

C0. Introduction

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C0.1

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

Avery Dennison helps make brands more inspiring and the world more intelligent as a global leader in pressure-sensitive technology and materials and retail branding and information solutions. Our businesses include the production of pressure-sensitive materials and a variety of tickets, tags, labels and other converted products. Some pressure-sensitive materials are sold to label printers and converters that convert the materials into labels and other products through embossing, printing, stamping and die-cutting. Some materials are sold by us in converted form as tapes and reflective sheeting. We also manufacture and sell a variety of other converted products and items not involving pressure-sensitive components, such as fasteners, tickets, tags, radio-frequency identification ("RFID") inlays and tags, and imprinting equipment and related services, which we market to retailers, apparel manufacturers, and brand owners. Our reportable segments for fiscal year 2017 were (i) Label and Graphic Materials ("LGM"); (ii) Retail Branding and Information Solutions ("RBIS"); and (iii) Industrial and Healthcare Materials ("IHM"). In 2017, the LGM, RBIS, and IHM segments made up approximately 68%, 23% and 9%, respectively, of our total sales. In 2017, international operations constituted a substantial majority of our business, representing approximately 76% of our sales. As of December 30, 2017, we operated approximately 180 manufacturing and distribution facilities worldwide with approximately 30,000 employees and had operations in over 50 countries, with sales from continuing operations of \$6.6 billion.

C0.2

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**(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
Row 1	January 1 2017	December 31 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

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**(C0.3) Select the countries/regions 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 (Province of China)  
Turkey  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America  
Viet Nam

**C0.4**

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

USD

**C0.5**

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**(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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Operational control

**C-CH0.7**

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**(C-CH0.7) Which part of the chemicals value chain does your organization operate in?**

**Row 1**

**Bulk organic chemicals**

Polymers

**Bulk inorganic chemicals**

Please select

**Other chemicals**

Specialty chemicals

## C1. Governance

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### C1.1

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

Yes

### C1.1a

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**(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Board/Executive board	To ensure that the Company's senior management is fully involved and responsible for managing climate change within our company, there is a 2-tier structure with this responsibility: 1. Board of Directors: Governance and Social Responsibility Committee; 2. Corporate Leadership Team (which includes the CEO) and functions as a Sustainability Steering Committee. The Corporate Leadership Team is comprised of business unit presidents, global marketing vice presidents, procurement vice presidents, environmental, health and safety directors, and sustainability leaders.

### C1.1b

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**(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	Please explain
Other, please specify (Scheduled - Annually)	Monitoring and overseeing progress against goals and targets for addressing climate-related issues	

### C1.2

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**(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Annually

### C1.2a

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**(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.**

Avery Dennison collects data from our web-based sustainability tracking tool monthly, consolidated and passed to both operational and executive-level management. The Corporate Leadership Team, whose sustainability-related responsibilities include reviewing and assessing climate change risks and opportunities, meets several times a year. We report results to the Corporate Leadership Team and with the Board of Directors. In addition, Avery Dennison has a communication plan for engagement with internal and external stakeholders regarding energy and climate change actions and progress. Avery Dennison communicates with investors, shareholders and employees through our Annual Report, our Corporate Sustainability Report, the CDP, and our corporate website.

### C1.3

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

Yes

### C1.3a

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**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.**

**Who is entitled to benefit from these incentives?**

Business unit manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction target

**Comment**

Each business unit has strategic plans that include a number of key initiatives of which greenhouse gas reduction is one. Overall performance of business units and business unit managers is measured against these key targets.

**Who is entitled to benefit from these incentives?**

Energy manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Energy reduction project

**Comment**

Environmental/Sustainability managers have overall accountability for ensuring public reduction targets are met.

**Who is entitled to benefit from these incentives?**

Environment/Sustainability manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Behavior change related indicator

**Comment**

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.

**Who is entitled to benefit from these incentives?**

Facilities manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency target

**Comment**

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.

**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency project

**Comment**

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) Describe what your organization considers to be short-, medium- and long-term horizons.**

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

C2.2

**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	We collect data from our web-based sustainability tracking tool monthly, consolidated and passed to both operational and executive-level management. The Corporate Governance and Social Responsibility Committee, whose responsibilities include reviewing and assessing climate change risks and opportunities meets twice a year and the business unit sustainability steering committees meet four to six times a year. We report results to the Sustainability Steering Committee, the Corporate Leadership Team and with the Board of Directors. In addition, Avery Dennison has a communication plan for engagement with internal and external stakeholders regarding energy and climate change actions and progress. Avery Dennison communicates with investors, shareholders and employees through our Annual Report, our Corporate Sustainability Report, the CDP, and our corporate website.

