# **Carbon Disclosure Project**

**CDP 2012 Investor CDP 2012 Information Request Avery Dennison Corporation** 

**Module: Introduction** 

**Page: Introduction** 

0.1

#### Introduction

Please give a general description and introduction to your organization

Avery Dennison is a global leader in pressure-sensitive technology and materials, retail branding and information solutions, and organization and identification products for offices and consumers. The Company employs approximately 30,400 employees (as of 12/31/11) in around 200 manufacturing and distribution facilities in more than 60 countries.

The Company's products include pressure-sensitive labelling materials; graphics imaging media; retail apparel ticketing and branding systems; RFID inlays and tags; office products; specialty tapes; and a variety of specialized labels for automotive, industrial and durable goods applications.

For 2011, sales were \$6.8 billion. Avery Dennison's self-adhesive technology and applications are an integral part of products used in virtually every major market and industry, with product sales in over 89 countries worldwide. Avery Dennison develops, manufactures and sells products through three business segments: Pressure-sensitive Materials, Retail Branding and Information Solutions, and Office and Consumer Products; in addition to our other specialty converting businesses. In 2011, Avery Dennison entered into an agreement to sell their Office and Consumer Products business segment. This sale was not completed in 2011. The Office and Consumer Products business segment, which is referred to as a discontinued operation, is reflected in the sales numbers provided and in the GHG information.

0.2

### **Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

#### Enter Periods that will be disclosed

Sat 01 Jan 2011 - Sat 31 Dec 2011

0.3

### **Country list configuration**

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

#### Select country

United States of America

Rest of world

0.4

#### **Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

0.5

Please select if you wish to complete a shorter information request

#### **Modules**

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will be marked as default options to your information request. If you want to query your classification, please email respond@cdproject.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx.

# **Module: Management [Investor]**

### Page: 1. Governance

1.1

## Where is the highest level of direct responsibility for climate change within your company?

Individual/Sub-set of the Board or other committee appointed by the Board

1.1a

## Please identify the position of the individual or name of the committee with this responsibility

To ensure that the Company's senior management is fully involved and responsible for managing climate change within our company, there is a 3-tier structure with this responsibility: 1. Board of Directors: Governance and Social Responsibility Committee; 2. Corporate Leadership Team which includes the CEO; and 3. the Corporate Sustainability Steering Committee.

Do you provide incentives for the management of climate change issues, including the attainment of targets?

No

1.2a

Please complete the table

Who is entitled to benefit from these incentives?

The type of incentives

Incentivised performance indicator

#### Page: 2. Strategy

2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

2.1a

### Please provide further details (see guidance)

To manage climate change risks and opportunities Avery Dennison is embedding sustainability into its strategic planning, innovation and operations processes, and is rigorously measuring its performance in this area. At a policy level, climate-change related efforts are guided by the Company's Sustainability Charter – this has three core principles related to People, Planet and Prosperity. Avery Dennison has established a 2015 GHG intensity reduction of 15% compared to the baseline of 2005.

The Company's senior management is fully involved and responsible for managing climate change risk and opportunity – this translates to an organizational structure that includes three levels of leadership. These are: 1. Board of Directors: Governance and Social Responsibility Committee; 2. Corporate Leadership Team; and 3. Sustainability Steering Committee.

At the operational/asset level, Avery Dennison has introduced a number of processes that are designed to monitor and manage climate change-related

performance, and through this, risks and opportunities. These are on-going and include:

Maintaining a web-based sustainability data collection tool. This tool, which is currently being used to collect, amongst other things, data relating to its energy
usage/carbon footprint, is not a one-off program, but rather an ongoing mechanism where the data is collected monthly, consolidated and passed to both
operational and executive-level management for decision-making purposes.

At the product and customer level, Avery Dennison is expanding its sustainable product offerings to ensure that the company takes advantage of evolving opportunities, through detailed customer research and life cycle analysis of its products.

• 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. The Avery Dennison Greenprint tool has been used in our two major business units: Label and Packaging Materials and Retail Branding and Information Solutions.

Avery Dennison also annually reviews its Energy usage and Greenhouse Gas emissions.

The following will be reviewed again in the event that new data becomes available. There are major changes to regulations and/or a major change in facility locations:

- regulatory risks and incentives-based opportunities associated with climate change
- physical risks and incentives-based opportunities associated with climate change. Risk assessments in this area consider both the region-wide risks associated with Avery Dennison locations, but also more site-specific information including historic data as well extrapolating current trends to identify possible future risks.

