes we have in place to ensure all of our direct and indirect activities that influence policy are consistent with our overall climate change strategy are two-fold:

1) We track new and proposed climate change legislation through our engagement with trade associations and Avery Dennison's sustainability organizations.

2) We review these regulations and engagements quarterly with those at Avery Dennison responsible for sustainability efforts and make recommendations to ensure alignment with our Climate Change strategy.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Underway – previous year attached

Attach the document
AVY 2018 Annual Report Filed 3-11-19.pdf

Page/Section reference
ii and iii

Content elements
Please select

Comment
Within our 2018 Annual Report, published in 2019, we state our Avery Dennison 2025 Sustainability Goals, including 3% annual reduction of absolute greenhouse gas emissions and targets for 95% landfill-free in our operations, with 75% of the waste repurposed and reducing the waste in the value chain by 70%. Within our CEO's letter to Shareholders, he references that we are exceeding our commitment to reduce our absolute greenhouse gas emissions.

Publication
In voluntary communications

Status
Complete

Attach the document
AveryDennison_ESG_Download_Aug2020_FINAL.pdf

Page/Section reference
5-11

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
The ESG download is available on the Avery Dennison website and includes not only contents related to climate but to additional Avery Dennsion goals. Additional climate content elements include incentives for management around climate change and waste reduction.

Publication
In voluntary communications

Status
Complete

Attach the document
AveryDennison_ClimatePolicy_August2020.pdf

Page/Section reference
1-2

Content elements
Governance
Strategy
Risks & opportunities

Comment
This attachment is Avery Dennison's published Climate Policy as of August 2020.

C13. Other land management impacts

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?
No

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Vice President of Global Communications	Other C-Suite Officer

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	0536111091

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	
Customer base is too large and diverse to accurately track emissions to the customer level	

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Avery Dennison is currently revising its emissions allocation methodology for customers, based on our sales value relative to their purchases. We anticipate implementing this allocation approach in the coming year. Additionally, we regularly update and implement a supplier scorecard for our upstream suppliers.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
Please select

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?
Please select

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?
Please select

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
Please select

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below
I have read and accept the applicable Terms