C2.2b

**(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.**

i) At a company level, the Sustainability Steering Committee identifies, reviews, and, if necessary, acts on climate change related risks and opportunities brought by business unit experts in sustainability and environmental, health, and safety. Climate-change related efforts are guided by our Sustainability Charter – this has three core principles related to People, Planet and Prosperity.

ii) At the asset level, Avery Dennison has introduced a number of processes that are designed to assess climate change-related performance, and through this, risks and opportunities. These are on-going and include:  
 a. Maintaining a web-based sustainability data collection tool. This tool, which is currently being used to collect, among other things, data relating to our energy usage/carbon footprint, is an ongoing mechanism used for decision-making purposes.  
 b. At the product and customer level, Avery Dennison assesses risks/opportunities through detailed customer research and life cycle analysis of its products. These assessments then support expansion of our sustainable product offerings as appropriate to ensure that the company takes advantage of evolving opportunities. For example, Avery Dennison has developed an LCA-based environmental assessment tool for sustainable product development known as “Avery Dennison Greenprint” which helps customers understand the relative environmental impacts of the products that they buy. We use the Avery Dennison Greenprint tool in our two major business units: Pressure Sensitive Materials and Retail Branding and Information Solutions.

Avery Dennison prioritizes climate change risks and opportunities based on impact to our business, the immediacy and likelihood of occurrence. We conduct a material assessment on a biennial basis to ensure that it reflects the sustainability issues most important to our stakeholders and businesses. To identify the issues, we reviewed a variety of sources, including internal strategic plans and reports, customer surveys, media coverage, and Internet postings. We also interviewed more than 35 internal subject matter experts who interact frequently with our various stakeholders. By proactively addressing our material issues, we believe we will create products and programs that fuel our ongoing business success.

C2.2c

**(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	
Emerging regulation	Relevant, sometimes included	
Technology	Relevant, sometimes included	
Legal	Relevant, always included	
Market	Relevant, sometimes included	
Reputation	Relevant, sometimes included	
Acute physical	Relevant, sometimes included	
Chronic physical	Relevant, sometimes included	
Upstream	Relevant, sometimes included	
Downstream	Relevant, sometimes included	

C2.2d

**(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

i) At a company level, the Sustainability Steering Committee identifies, reviews, and, if necessary, acts on climate change related risks and opportunities brought by business unit experts in sustainability and environmental, health, and safety. Climate-change related efforts are guided by our Sustainability Charter – this has three core principles related to People, Planet and Prosperity.

ii) At the asset level, Avery Dennison has introduced a number of processes that are designed to assess climate change-related performance, and through this, risks and opportunities. These are on-going and include: a. Maintaining a web-based sustainability data collection tool. This tool, which is currently being used to collect, among other things, data relating to our energy usage/carbon footprint, is an ongoing mechanism used for decision-making purposes. b. At the product and customer level, Avery Dennison assesses risks/opportunities through detailed customer research and life cycle analysis of its products. These assessments then support expansion of our sustainable product offerings as appropriate to ensure that the company takes advantage of evolving opportunities. For example, Avery Dennison has developed an LCA-based environmental assessment tool for sustainable product development known as “Avery Dennison Greenprint” which helps customers understand the relative environmental impacts of the products that they buy. We use the Avery Dennison Greenprint tool in our two major business units: Pressure Sensitive Materials and Retail Branding and Information Solutions.

Avery Dennison prioritizes climate change risks and opportunities based on impact to our business, the immediacy and likelihood of occurrence. We conduct a material assessment on a biennial basis to ensure that it reflects the sustainability issues most important to our stakeholders and businesses. To identify the issues, we reviewed a variety of sources, including internal strategic plans and reports, customer surveys, media coverage, and Internet postings. We also interviewed more than 35 internal subject matter experts who interact frequently with our various stakeholders. By proactively addressing our material issues, we believe we will create products and programs that fuel our ongoing business success.

**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**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Other

**Type of financial impact driver**

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**Company- specific description**

Because Avery Dennison is a worldwide company, we face a constantly changing array of environmental regulations with which we must comply. Climate change regulation could affect our operations in one or more regions in the world by increasing operational costs by affecting the prices of key inputs such as electricity and natural gas.

**Time horizon**

Short-term

**Likelihood**

More likely than not

**Magnitude of impact**

Low

**Potential financial impact**

3000000

**Explanation of financial impact**

Although direct energy costs are not a significant portion of the Company's operating costs, if we are unable to reduce energy consumption, energy costs could rise. A 5 percent increase in electric and natural gas costs resulting from taxes or regulations could result in more than \$3 million per year in additional costs.