The output of these reviews is shared with the Sustainability Steering Committee, the Corporate Leadership Team and with the Board of Directors as new data become available.

Finally, Avery Dennison believes that managing the risks and opportunities associated with climate change is not just about introducing new policies and procedures, or about senior management providing guidance and oversight, it is also about stimulating behavioral changes in corporate culture. Avery Dennison is committed to engaging all employees in sustainability thinking, at work and at home.

2.2

Is climate change integrated into your business strategy?

Yes

### Please describe the process and outcomes (see guidance)

In order to manage climate change risks and opportunities Avery Dennison is embedding sustainability into its strategic planning, innovation and operations processes, and is rigorously measuring its performance in this area. In doing this, Avery Dennison is gaining strategic advantages in terms of aspects such as cost reduction, product innovation which will enhance sales and will help to reach new markets and customers.

In 2010, Avery Dennison established an Energy and Climate Change Strategy that corresponds with our business and our sustainability strategy. The Energy and Climate Change Strategy integrates with short-term business planning and decision-making, and considers a range of issues including regulatory and physical risks and opportunities. The Energy and Climate Change Strategy has a number of targets associated with it, including GHG emissions reduction. Our long-term business approach and strategy has been significantly affected by sustainability issues. Climate change and low carbon is just one facet of our long-term business approach and strategy. We consider sustainability in the design and development of new products, especially related to materials, waste and carbon aspects.

#### **Energy and Climate Change Strategy Overview**

#### **Vision Statement**

Avery Dennison's business strategy focuses on top line growth in all markets, operational excellence and attracting and retaining talent. As such, Avery Dennison acknowledges that climate change is an important global issue with potential implications to our business. We are committed to monitoring the potential risks and opportunities related to climate change and to developing energy and greenhouse gas (GHG) reduction programs in accordance with our Sustainability strategy to create:

- More sustainable products
- More sustainable processes
- More sustainable purpose

#### **Program Elements**

- More sustainable products: Avery Dennison will improve the energy and carbon footprint of our products and services through innovation and life cycle management
- More sustainable processes: Avery Dennison will improve the energy and GHG efficiency of our operations and will work toward continual improvement at all facilities
- **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 set goals to reduce greenhouse gas emissions by 15% as indexed to net revenue from 2005 to 2015.

These operational goals will be achieved through 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

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 plan to set internal goals related to product lifecycle in 2012.

The Company's senior management is fully involved and responsible for managing climate change risk and opportunity – this translates to an organizational structure that includes three levels of leadership. These are: 1. Board of Directors: Governance and Social Responsibility Committee; 2. Corporate Leadership Team; and 3. Sustainability Steering Committee.

Avery Dennison has a communication plan for engagement with internal and external stakeholders regarding energy and climate change actions and progress (including disclosure). Avery Dennison communicates with investors, shareholders and employees through our Annual Report, our Corporate Sustainability Report, the CDP, and our corporate website. In addition to these mechanisms, we communicate with customers individually on a regular basis regarding their sustainability interests.

2.2b

Please explain why not

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

No

2.3a

Please explain (i) the engagement process and (ii) actions you are advocating

### Page: 3. Targets and Initiatives

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

Intensity target

3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
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3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
	Scope 1+2	95%	15%	metric tonnes CO2e per unit revenue	2005	86	2015	Target emissions include those from on-site fuel combustion and purchased electricity. Unit revenue is in Million US\$

3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comments
	Increase	7.7			While we anticipate company growth of approximately 30% from 2005-2015, we expect our GHG emissions to only increase by 7.7% due to our energy and GHG reduction efforts and our 15% reduction in GHG intensity.

## 3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
	60	47	

3.1e

Please explain (i) why not; and (ii) forecast how your emissions will change over the next five years

3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

### Please provide details (see guidance)

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 labelling and graphics materials lie in the selection of raw materials and the end-of-life disposal of those materials. In contrast, we estimate that the manufacturing phase of our products' life cycle contributes to less than 10% of the overall impact on the major environmental indicators, including Global Warming Potential. 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 and lighter labelling and trim materials
- 2. developing bio-based adhesives formulations that reduce consumption of fossil-based materials
- 3. designing products that facilitate recycling

In developing labelling and graphic materials with a smaller carbon footprint, Avery Dennison enables its customers to reduce the carbon footprint of their products. 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 the GHG emissions associated with transporting fewer rolls of materials. While Avery Dennison has not yet calculated the overall net impact of our products on GHG emissions, our LCA-based environmental assessment tool, known as "Avery Dennison Greenprint", is being used to help leading U.S. and European customers estimate the relative energy savings and GHG emissions reductions of the products they buy.

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 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.

Avery Dennison is expanding its life cycle program to include more product LCA studies and we plan to set internal goals related to product lifecycle in 2012. There are no plans for develop CERs or other credits for GHG emissions reductions resulting from the use of our products.

3.3

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

Yes

Please identify the total number of projects at each stage of development, and for those in the implementation stages, estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*		
Not to be implemented		

# 3.3b

## For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Energy efficiency: building services	Voluntary: Added frequency conversion to adjust air conditioning system operating power based on seasonal requirement.	270	35000	0	<1 year
Energy efficiency: processes	Voluntary: Upgraded heating system in starching machine	68	8862	0	<1 year
Energy efficiency: building services	Voluntary: Replaced air conditioning system with small unit; sharing transformer with neighbor to reduce basic electricity fee	47	6105	0	<1 year
Energy efficiency: processes	Voluntary: Installed more efficient drying oven	1058	143000	2	1-3 years
Energy efficiency: building services	Voluntary: Installed power conditioner on incoming power supply to improve power factor correction	97	21970	0	1-3 years
Energy efficiency: processes	Voluntary: Replaced steam sprayer with water sprayer on a process line.	174	40300	0	>3 years
Energy efficiency: building services	Voluntary: Replaced steam boiler with a higher efficiency one	144	32500	0	>3 years
Energy efficiency:	Voluntary: Installed controls to better manage building heating	164	46800	0	1-3 years

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
building services					
Energy efficiency: processes	Voluntary: Installed an oxygen analyzer on a process line to provide better combustion control	61	14300	0	>3 years
Energy efficiency: building services	Voluntary: Made improvements to the facility's hot water network distribution	281	37830	0	1-3 years
Energy efficiency: processes	Voluntary: Upgraded thermal media & poppet on a regenerative thermal oxidizer which reduced electricity load on associated exhaust fan	984	10900	0	>3 years
Energy efficiency: processes	Voluntary: Upgraded heat transfer fluid circuit on a process line	34	63234	0	1-3 years
Energy efficiency: processes	Voluntary: Improved seals around a process oven	61	21000	0	<1 year
Energy efficiency: processes	Voluntary: Installed a power inverter for a process exhaust fan	42	7700	0	1-3 years
Energy efficiency: processes	Voluntary: Installed new heat exchanger to recover heat energy from waste exhaust	379	131000	0	1-3 years
Energy efficiency: processes	Voluntary: Installed a flash vessel to recover energy from waste steam	35	13330	0	<1 year
Energy efficiency: building services	Voluntary: Improved facility lighting	185	11110	0	<1 year
Energy efficiency: processes	Voluntary: Replaced steam sprayer with water sprayer on a process line.	60	5000	0	>3 years
Energy efficiency: building services	Voluntary: Replaced onsite steam generation with utility supply steam	93	24700	0	>3 years
Energy efficiency: building services	Voluntary: Replaced lighting system in the workshop	20	22000	0	1-3 years
Energy efficiency: processes	Voluntary: Implemented procedures to power down machines when not in use.	26	2884	0	<1 year
Energy efficiency: building services	Voluntary: Implemented procedures to power off miscellaneous equipment such as fans, radios, computers, pan washer during off hours and weekends.	15	1767	0	<1 year
Energy efficiency: building services	Voluntary: Removed the pan washer	55	31846	0	<1 year

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Energy efficiency: processes	Voluntary: Implemented usage rotation of air compressors to minimize overheating, shutdowns, and unnecessary kick-ins.	11	1280	0	1-3 years
Energy efficiency: processes	Voluntary: Completed insulation of molding ovens; addition of dampers at the ends of the ovens; and repair door latches and seals to eliminate leaks	12	1394	0	<1 year
Energy efficiency: processes	Voluntary: Fixed leaks on compressed air system	54	6151	0	<1 year
Energy efficiency: processes	Voluntary: Replaced air driven mixing pumps with electric pumps in the supply area	1	4850	0	<1 year