**Management method**

Avery Dennison goes beyond complying with current environmental regulations-. We actively track energy use across our operations and have reduced energy consumption by implementing numerous efficiency measures--we organized large-scale kaizen initiatives designed to remove or reduce energy and material-intensity of manufacturing processes at our twenty most energy-intensive facilities. For example, we reduced heat curing requirements in our heat printing processes at RBIS facilities by using more efficient inks and operating printing presses at standard, more efficient settings. Similarly, at PSM coating facilities, we have optimized the temperatures and throughput of our drying ovens. These measures are being expanded to other facilities and enable us to mitigate the potential risk of cost increases.

**Cost of management**

0

**Comment**

Included in the cost of doing business, so we estimate these cost to be \$0. The cost of these actions is typically combined with broad sustainability and business initiatives including carbon, energy, and other environmental concerns.

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**Identifier**

Risk 2

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

Direct operations

**Risk type**

Transition risk

**Primary climate-related risk driver**

Market: Changing customer behavior

**Type of financial impact driver**

Technology: Reduced demand for products and services

**Company- specific description**

Increased customer attention on environmental performance of products, including the carbon footprint, could affect their selection of Avery Dennison's products.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium-low

**Potential financial impact**

66000000

**Explanation of financial impact**

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 \$6.6 billion in 2017, a 1% shift would represent a loss of \$661 million in sales.

**Management method**

To manage these risks we are expanding our sustainable product offerings through detailed customer research and life cycle analysis of our products. Our analyses have helped us focus our product innovation on reducing the environmental impact of the materials found in our products by: 1. Designing thinner and lighter labeling and trim materials 2. Developing bio-based adhesives formulations that reduce consumption of fossil-based materials 3. Designing products that facilitate recycling We utilize our environmental assessment tool, known as "Avery Dennison Greenprint" to help leading U.S. and European customers estimate the relative energy savings and GHG emissions reductions of the products they buy. The Avery Dennison Greenprint tool has been used in our two major business units: Label and Packaging Materials and Retail Branding and Information Solutions. For example, we help brands and retailers communicate their product sustainability to the consumers.

**Cost of management**

200000

**Comment**

We are investing \$200,000 annually in developing and marketing products that help reduce environmental impact. Conducting Life Cycle Assessments of our products cost approximately \$30,000 per product.

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**Identifier**

Risk 3

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

Direct operations

**Risk type**

Physical risk

**Primary climate-related risk driver**

Acute: Increased severity of extreme weather events such as cyclones and floods

**Type of financial impact driver**

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

**Company- specific description****Time horizon**

Long-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium-low

**Potential financial impact****Explanation of financial impact****Management method****Cost of management****Comment**

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**(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

**Type of financial impact driver**

Other, please specify (Reduced operational costs)

**Company- specific description**

Avery Dennison could efficiently meet reporting obligations due to our multiple year experience with carbon and energy management tracking and reporting on a voluntary basis. This experience can create a cost advantage relative to less prepared competitors.

**Time horizon**

Short-term

**Likelihood**

Very unlikely

**Magnitude of impact**

Medium-low

**Potential financial impact**

20000

**Explanation of financial impact**

Specific costs associated with emissions reporting obligations will vary based on the type of program, scope, and implementation (approximately \$20,000); 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 cost advantage. We have become increasingly more efficient at preparing our corporate GHG inventory.

**Strategy to realize opportunity**

Included in the cost of doing business, so we estimate these 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.

**Cost to realize opportunity**

100000

**Comment**

**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

**Type of financial impact driver**

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 have significant economic impacts on our facilities. The regulations are targeting a reduction in volatile organic compounds (VOCs) from industrial operations. Avery Dennison is well-positioned to meet and exceed these proposed targets, providing us an opportunity in the market. Due to our global policies and procedures, AD China plants are below the limits of the regulations that have come into effect in the relevant provinces, and therefore gives a competitive advantage over competitors who had higher VOC emissions.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Potential financial impact**

100000

**Explanation of financial impact**

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



**Strategy to realize opportunity**

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.

**Cost to realize opportunity**

0

**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 realized 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

**Type of financial impact driver**

Increased revenue through demand for lower emissions 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

**Potential financial impact**

60000000

**Explanation of financial impact**

We are responding to changing consumer behavior driven by a demand for more sustainable products, such as our ThinStream products that combine an ultra-thin PET liner material with patented machine technology to yield 17% more labels per roll. The financial implications of the opportunity would be determined by the market shift. With sales of approximately \$6.1 billion, a 1% shift would represent \$61 million in sales.