## 3.3c

## What methods do you use to drive investment in emissions reduction activities?

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

3.3d

If you do not have any emissions reduction initiatives, please explain why not

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

Publication	Page/Section Reference	Identify the attachment

# **Module: Risks and Opportunities [Investor]**

Page: 2012-Investor-Risks&Opps-ClimateChangeRisks

5.1

Have you identified any climate change risks (current or future) that have potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

5.1c

Please describe your risks that are driven by change in physical climate parameters

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

5.1e

Please describe your risks that are driven by changes in other climate-related developments

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

#### 5.1g

Please explain why you do not consider your company to be exposed to risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

We do not consider our company to be exposed to regulatory risks. While Avery Dennison recognizes that climate change is an important global issue, the company does not believe that climate change presents significant, direct regulatory risks for its operations. We believe that we are typical in this respect of other companies in our peer group.

#### 5.1h

Please explain why you do not consider your company to be exposed to risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

We do not consider our company to be exposed to physical climate parameter risks. Based on an analysis of physical climate parameters that have the potential to impact our business, Avery Dennison does not anticipate manufacturing or distribution facilities to be significantly impacted by climate change-induced extreme weather events. The company's facilities are generally located inland, and should not be significantly impacted by sea level rise, flood zones or storm-affected areas. The company does not have sites in the high-catastrophic exposure areas along the Gulf Coast. The Company has some flood exposures:

- Distribution Centers in Kansas City (closed in July 2011) and Kent, Washington.
- Champ-sur-Drac if the dam should fail.
- Dutch flood exposure related to ocean water level.

Increased insurance premiums have not been assigned in the past or currently, nor has there been an adverse or supplemental impact to coverage. Property damage due to flood or severe weather is covered under current Company insurance. We believe that we are typical in this respect relative to other companies in our peer group.

While Avery Dennison could potentially experience disruptions in its supply chain (e.g., shortage or delay of key raw material inputs) resulting from extreme weather events, the company continually seeks to qualify alternative suppliers on a global basis to mitigate such events. The company does not anticipate significant disruptions in the physical distribution of its products resulting from an extreme weather event. Based on current information for these locations, disruption of manufacturing products and transportation of products would be reassigned to other manufacturing or distribution locations under the business continuity plan. The

impact to business interruption is not likely to be significant since there are other manufacturing and distribution centers to accommodate business needs. Demand for the company's products from customers affected by extreme weather events could be impacted; however, given the company's breadth of operations globally and the relatively low degree of customer/industry concentration, Avery Dennison does not consider reduced customer demand following an extreme weather event to be a significant risk to the company's financial bottom line.

5.1i

Please explain why you do not consider your company to be exposed to risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Avery Dennison does not believe the company is exposed to other significant climate change-related risk - we believe that we are typical in this respect relative to other companies in our peer group. Through preparing GHG emissions inventories, the company's enterprise-wide energy use and associated GHG emissions are low compared to other industry sectors. Regarding energy use, Avery Dennison primarily uses natural gas for drying ovens, emissions control equipment, and heating/cooling of manufacturing operations and office buildings. In addition, the company purchases electricity for those and other uses. Avery Dennison uses a minimal amount of diesel and other fuels. Avery Dennison understands that possible significant impacts of any climate change legislation in the United States would include (i) increased fuel and electricity costs for its operations; and/or (ii) being a covered source in a cap-and-trade program. As such, Avery Dennison is reviewing options for decreasing the energy (natural gas and electricity) use in key divisions that have the highest energy use and costs.

## Page: 2012-Investor-Risks&Opps-ClimateChangeOpp

6.1

Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

6.1c

Please describe the opportunities that are driven by changes in physical climate parameters

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

6.1e

Please describe the opportunities that are driven by changes in other climate-related developments

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

6.1f

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

### 6.1g

Please explain why you do not consider your company to be exposed to opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

In the preparation of our climate change strategy this year, opportunities related to regulation were considered over the next 5 years both in the US and overseas. Current or anticipated regulatory requirements do not present significant opportunities for Avery Dennison. Our operations and the operations of our suppliers and customers will not be impacted directly by regulation during this time period due to the size and nature of our operations. We believe that we are typical in this respect relative to other companies in our peer group.

#### 6.1h

Please explain why you do not consider your company to be exposed to opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

In the preparation of our climate change strategy this year, opportunities related to physical climate parameters were considered over the next 5 years both in the US and overseas. Avery Dennison does not anticipate significant opportunities related to climate change-induced physical parameters due to the nature of our business and that of our customers, primarily retailers and retail suppliers. We believe that we are typical in this respect relative to other companies in our peer group.

Please explain why you do not consider your company to be exposed to opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

# Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

### Page: 7. Emissions Methodology

7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Sat 01 Jan 2005 - Sat 31 Dec 2005	246613	301827

7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

# Please select the published methodologies that you use

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

7.2a

If you have selected "Other", please provide details below

7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)

7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data

Fuel/Material/Energy	Emission Factor	Unit	Reference

### **Attachments**

https://www.cdproject.net/Sites/2012/27/1227/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/7.EmissionsMethodology/Supporting Document for GHG EFs.xls

## Page: 8. Emissions Data - (1 Jan 2011 - 31 Dec 2011)

8.1			
	Please select the bour	ndary you are using for your Scope 1 and 2 greenhouse gas invento	ry
	Operational control		
8.2a			
	Please provide your g	ross global Scope 1 emissions figure in metric tonnes CO2e	
	175780		
8.2b			
0.20			
	Please provide your g	ross global Scope 1 emissions figures in metric tonnes CO2e - Part	1 breakdown
	Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
8.2c			
	Please provide your g	ross global Scope 1 emissions figures in metric tonnes CO2e - Part	1 Total
	Gross glo	bal Scope 1 emissions (metric tonnes CO2e) – Part 1 Total	Comment
8.2d			
	Discount I		
	Please provide your g	ross global Scope 1 emissions figures in metric tonnes CO2e - Part	2

	Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
8.3a			
	Please provide you	ur gross global Scope 2 emissions figure in metric tonnes CO2e	
	368580		
8.3b			
	Please provide you	ur gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1	breakdown
	Boundary	Gross global Scope 2 emissions (metric tonnes CO2e)	Comment
8.3c			
	Please provide you	ır gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1	Total
	Gross	global Scope 2 emissions (metric tonnes CO2e) - Total Part 1	Comment

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 2

8.3d

	Boundary		ther operation	missions (metric nally controlled o or facilities		Comment				
8.4	Are there are any sidisclosure?	sources (e.g. f	acilities, spec	cific GHGs, activ	rities, geog	raphies, etc.) of So	cope 1 and Scope 2 e	missions w	nich are not	included in you
8.4a										
	Please complete the	he table								
	Reporting E	intity	Source	Scope	Ex	plain why the sour	rce is excluded			
8.4										
	Are there are any sidisclosure?	sources (e.g. f	acilities, spec	cific GHGs, activ	vities, geog	raphies, etc.) of So	cope 1 and Scope 2 e	missions w	nich are not	included in you
	Yes									
8.4a										

Please complete the table

Source	Scope	Explain why the source is excluded
Mobile sources	Scope 1	Not material
Fugitive refrigerant emissions	Scope 1	Not material
Process emissions	Scope 1	Not material

Please estimate the level of uncertainty of the total gross global Scope 1 and Scope 2 figures that you have supplied and specify the sources of uncertainty in your data gathering, handling, and calculations

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
Less than or equal to 2%	Data Gaps Other: Published emission factors	Avery Dennison has implemented a worldwide data collection process to assemble purchased electric and fuel usage from its manufacturing and DC facilities and large offices. A small number of facilities (i.e., less than 10,000 sf) have also been excluded from this effort because of their relative size compared to all other facilities. Although there can be inherent uncertainty in collecting information from numerous sites, the data has been verified through a series of data review steps.	Less than or equal to 2%	Data Gaps Other: Published emission factors	Avery Dennison has implemented a worldwide data collection process to assemble purchased electric and fuel usage from its manufacturing and DC facilities and large offices. A small number of facilities (i.e., less than 10,000 sf) have also been excluded from this effort because of their relative size compared to all other facilities. Although there can be inherent uncertainty in collecting information from numerous sites, the data has been verified through a series of data review steps.