**Strategy to realize opportunity**

To manage these opportunities we are expanding our sustainable product offerings through detailed customer research and life cycle analysis of our products. Our analysis have helped us focus our product innovation on reducing the environmental impact of the materials found in our products by: 1. Designing thinner and lighter labeling and trim materials 2. Developing bio-based adhesives formulations that reduce consumption of fossil-based materials 3. Designing products that facilitate recycling. We utilize our environmental assessment tool known as "Avery Dennison Greenprint" to help leading U.S. and European customers estimate the relative energy savings and GHG emissions reductions of the products they buy. The Avery Dennison Greenprint tool has been used in our two major business units: Label and Packaging Materials and Retail Branding and Information Solutions. For example, we help brands and retailers communicate their product sustainability to the consumers.

**Cost to realize opportunity**

200000

**Comment**

The costs associated with these actions include investing \$200,000 annually in developing and marketing products that help reduce environmental impact. Conducting Life Cycle Assessments of our products cost approximately \$30,000 per product.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Not yet impacted	
Supply chain and/or value chain	Not yet impacted	
Adaptation and mitigation activities	Not yet impacted	
Investment in R&D	Not yet impacted	
Operations	Not yet impacted	
Other, please specify	Please select	

C2.6

**(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.**

	Relevance	Description
Revenues	Not yet impacted	
Operating costs	Not yet impacted	
Capital expenditures / capital allocation	Not yet impacted	
Acquisitions and divestments	Not yet impacted	
Access to capital	Not yet impacted	
Assets	Not yet impacted	
Liabilities	Not yet impacted	
Other	Please select	

**C3. Business Strategy**

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**C3.1**

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**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

**C3.1a**

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

Yes, qualitative and quantitative

**C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)**

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**(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.**

Yes

**C3.1c**

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**(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

Avery Dennison’s business strategy focuses on top line growth in all markets, operational excellence and attracting and retaining talent. We recognize that climate change is an important global issue with potential implications to our business. Our Energy and Climate Change Strategy corresponds with our business and sustainability strategies, and includes an established science-based target to reduce absolute greenhouse gas emissions by at least 26% (3% per year) by 2025, compared to a 2015 baseline. Our Sustainability Charter lays out the primary tenants of how we influence our business strategy to integrate sustainability and climate change through the following goals: More sustainable products - Avery Dennison will improve the energy and carbon footprint of our products and services through innovation and life cycle management. For example, our Greenprint tool houses our environmental product information, which we use for internal decision making and discussion with customers. More sustainable processes - Avery Dennison will improve the energy and GHG efficiency of our operations and will work toward continual improvement at all facilities. We collect data from our web-based sustainability tracking tool monthly, consolidated and passed to both operational and executive-level management. The Corporate Governance and Social Responsibility Committee, whose responsibilities include reviewing and assessing climate change risks and opportunities meets twice a year and the business unit sustainability steering committees meet four to six times a year.

We report results to the Corporate Leadership Team and with the Board of Directors.- More sustainable purpose: Avery Dennison will communicate and engage with key stakeholders to achieve our energy and climate change goals and to meet the interests of customers, shareholders, employees, and the communities where we operate. Avery Dennison has a communication plan for engagement with internal and external stakeholders regarding energy and climate change actions and progress. Avery Dennison communicates with investors, shareholders, and employees through our Annual Report, our Corporate Sustainability Report, the CDP, and our corporate website. We have embedded sustainability into our strategic planning, innovation and operations processes, and are rigorously measuring performance in this area.

The aspects of climate change that have influenced Avery Dennison’s strategy include regulatory, physical and consumer-related risks and incentives-based opportunities. The most substantial business decisions made include expanding use of life cycle assessment in product design, along with partnering and membership in NGO organizations with a focus on GHG reduction. These activities were influenced by stakeholder requests, brand differentiation, desire for a leadership position in sustainability, and reducing energy costs.

The key components of our short term strategy that have been influenced by climate change include activities that support our Energy and Climate Change Strategy and enable us to work towards our emission reduction targets, such as energy evaluations and management projects at prioritized sites including:- Energy reclamation and efficiency projects- Building/infrastructure efficiency- Supply-side procurement and peak-load analysis- Alternative energy, as feasible- Teaming with energy experts on energy reductions opportunities, analyses. In addition, as part of Avery Dennison’s waste reduction initiatives, the company has started to divert from landfill a growing proportion of its industrial waste by sending this waste off-site to municipal waste-to-energy facilities. By supporting energy recovery from waste, Avery Dennison is helping to reduce GHG emissions elsewhere, downstream of our operations, by avoiding landfill methane emissions from waste that would have been landfilled. Avery Dennison is expanding its lifecycle program for product design and development and we set internal goals related to product lifecycle in 2013. Our innovation teams use screening lifecycle assessment to evaluate new products with the goal that 80% of new products will have reduced impacts when compared to existing products.

The most important components of the long term strategy that have been influenced by climate change include a change in core business focus and development and incorporation of new technologies. We have set new long term goals for 2025 based on current science, and which will incorporate more renewable energy into our utility mix.

These activities gain Avery Dennison strategic advantage through cost reductions and by enabling product innovation which will enhance sales and help to reach new markets and customers.

**C3.1d**

**(C3.1d) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenarios	Details
Other, please specify (World Wildlife Fund’s Climate Savers)	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. We anticipate our science-based target to be approved by SBTi by the end of 2018.

C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e

**(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e) Disclose details of your organization's low-carbon transition plan.**

As a member of World Wildlife Fund's Climate Savers and the Renewable Energy Buyers Alliance, and as a signatory of the American Businesses Act on Climate Pledge, we support the global effort to reduce greenhouse gas emissions (GHGs) and keep global temperatures to less than two degrees Celsius above pre-industrial levels. We believe that every sector of society, including business, must do its part to help reach those targets.

We're working specifically to reduce the carbon emissions from powering our more than 180 facilities. Almost all of the energy we use comes from electricity or natural gas. Our aim is to lower absolute emissions by at least 3 percent each year between 2015 and 2025—a minimum of 26 percent in total. 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. In late 2016, we entered into our first renewable energy power purchase agreement (PPA) in the United States. We expect the renewable energy certificates we receive via the PPA to offset 50 percent of the GHG emissions generated from our electricity consumption in the U.S.

## C4. Targets and performance

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### C4.1

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

Absolute target

#### C4.1a

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

**Target reference number**

Abs 1

**Scope**

Scope 1 +2 (market-based)

**% emissions in Scope**

100

**% reduction from base year**

26

**Base year**

2015

**Start year**

2015

**Base year emissions covered by target (metric tons CO2e)**

682341

**Target year**

2025

**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

**% achieved (emissions)**

77

**Target status**

Underway

**Please explain**

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'll cut emissions by a minimum of 26 percent over the next decade. We anticipate our science-based target to be approved by the SBTi by the end of 2018.

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### C4.2

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**(C4.2) Provide details of other key climate-related targets not already reported in question C4.1a/b.**

### C4.3

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(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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	364.2
To be implemented*	1	0
Implementation commenced*	11	1058.3
Implemented*	39	116526.95
Not to be implemented	0	0

### C4.3b

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

**Activity type**

Low-carbon energy purchase

**Description of activity**

Solar PV

**Estimated annual CO2e savings (metric tonnes CO2e)**

61830

**Scope**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**

**Investment required (unit currency – as specified in CC0.4)**

**Payback period**

Please select

**Estimated lifetime of the initiative**

<1 year

**Comment**

Renewable Energy Certificates (RECs) received in US; GHG savings calculated based on allocation to various facilities in US; Lifetime of the initiative listed as <1 year based on the retirement of RECs in the reporting year, not the lifetime of the project

**Activity type**

Low-carbon energy purchase

**Description of activity**

Solar PV

**Estimated annual CO2e savings (metric tonnes CO2e)**

40642.86

**Scope**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**

**Investment required (unit currency – as specified in CC0.4)**

149530

**Payback period**

Please select

**Estimated lifetime of the initiative**

<1 year

**Comment**

Market purchase of guarantees of origin for renewable electricity for multiple sites in Europe; GHG savings calculated based on allocation to EU facilities; Lifetime of the initiative listed as <1 year based on the retirement of RECs in the reporting year, not the lifetime of the project.

**Activity type**

Energy efficiency: Processes

**Description of activity**

Heat recovery

**Estimated annual CO2e savings (metric tonnes CO2e)**

2841.31

**Scope**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**

429000

**Investment required (unit currency – as specified in CC0.4)**

1512603

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Project approved in 2016 and completed Q1 2017. Natural Gas savings are achieved due to the RTO operating in self-sustained mode (no gas usage) when solvent load is high enough.

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

Method	Comment
Internal finance mechanisms	
Lower return on investment (ROI) specification	

**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 growing 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 to less than 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: 1. Designing thinner, lighter labeling and trim materials 2. Developing bio-based adhesives formulations that reduce consumption of fossil-based materials 3. 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 decrease associated GHG emissions with transporting fewer rolls of materials. We utilize our environmental assessment tool, known as "Avery Dennison Greenprint" to help leading U.S. and European customers 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?**

Low-carbon product

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (Cradle to Avery Gate LCA; ReCipe assmnt)

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

These figures were estimated using the results of a Cradle to Avery Gate Life Cycle Assessment study that applied the ReCipe impact assessment method (2008) to calculate climate change. ReCipe uses the GWPs published in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (2007).