	Not verified or assured			
8.6a	Please indicate the proportion of your Scope 1 emissions that are verified/assured			
8.6b	Please provide further details of the verification/assurance undertaken, and attach the relevant statements			
	Level of verification or assurance	Relevant verification standard	Relevant statement attached	
8.7	Please indicate the verification/assurance status that Not verified or assured	at applies to your Scope 2 emissions		
8.7a	Please indicate the proportion of your Scope 2 emis	ssions that are verified/assured		
8.7b				

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Level of verification or assurance	Relevant verification standard	Relevant statement attached

8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No

8.8a

Please provide the emissions in metric tonnes CO2e

## Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2011 - 31 Dec 2011)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
United States of America	91650
Rest of world	84130

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By business division By GHG type

9.2a

Please break down your total gross global Scope 1 emissions by business division

Business Division	Scope 1 metric tonnes CO2e
Corporate	1196
Label and Packaging Materials	95859
Office and Consumer Products	2659
Retail Branding and Information Solutions	12237
Specialty Materials	63829

9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 metric tonnes CO2e

### 9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 metric tonnes CO2e
CO2	175764.5
CH4	11.8
N2O	3.9

### 9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 metric tonnes CO2e

## Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2011 - 31 Dec 2011

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

## 10.1a

Please complete the table below

Country	Scope 2 metric tonnes CO2e	

Country	Scope 2 metric tonnes CO2e
United States of America	168573
Rest of world	200007

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division

## 10.2a

## Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 metric tonnes CO2e
Corporate	1521
Label and Packaging Materials	125659
Office and Consumer Products	27320
Retail Branding and Information Solutions	134261
Specialty Materials	79819

10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 metric tonnes CO2e

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 metric tonnes CO2e

#### Page: 11. Emissions Scope 2 Contractual

### 11.1

Do you consider that the grid average factors used to report Scope 2 emissions in Question 8.3 reflect the contractual arrangements you have with electricity suppliers?

Yes

11.1a

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO2e

11.1b

Explain the basis of the alternative figure (see guidance)

11.2

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

## 11.2a

Please provide details including the number and type of certificates

Type of certificate	Number of certificates	Comments

## Page: 12. Energy

## 12.1

What percentage of your total operational spend in the reporting year was on energy?

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

## 12.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has consumed during the reporting year

Energy type	MWh
Fuel	955322
Electricity	578822
Heat	
Steam	
Cooling	

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	922414
Diesel/Gas oil	26671
Propane	5583

### Page: 13. Emissions Performance

13.1

How do your absolute emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

13.1a

## Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	3.5	Decrease	Total combined Scope 1 and Scope 2 emissions decreased by 3.5%.

13.2

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
80.2	metric tonnes CO2e	unit total revenue	7.4	Decrease	Decreased GHG intensity is attributable to energy efficiency activities and increased production in 2011 allowing greater optimization of assets.

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
17.9	metric tonnes CO2e	FTE Employee	1.9	Increase	Avery Dennison has reduced the number of FTE.

13.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
	metric tonnes CO2e				

## Do you participate in any emission trading schemes?

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

14.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

### 14.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

14.2

Has your company originated any project-based carbon credits or purchased any within the reporting period?

14.2a

Please complete the following table

	roject Project type identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose e.g. compliance
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## Page: 2012-Investor-Scope 3 Emissions

### 15.1

## Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
Business travel		NA	Avery Dennison has over 200 facilities in the US and overseas. Senior and middle management staff travel on business, utilizing vehicles/aircraft not owned or operated by Avery Dennison. Relative to our overall Scope 1 and Scope 2 emissions, we believe that Scope 3 emissions from this source are relatively small.
Purchased goods & services		NA	Avery Dennison has a complex supply chain made up of a wide range of raw material suppliers. Relative to our overall Scope 1 and Scope 2 emissions, we believe that these Scope 3 emissions will be a significant quantity, however, spread across a large number and types of suppliers.

## 15.2

## Please indicate the verification/assurance status that applies to your Scope 3 emissions

No emissions data provided

15.2a

Please indicate the proportion of your Scope 3 emissions that are verified/assured

15.2b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Level of verification or assurance	Relevant verification standard	Relevant statement attached

15.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

15.3a

Please complete the table

S	ources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment	

**Module: Sign Off** 

Page: Sign Off

# Please enter the name of the individual that has signed off (approved) the response and their job title

Danny Wong, Senior Director, Corporate Sustainability

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