## C5. Emissions methodology

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### 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)**

299493

**Comment**

#### Scope 2 (location-based)

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

382849

**Comment**

#### Scope 2 (market-based)

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

382849

**Comment**

### C5.2

---

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 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?

#### Row 1

**Gross global Scope 1 emissions (metric tons CO2e)**

244316

**End-year of reporting period**

<Not Applicable>

**Comment**

### 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?**

**Row 1**

**Scope 2, location-based**

404458

**Scope 2, market-based (if applicable)**

301606

**End-year of reporting period**

<Not Applicable>

**Comment**

**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**

Mobile sources

**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 the source is excluded**

Limited emissions from forklifts at manufacturing facilities are immaterial. Data unavailable.

---

**Source**

Fugitive refrigerant emissions

**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 the source is excluded**

Emissions from HVAC equipment is immaterial. Data unavailable.

---

**Source**

Small facilities

**Relevance of Scope 1 emissions from this source**

Emissions are not relevant

**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 the source is excluded**

<10,000 square foot facilities excluded because of relative size.

---

**C6.5**

---

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

**Purchased goods and services**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

**Capital goods**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

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

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

**Upstream transportation and distribution**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

**Waste generated in operations**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

**Business travel**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

11518

**Emissions calculation methodology**

All business travel was calculated by Radius Travel. Air travel was calculated from reports where each flight segment was categorized into specific flight haul lengths and then multiplied by DEFRA's published emission factors for those flights. Rental car was calculated based on reports from twelve (12) rental car vendors, which included total miles driven. Total fuel usage was then calculated by average mpg for that vehicle type. This data was then multiplied by the specific emission factor for that vehicle type using emission factors for gasoline and diesel passenger cars, and full size vehicles. For hotel stays, total room nights was multiplied by 25.2 kg CO2/room-night, where this emission factor was estimated in the hotel and casino market sector.

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

100

**Explanation**

**Employee commuting**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

**Upstream leased assets**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**

Avry Dennison has insignificant leased assets that are not already included in our Scope 1 and 2 inventory.

#### Downstream transportation and distribution

##### Evaluation status

Not relevant, explanation provided

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

Avery Dennison pays for all distribution of our products.

#### Processing of sold products

##### Evaluation status

Not relevant, explanation provided

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

#### Use of sold products

##### Evaluation status

Relevant, not yet calculated

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

#### End of life treatment of sold products

##### Evaluation status

Relevant, not yet calculated

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

#### Downstream leased assets

##### Evaluation status

Not relevant, explanation provided

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

Avery Dennison does not lease space to other entities.

#### Franchises

##### Evaluation status

Not relevant, explanation provided

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

Avery Dennison does not have franchises.

#### Investments

##### Evaluation status

Not relevant, explanation provided

##### Metric tonnes CO2e

##### Emissions calculation methodology

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

##### Explanation

Avery Dennison does not provide capital or financing.

**Other (upstream)**

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

**Other (downstream)**

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

**C6.7**

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**(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

Yes

**C6.7a**

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**(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.**

13231

**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**

0.0001

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

648774

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

6613800000

**Scope 2 figure used**

Location-based

**% change from previous year**

26.8

**Direction of change**

Increased

**Reason for change**

The stated increase in per cent change from previous year is a result of a 38% year-over-year increase in S1+S2 emissions (numerator), as well as a 9% increase in revenue (denominator).

---

**C7. Emissions breakdowns**

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**C7.1**

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**(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?**

Yes

**C7.1a**

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**(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	234680.21	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	234.52	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	0.66	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)	104997
Europe, Middle East and Africa (EMEA)	51929
Latin America (LATAM)	6663
North America	80727

## 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)	25489
Label and Graphic Materials (LGM)	123594
Merger & Acquisition (M&A)	90509
Retail Business Information Solutions (RBIS)	4725

## C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	3964	<Not Applicable>	
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

## 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 in market-based approach (MWh)
Asia Pacific (or JAPA)	205443		259388	259388
Europe, Middle East and Africa (EMEA)	58575		143387	143387
Latin America (LATAM)	11736		34336	34336
North America	128704		167214	167214

**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 emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Corporate (Corp)	0	
Industrial and Healthcare Materials (IHM)	27867	
Label and Graphic Materials (LGM)	188306	
Merger & Acquisition (M&A)	75000	
Retail Business Information Solutions (RBIS)	113284	

**C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7**

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	3736.69	1902.5	
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C-CH7.8**

**(C-CH7.8) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.**

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology
Polymers		
Specialty chemicals		
Other (please specify) (Monomers)		
Other (please specify) (Hotmelt Components)		
Other (please specify) (Rosin ester)		

**C-CH7.8a**

**(C-CH7.8a) Disclose sales of products that are greenhouse gases.**

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	
Methane (CH4)	0	
Nitrous oxide (N2O)	0	
Hydrofluorocarbons (HFC)	0	
Perfluorocarbons (PFC)	0	
Sulphur hexafluoride (SF6)	0	
Nitrogen trifluoride (NF3)	0	

**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?**

Increased

**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		<Not Applicable>		
Other emissions reduction activities	116527	Decreased	28	Despite an overall increase in S1+S2 (market-based) emissions, several emission reduction activities, including RECs and other market-based values were a part of our 2017 inventory totals.
Divestment		<Not Applicable>		
Acquisitions	5700	Increased	5	
Mergers		<Not Applicable>		
Change in output	222373	Increased	49.2	
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

**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 undertakes this energy-related activity
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	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

**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 MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	43298	1153842	1197140
Consumption of purchased or acquired electricity	<Not Applicable>	80058	604324	684383
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	123356	1758166	1881523

**C-CH8.2a**

**(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.**

	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	21686
Consumption of purchased or acquired electricity	<Not Applicable>	9514
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	31200

**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	No
Consumption of fuel for the generation of steam	No
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**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

962462

**MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**



<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

---

**Fuels (excluding feedstocks)**

Coal

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

88108

**MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

72203

**MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

---

**Fuels (excluding feedstocks)**

Propane Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

30528

**MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

---

**Fuels (excluding feedstocks)**

Wood

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

43298

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**MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

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**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

541

**MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

<Not Applicable>

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Not Applicable>

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C8.2d

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**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

**Coal**

**Emission factor**

2580

**Unit**

kg CO2e per metric ton

**Emission factor source**

Avery GHG Protocol

**Comment**

**Diesel**

**Emission factor**

11.9938

**Unit**

kg CO2e per gallon

**Emission factor source**

Avery GHG Protocol

**Comment**

**Motor Gasoline**

**Emission factor**

8.652

**Unit**

kg CO2e per gallon

**Emission factor source**

Avery GHG Protocol

**Comment**

**Natural Gas**

**Emission factor**

181.286

**Unit**

kg CO2e per MWh

**Emission factor source**

Avery GHG Protocol

**Comment**

**Propane Gas**

**Emission factor**

227.66

**Unit**

kg CO2e per MWh

**Emission factor source**

Avery GHG Protocol

**Comment**

**Wood**

**Emission factor**

1809.909

**Unit**

kg CO2e per metric ton

**Emission factor source**

Avery GHG Protocol

**Comment**

**C8.2f**

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

**Basis for applying a low-carbon emission factor**

Power Purchase Agreement (PPA) with energy attribute certificates

**Low-carbon technology type**

Solar PV

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

80058

**Emission factor (in units of metric tons CO2e per MWh)**

0

**Comment**

**Basis for applying a low-carbon emission factor**

Energy attribute certificates, Guarantees of Origin

**Low-carbon technology type**

Solar PV

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

114293

**Emission factor (in units of metric tons CO2e per MWh)**

0

**Comment**

**Basis for applying a low-carbon emission factor**

Energy attribute certificates, Renewable Energy Certificates (RECs)

**Low-carbon technology type**

Wind

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

981.05

**Emission factor (in units of metric tons CO2e per MWh)**

0

**Comment**

**C-CH8.3**

**(C-CH8.3) Disclose details on your organization’s consumption of feedstocks for chemical production activities.**

**C-CH8.3a**

**(C-CH8.3a) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.**

	Percentage of total chemical feedstock (%)
Oil	0
Natural Gas	0
Coal	0
Biomass	0
Waste	0
Fossil fuel (where coal, gas, oil cannot be distinguished)	0
Unknown source or unable to disaggregate	100

**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**

2025 Goal: To be 95 percent landfill-free, with at least 75 percent of waste reused, repurposed, or recycled. We work continuously to minimize the solid waste created through our manufacturing operations. Our main waste products are excess paper, laminate, liner, fabric, adhesive and other materials left over from making our products. We're pursuing a vision of sending zero operational waste to landfills. Our 2025 goal is to be 95 percent landfill-free and to reuse, recycle or repurpose at least 75 percent of our waste. (We've also committed to eliminating customer waste created by our products by 70 percent.) As of the end of 2016, 91 percent of our solid waste was being diverted from landfills, and 59 of our sites worldwide were operating landfill-free. About 58 percent of all diverted waste was recycled. We're building new partnerships with recyclers to help increase that number. At the same time, we're working to better understand how to reduce and more efficiently use the materials that come into our facilities.

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C-CH9.3a

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**(C-CH9.3a) Provide details on your organization's chemical products.**

**Output product**

Polymers

**Production (metric tons)**

**Capacity (metric tons)**

**Direct emissions intensity (metric tons CO2e per metric ton of product)**

**Electricity intensity (MWh per metric ton of product)**

**Steam intensity (MWh per metric ton of product)**

**Steam/ heat recovered (MWh per metric ton of product)**

**Comment**

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**Output product**

Specialty chemicals

**Production (metric tons)**

**Capacity (metric tons)**

**Direct emissions intensity (metric tons CO2e per metric ton of product)**

**Electricity intensity (MWh per metric ton of product)**

**Steam intensity (MWh per metric ton of product)**

**Steam/ heat recovered (MWh per metric ton of product)**

**Comment**

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C-CH9.6

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**(C-CH9.6) Disclose your organization's low-carbon investments for chemical production activities.**

**Investment start date**

**Investment end date**

**Investment area**

Please select

**Technology area**

Please select

**Investment maturity**

Please select

**Investment figure**

**Low-carbon investment percentage**

Please select

**Please explain**

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**C10. Verification**

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**C10.1**

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

**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, we do not verify any other climate-related information reported in our CDP disclosure

**C11. Carbon pricing**

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**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?**

Yes

**C11.2a**

---

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

**Credit origination or credit purchase**

Credit purchase

**Project type**

Solar

**Project identification**

**Verified to which standard**

Please select

**Number of credits (metric tonnes CO2e)**

Number of credits (metric tonnes CO2e): Risk adjusted volume

**Credits cancelled**

Please select

**Purpose, e.g. compliance**

Voluntary Offsetting

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C11.3

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(C11.3) Does your organization use an internal price on carbon?

No, but we anticipate doing so in the next two years

C12. Engagement

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C12.1

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(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

C12.1a

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

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect climate change and carbon information at least annually from suppliers

**% of suppliers by number**

**% total procurement spend (direct and indirect)**

80

**% Scope 3 emissions as reported in C6.5**

**Rationale for the coverage of your engagement**

**Impact of engagement, including measures of success**

These values correspond to our finished goods suppliers. We make use of the supplier data in our supplier scorecards and in our responsible sourcing policy.

**Comment**

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C12.3

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(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

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

Yes

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## C12.3c

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

**Trade association**

National Association of PET Container Resources

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The association promotes increased recycled content of PET plastic that offsets extraction of virgin material.

**How have you, or are you attempting to, influence the position?**

We are working with the association to promote the position by creating products that enable food-grade PET recycling so that recycled PET can easily offset virgin PET material.

**Trade association**

Sustainable Apparel Coalition

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Avery is in alignment with SAC goals as outlined in the SAC's Higg Facilities Module that includes, among other things, energy management systems and GHG reduction.

**How have you, or are you attempting to, influence the position?**

Avery participated on a number of working groups in the SAC and holds 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.

**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**

The associations Label Initiative for the Environment (LIFE) Measurement is required to set goals that lead to change.

**How have you, or are you attempting to, influence the position?**

All of our manufacturing operations are LIFE certified.

**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**

The Design for Recyclability promotes increased recycled content of all plastics and offsets extraction of virgin material.

**How have you, or are you attempting to, influence the position?**

We support this position by creating products that enable clean recycling of plastics (PET and HDPE) which can easily offset the extraction of new materials.

## 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 that 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 and our engagement with trade associations through Avery Dennison's sustainability and legal affairs 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 voluntary sustainability report

**Status**

Complete

**Attach the document**

AveryDennison\_SustainabilityReport\_2017\_f.pdf

**Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

**C14. 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.**

**C14.1**

**(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Global Senior Director of Sustainability	Environment/Sustainability manager

**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	6613800000

**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.

**Requesting member**  
Fiat Chrysler Automobiles NV

**Scope of emissions**  
Please select

**Emissions in metric tonnes of CO2e**

**Uncertainty (±%)**

**Major sources of emissions**

**Verified**  
No

**Allocation method**  
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

**Requesting member**  
Nissan Motor Co., Ltd.

**Scope of emissions**  
Please select

**Emissions in metric tonnes of CO2e**

**Uncertainty (±%)**

**Major sources of emissions**

**Verified**  
No

**Allocation method**  
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

SC1.2

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

Information for SC1.1 not available and not published.

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

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

SC2.2

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(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?  
No

SC3.1

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(SC3.1) Do you want to enroll in the 2018-2019 CDP Action Exchange initiative?  
No

SC3.2

---

(SC3.2) Is your company a participating supplier in CDP's 2017-2018 Action Exchange initiative?  
No

SC4.1

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(SC4.1) Are you providing product level data for your organization's goods or services, if so, what functionality will you be using?  
No, I am not providing data

SC4.2d

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(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?  
No

Submit your response

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In which language are you submitting your response?  
English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms