Carbon Disclosure Project

CDP 2012 Investor CDP 2012 Information Request Philip Morris International

Module: Introduction

Page: Introduction

0.1

Introduction

- Philip Morris International Inc. (PMI) is the leading international tobacco company, with its headquarters in New York City, New York, U.S.A. and Operations Center in Lausanne, Switzerland.
- PMI operates 56 manufacturing facilities and sells products in approximately 180 countries.
- In 2011, PMI recorded total cigarette shipment volume of 915.3 billion units, had revenues, including excise taxes billed to customers, of US\$ 76.3 billion, and held 28.1 % of the international cigarette market excluding the People's Republic of China and the U.S. PMI's 2011 adjusted operating company income (OCI) was US\$ 13.7 billion.
- PMI has an unequalled brand portfolio led by Marlboro, the world's number one international selling cigarette brand, and L&M, the third most popular brand. Along with Marlboro and L&M, seven of our brands rank in the top 15 international brands in the world. We have a strong mix of international and local products that appeal to a wide range of adult smokers.
- PMI's global workforce of more than 78,000 employees is extremely diverse. We have historically expanded our business through a mixture of organic growth, geographic expansion and acquisitions, and have a successful track record of acquiring and integrating companies.
- PMI is driven by four key goals that guide us as we grow our business in a responsible manner. Those goals are:
- to meet the expectations of adult smokers by offering innovative tobacco products of the highest quality available in their preferred price category;
- to generate superior returns to our stockholders through revenue, volume, income, and cash flow growth and a balanced program of dividends and share repurchases:
- to reduce the harm caused by tobacco products by supporting comprehensive regulation and by developing products with the potential to reduce the risk of tobacco-related diseases; and
- to be a responsible corporate citizen and to conduct our business with the highest degree of integrity, at both a local and global level.

We are passionate about our social performance and place a high priority on compliance with all local laws and regulations in all countries where we operate. As the leading international cigarette company, we also aim to be an industry leader in environmental sustainability. In 2010, we set ourselves the goal of reducing CO2 emissions, energy consumption, wastes and water in our manufacturing facilities by 20 % by 2015, and reducing the carbon footprint of our value chain by 30% by 2020.

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

Enter Periods that will be disclosed

Sat 01 Jan 2011 - Sat 31 Dec 2011

0.3

Country list configuration

Select country
Argentina
Australia
Brazil
Canada
Colombia
Costa Rica
Czech Republic
Dominican Republic
Ecuador
Germany
Greece
Guatemala
Indonesia
Italy

Select country
Kazakhstan
Lithuania
Malaysia
Mexico
Netherlands
Pakistan
Philippines
Poland
Portugal
Romania
Russia
Senegal
Serbia
South Africa
South Korea
Switzerland
Turkey
Ukraine
Uruguay
Venezuela
Rest of world

0.4

Currency selection

USD(\$)

0.5

Please select if you wish to complete a shorter information request

0.6

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.

Further Information

Rest of the world: Curacao (not in country list).

Module: Management [Investor]

Page: 1. Governance

1.1

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

Senior Manager/Officer

1.1a

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

The Vice-President Environment, Health, Safety & Security (VP EHS & S) has day to day responsibility for climate change issues within PMI. He reports to the Chairman & Chief Executive Officer (CEO) PMI and the Chief Operating Officer via the Senior Vice-President Operations who is a Senior Management Team member. The Chairman & CEO plays an active role in setting our strategy and reviewing progress with respect to climate change issues; which includes reviewing and inputting to this CDP questionnaire.

In addition, the Product Innovation and Regulatory Affairs Committee of the Board of Directors reviews our objectives, strategies and action plans periodically.

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

Yes

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator
All employees	Monetary reward	Our CEO specifically covers EHS results (including greenhouse gases reductions) in the assessment of our annual company-wide performance that is reviewed by the Compensation and Leadership Development Committee of the Board. Accordingly, these results are included in our overall performance rating which determines the bonus pool for all eligible employees.
Business unit managers	Monetary reward	Specific company awards such as Chairman's Award, Excellence Awards are available for PMI Business Unit Managers, Energy Managers, EHS Managers, and other employees who are responsible for the management of these programs.
Business unit managers	Monetary reward	The managers, and team members, have energy efficiency and CO2 reduction targets set out in their annual performance objectives, and are assessed against those targets. Energy efficiency and CO2 emissions targets are set annually for at least three years for all of our manufacturing facilities.
All employees	Monetary reward	There is also the opportunity for specific company awards such as Above and Beyond the Call of Duty (ABCD) awards for best practice initiatives in the areas of climate change, energy and carbon reduction.
	Monetary reward	All employees from the Operations Center are eligible, and encouraged to use public transportation. The annual fee for half-price railway subscription as well as a monthly public transport allowance is paid by the company for those employees who choose to use public transportation rather than their private cars to work.
All employees	Recognition (non-monetary)	Specific team and employee recognition programs have been implemented in affiliates. Through specific energy and carbon reduction program and promotion campaigns, employees are asked to contribute to the campaigns in which best practices are recognized. For instance, in 2011 our affiliates in Russia and Indonesia performed awareness and promotion campaigns/ programs in order to increase employees' active participation in environment, health and safety programs (EHS) and to make EHS part of the company's culture.
All employees	Recognition (non-monetary)	Operations employees also have the opportunity to earn Lead, Lean and Learn (3L) awards for best practice initiatives in the areas of climate change, energy and carbon reduction.

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)

Scope

Our climate change risk management process covers our company's entire value chain from growing tobacco to the management of material and product wastage and addresses regulatory, physical climate and market risks such as reputation and changing customer demands. Importantly we always seek opportunities that exist within those areas whilst addressing our risks.

Risks and Opportunities Assessment - Company

At a company level we have identified and addressed risks/opportunities in 2 main areas:

1. Minimizing our impact on the environment through carbon footprint reduction initiatives.

As a responsible company, in order to reduce our regulatory, reputational, and financial risk exposure, we have corporate programs to reduce our energy consumption and CO2 emissions. This includes energy and CO2 reductions from our manufacturing operations (some of which are regulated under emissions trading regulations such as the EU ETS), vehicle fleet, agricultural base (including tobacco curing) and supply chain/logistics operations. The carbon footprint that we prepared in 2009/10 highlights the main risk/opportunity exposures for us in terms of priority areas for reduction; we update our carbon footprint every 2 years (next based on 2012 data) to ensure our risk/opportunity actions remain appropriate. We also have a regulatory "radar screen" to track changes in legislation that could impact us, and which also enables us to take the necessary steps to ensure compliance or seek opportunities from the changing regulatory landscape such as regulated energy tariffs or incentives. This work enables action at both the company and asset level.

2. Minimizing the future environmental impact on our business through a climate change risk assessment process.

We completed a comprehensive climate change risk assessment process in 2011 which addresses both our corporate and asset level risks and opportunities. The risk assessment process includes our key internal assets such as factories and warehouses, supplier assets (including port facilities, warehouses, tobacco leaf growing regions and other strategic suppliers). This risk management process covers material physical and regulatory risks impacting those key assets (internal / external), regions and our company as a whole. It uses a current risk state assessment against projected changes in the 2020-2030 time horizon. Whilst the initial results of this risk assessment process are not definitive, the broad themes of change in risk profile are deemed valid and will be further refined in the future to engender specific action plans at the company level.

Risks and Opportunities Assessment – Asset

At the local asset level we can analyze the results of our 2011 climate change risk assessment process down to the specifics of, for example, potential increased flood, drought and cyclone risk for individual company assets, and we have assessed those risks in terms of potential financial and raw material volume impacts. As stated above, the initial results of the risk assessment are not definitive, the broad themes of change in risk profile are considered valid and will be further refined in the future to engender specific action plans at the asset level.

Other tools that we use in identifying significant risks and/or opportunities from climate change include:

- Environmental risk assessments are conducted at both the global company level and the individual affiliate level to identify material risks and opportunities. In manufacturing centers the process is formalized through our environmental management systems (to the international standard ISO 14001). These risk assessments include asset details such as the need for flood risk management plans which we discuss with our insurers.
- Due diligence surveys are performed at least annually to identify material environmental risks. The results of these surveys are collected from affiliates and analyzed by the central PMI EHS&S team. Information is then assessed with relevant corporate departments, for example, finance and legal.
- We conduct annual compliance risk assessments at all affiliates which take into account CO2 emissions, reporting and climate change, this includes forecasting of future changes in regulations such as tightening in emissions allowances (e.g. EU Emissions Trading Scheme allowances for 4 factories in the EU).

Monitoring Frequency

In addition to the above annual actions, we monitor our energy and CO2 emissions from our manufacturing centers on a monthly basis, our risk/opportunity radar screen will be reviewed every 6 months and our whole carbon footprint will be reviewed every 2 years from 2012. Our climate change risk assessment will also be refined on an annual basis, and a major review will be undertaken within 5 years.

Materiality and Prioritization

Material issues are identified in a multidisciplinary way and include those which:

- Have the highest potential impact and a realistic probability of occurrence
- Are most relevant to our enterprises and geographic locations
- Are most important to our stakeholders

In current terms, we usually set a financial threshold of USD \$100K for materiality of risk/opportunity at the asset level.

In 2020+ risk forecasting terms, higher level risks are defined as those with a potential impact of in excess of USD\$2M or a raw material impact in excess of 1000 tonnes of tobacco leaf.

In carbon footprint terms we have initially prioritized actions for those areas of our business which constitute more than 5% of our footprint.

Reporting

Issues and progress on risks and opportunities are reported through various means, including a formal annual and quarterly report on progress on all EHS areas including climate change and carbon footprinting. These reports are generated by the EHS&S team, and are reported through the VP EHS&S to senior management. Asset level risks/opportunities are reported through Directors to country Managing Directors and key risks/opportunities are reviewed through Regional Management Teams including our Regional Presidents. On an annual basis, key climate change risks and opportunities are reported to and reviewed by the Board as part of our long range planning and strategy process.

External reports on progress are delivered on our Company internet, through the PMI Annual Report, Carbon Disclosure Project, and through selected senior management presentations, including those to our investors and stakeholders.

2.2

Is climate change integrated into your business strategy?

Yes

Please describe the process and outcomes (see guidance)

i) Our Strategy Process

Reducing our impact on the environment and protecting our workforce and others who work with us is fundamental to our business. We do this with a commitment to the highest ethical standards and business integrity, through systems and processes, to deliver compliance and conduct safe, efficient and ethical operations worldwide. Climate Change strategy is embedded in our overall strategy as a key element of "Doing What is Right" which is at the core of our company Code of Conduct. It is integrated in our business strategy through normal business practices and a Long Range Planning process (LRP). LRP is an annual business cycle that reviews and sets direction for 3 years and beyond. The corporate EHS&S team undertakes annual strategy development sessions with regional/business representatives, which is based on review of previous year performance, regulatory/external developments, risk/opportunity assessments, stakeholder interest and operational/other business changes. The draft strategy is presented to the company Operations Management Team which includes the VP EHS&S and the Senior VP Operations. Upon approval, the strategy is discussed with the Senior Management Team including the Chairman and CEO. Upon final approval the Climate Change strategy is communicated to central functions, regions and affiliates for integration into specific country strategies, and implementation. Climate Change Strategy reviews are held during the year, including with the Product Innovation and Regulatory Affairs Committee of the Board.

ii) Climate Change Aspects

Our strategy is split into two main areas: 1) Minimizing our impact on the environment through carbon footprint reduction initiatives. 2) Minimizing the future environmental impact on our business through a climate change risk assessment process. For 1) in 2009/10, we undertook a Life Cycle Assessment to establish our carbon footprint, and found that the majority of our footprint comes from our scope 3 emissions, in particular the tobacco agriculture part of our value chain (46% of our emissions). The size and importance of the impact from each element of our business is a key input to our strategy development. For 2) in 2011, we completed a climate change risk assessment for key assets within our entire value chain and main focus areas were identified. Our business depends on agriculture for key raw materials, as such, current and future changes in climate impacting sensitive crops such as tobacco and clove are key items for our business strategy.

iii) Short-term Strategy

Addressing climate change risks and our carbon footprint, our short term strategy components include: 1) developing a methodology to understand, benchmark and address the use of wood in tobacco curing operations, starting with a pilot study (with a NGO) to identify issues and best practices in Brazil. Recommendations will be made in 2012 for implementation as of 2013 including reducing wood use in tobacco curing, promoting sustainable consumption, and alternatives to wood as a fuel. 2) Continuing investment in reforestation and Sustainable Tobacco Production which includes the development of country specific action plans in 2012 to reduce impacts in 2013-2015. 3) Procuring over 97% of our paper and boards from sustainable sources as certified by organizations such as the FSC. 4) Reducing our energy and CO2 from manufacturing operations by 20% by 2015 against our 2010 baseline. 5) Implementing a comprehensive Energy Management Program, including worldwide factory metering and targeting, Energy assessments, key Energy Savings Projects (best practice cascading) and identifying emerging technologies including renewable energy opportunities. 6) Reducing emissions and sharing best practices in Logistics and Distribution through a carbon footprinting tool. 7) Revising our direct materials supplier program covering sustainability topics and related criteria. 8) Managing supply/demand and pricing fluctuations for key raw materials. 9) Review/update of our carbon footprint every 2 years from 2012, continuing to measure changes to our products and packaging. 10) Annual review and refinement of our climate change risk assessment.

iv) Long-term strategy

Our long term commitment is to reduce our value chain carbon footprint by 30 % by 2020. This will be supported by sustained implementation and development of many short term actions described above. Our recently completed climate change risk assessment work is a starting point to inform future key management decisions in terms of climate related agricultural impacts and expected physical changes in business environments in certain climates and countries. At this time the specificity and accuracy of the risk assessment is insufficient to inform definitive action and therefore a key element of our strategy is to continue to refine and review this risk assessment to ensure that we are ready to take action when the information fully supports such action from a business risk perspective. In the long term we will also integrate our customer and supplier strategies for sustainability and climate change to ensure that our entire value chain is aligned with our objectives.

v) How this strategy gains us strategic advantage

We are the leading international cigarette company; our climate change strategy has a key role in enabling our business efficiency and flexibility and is inherent in our business ethos which keeps us ahead of our competitors and drives us to be the best in whatever we do, especially with regard to our long term

sustainability. Specifically, we listen to what our customers tell us and have taken steps to align with our customer expectations on climate change including the development of our carbon footprint and our target to reduce that footprint by 30% by 2020. We will continue to work with trade customers, such as Tesco, to ensure that we exceed their expectations and are viewed advantageously in this area when doing business with them.

vi) Substantial business decisions influenced by climate change

a) Historically we have been conservative in relation to external communications about sustainability and climate change issues and we are sensitive to the external view of the tobacco industry in this regard. However, we have decided to engage and communicate more extensively in the future on our climate change strategy, and indeed the CDP itself, has been a key driver in that decision b) Developing our Energy Management Program (over \$6M USD investment) where we allow for a longer term return on investment approach when there are additional justified benefits such as climate change risk reduction c) Integrating our climate change strategy (through LCA) as part of the development of our portfolio of innovative Next Generation Products.

2.2b

Please explain why not

2.3

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

Yes

2.3a

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

At this time we do not engage directly with policy makers from a corporate perspective but do engage locally with respect to specific initiatives and we engage indirectly through third parties (including non-governmental organizations (NGOs)) and company memberships which include:

- US Chamber of Commerce
- National Association of Manufacturers
- US Council for International Business
- National Foreign Trade Council
- Emergency Committee for American Trade
- US ASEAN Business Council
- Council of the Americas/Americas Society Trans-Atlantic Business Dialogue Executive Council on Diplomacy

We favor direct actions in our communities in association with NGOs and governments in the areas of sustainable forestry, reforestation and sustainable rural living conditions in order to encourage and implement improvement, adaptation and mitigation measures.

Such measures are exemplified as follows:

- In Switzerland, we have negotiated energy reduction objectives for our manufacturing centers through the association "Agency of Energy for the Economy", an agency that campaigns with energy experts and local policy makers.
- Our affiliate in the Philippines developed a reforestation project involving local government units, suppliers and NGOs (non-governmental organizations) as well as schools. Almost 2.5 million trees have been planted over the last 10 years and for this project, our affiliate won the International Business Award "The 2011 Environmental Responsibility Program of the Year (Asia, Australia and New Zealand)", out of 3000 entries from 40 nations (October 11, 2011).
- In Malawi, Mozambique and Tanzania, PMI has provided over 16 million USD in funding to the NGO Total LandCare (TLC) and since 2001 more than 90 million trees have been planted and 9,000 hectares of natural forest have been regenerated. In addition, 485 water wells have been put in place supplying fresh water to around 125,000 people. Specifically in Malawi, we worked with TLC in 2011 to develop the basis for a major reforestation project at Viphya; working with the forestry department of the Malawi government, TLC will develop a sustainable approach to the replanting, harvesting and sale of harvested wood, initially for 2,589 hectares of woodland over a 40 year period.
- In Indonesia, our local affiliate is working together with the city government of Surabaya to reforest an area of 871 hectares of mangrove forests (with benefits against flooding, erosion and improving water quality, in addition to carbon reduction) in a biodiverse area. A further 1500 hectares is planned providing the city with an additional 6 % of green space. We are also looking at more opportunities for sustainable tree planting in Indonesia including trees associated with clove and tobacco farming.
- Working with an international NGO we are developing a methodology to fully understand, benchmark and address the use of wood in tobacco curing operations, starting with a pilot study to identify issues and best practices in Brazil. The project commenced in 2011 and recommendations will be made by the end of 2012 for implementation from 2013.

Page: 3. Targets and Initiatives

3.1

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
11	Scope 1+2	81%	20%	Other: kg CO2- equivalent / million cigarettes	2010	749	2015	This is a publicly declared target to reduce our emissions from our manufacturing facilities by 20% per million cigarettes equivalent by 2015 against our 2010 baseline.
12	Scope 1+2+3	100%	30%	Other: kg CO2- equivalent / million cigarettes	2010	6493	2020	This is a publicly declared target to reduce our emissions from the entire value chain (Scope 1+2+3) against our 2010 baseline by 30% per million cigarettes equivalent by 2020. We have recently reset our baseline year to 2010 in order to align with other targets and an extended scope following new acquisitions.
13	Scope 1+2	81%	2%	Other: kg CO2- equivalent / million cigarettes	2010	749	2011	This is a target to reduce our emissions from our manufacturing facilities by 2% per million cigarettes equivalent in 2011 against our 2010 baseline

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
I1	Decrease	20	No change		Based on constant volumes
12	Decrease	25	Decrease	32	Based on constant volumes
13	Decrease	2	No change		Based on constant volumes

3.1d

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

ID	% complete (time)	% complete (emissions)	Comment
11	20	17.5	We had a 3.5 % reduction in our manufacturing facilities against the 2010 baseline
12	10	2	Based on Scope 1 + 2 reduction only, we did not recalculate our Scope 3 emissions this year.
13	100	100	We had a 3.5 % reduction per mio cigarettes in our manufacturing facilities against the 2010 baseline

3.1e

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

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

No

3.2a

Please provide details (see guidance)

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

3.3a

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	140	57000
To be implemented*	40	16000
Implementation commenced*	60	26000
Implemented*	75	30000
Not to be implemented	30	0

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: processes	Central Cooling For Filter Making Equipment (Top 5 projects) Scope 2, targets I1 & I3, worldwide roll-out period: 2010-2013, on a voluntary basis. This project is one of the Top 5 projects selected for global roll-out as part of our Energy Management Program (for more information, please refer to the paragraph "Further information" of this section). The implementation of this project is ongoing from 2010 to 2013. Central Cooling For Filter Making Equipment project consists of the replacement of the individual cooling device at each filter making equipment by a central system producing cooling outside of the production area. The realization timeframe of this project at local facility is 2-3 months. In 2011, we implemented this project in 11% of our affiliates and implementation is commenced or planned in 2012 for 16%. Numbers are estimates for implemented projects.	2200			1-3 years
Energy efficiency: building services	Heating Ventilation Air Conditioning Flow Rate Optimization (Top 5 projects, see further information paragraph) Scope 2, targets I1 & I3, worldwide roll-out period: 2010-2013, on a voluntary basis. Installation of variable speed drives on all fan motors of air handling units in order to adapt the flow rate of air supplied and returning from the production according to production needs. The realization timeframe of this project at local facility is 4-6 months. In 2011, we had this project implemented in 23% of our affiliates and implementation is commenced or planned in 2012 for 13%. Numbers are estimates for implemented projects.	9500			1-3 years
Energy efficiency: building services	Dust Collection System Flow Rate Optimization (Top 5 projects, see further information paragraph) Scope 2, targets I1 & I3, worldwide roll-out period: 2010-2013, on a voluntary basis. The optimization is brought by the installation of variable speed drives on all fan motors of dust collection system to be able to vary the flow according to the production needs. The realization timeframe of this project at local facility is 4-6 months. In 2011, this project was implemented at 7% of our affiliates and implementation commenced or planned in 2012 for 16%. Numbers are estimates based on implemented projects.	5700			1-3 years
Energy efficiency: processes	Steam Traps Monitoring System (Top 5 projects, see further information paragraph) Scope 1, targets I1 & I3, worldwide roll-out period: 2010-2013, on a voluntary basis. Steam production and distribution is one of the largest contributors to our facilities energy consumption and carbon footprint. Steam Traps (ST) are critical devices of the steam distribution system. Malfunctioned STs may cause significant increase of the energy consumption. This project consists in installing an on-line monitoring	600			>3 years

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
	system of the STs to replace regularly scheduled manual checks. This allows immediate identification and corrective actions on failing STs. The realization timeframe of this project at local facility is 2-4 months. In 2011, we implemented this project in 16% of our affiliates and implementation commenced or planned in 2012 for 13%.				
Energy efficiency: building services	Chilled Water System Upgrade (Top 5 projects, see further information paragraph), on a voluntary basis. Scope 2, targets I1 & I3, worldwide roll-out period: 2010-2013 Optimization of the production of chilled water used for cooling through the installation of higher efficiency chillers and the installation of Variable Speed Drives to modulate the flow rate of air conditioning supplied to the production floor. The realization timeframe of this project at local facility is 4-6 months. In 2011, we had this project implemented in 20% of our affiliates and implementation commenced or planned in 2012 for 13%. Numbers are estimates based on implemented projects.	5500			>3 years
Process emissions reductions	Process equipment optimization—scope 1& 2 target I1 and I3, on a voluntary basis. Process equipment requirements optimization is as well a focus area of our Energy Management Program. Below, you will find two examples of this type of projects implemented in 2011. Process equipment optimization in tobacco preparation area in our facility in Ukraine: Implementation of use in "Ready mode" on a certain type of equipment to reduce the consumption of electricity, gas, steam and water. This is mode is an idle mode developed by equipment manufacturer. Process equipment optimization in cigarettes making and packing area in our facility in Switzerland Addition of automatic switches to cut off the most important energy consumers (light, compressed air, heating, etc.), without switching off completely the machine. We also set a timer to have an automatic switch on-switch off, for days when we are not producing. Numbers are estimates based the 2 projects mentioned. This year, 13 initiatives have been selected to be tested each at one affiliate, in order to prepare the standard guidelines for global roll-out starting in 2013.	64			1-3 years
Process emissions reductions	Heat recovery – scope 1, targets I1 and I3, on a voluntary basis. Heat recovery is recommended, when the energy consumption cannot be avoided nor losses minimized. The heat waste recovery is widely applied at our manufacturing facilities, as in the example below. At our facility in Czech Republic, we installed a heat pump to recover the heat from chillers. The excessive heat was rejected outside of thebuilding but is now recovered. The heat will heat water and allow consuming less gas. Numbers are based on the example above	616			>3 years
Energy efficiency:	Installation of high efficiency chillers – scope 2, targets I1 and I3, on a voluntary	333			>3 years

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
processes	basis. We installed new high efficiency chillers in our manufacturing facility in Ukraine and Germany. In Ukraine, this impacted positively the climatic conditions in production areas and decrease cooling system electricity, water consumption and maintenance costs. In Germany the new chillers and a dry condenser were installed to optimize for a tobacco treatment process. Numbers are based on the Ukrainian project.				
Energy efficiency: building services	Lighting optimization – scope 2 targets I1 and I3 on a voluntary basis. We reduce our electricity consumption by installing more efficient lighting (e.g.: LED), reviewing the lamps layout, installing daylight system, motion and light sensors for automatic switch on-off in our manufacturing facilities of Lithuania, Portugal, Switzerland, Ukraine, Indonesia, Mexico and Canada. In Portugal for example we changed 290 metal halide lamps and 608 fluorescent tubes in production areas. We also installed suntubes in warehouses to have a better use of natural daylight. Further implementation of this suntubes combined with solar panels and LED technology is under investigation. Given the more complex technology used here the payback period for this specific project (>3yr)is higher than for classical lighting optimization projects. CO2 savings are based on 2011 savings sum for countries mentioned above.	740			1-3 years
Energy efficiency: building services	Free cooling and changes in temperature set point – scope1 & 2, targets I1 and I3, on a voluntary basis. In Lithuania we reduce our energy consumption for air conditioning in the tobacco processing area, by changing the temperature set point. Initially always set at 22 °C temperature, it is now ranges from 18 to 26 °C, based on the production needs. Still in Lithuania we implemented the use of ambient air temperature to prepare chilled water to reduce the energy consumption for the HVAC in the tobacco processing area (free cooling). We have also started using ambient outside temperature (a way of free cooling) in one of our print shops in Indonesia. Savings from these projects are estimated and given as example.	92			1-3 years
Low carbon energy purchase	Purchase of electricity from renewable sources in manufacturing facility in Berlin–scope 2 targets I1 and I3, on a voluntary basis. In our manufacturing facility of Berlin, we started sourcing electricity with a higher share of renewable energy and a CO2e emission factor reduced by 22%.	3251			<1 year
Transportation: use	The logistics, including mainly transports of supply and finished goods accounts for 16% of our total carbon footprint (scope 3, target I2), on a voluntary basis. The program for systematic and central management of initiatives in this area is at its early days. However, we have already implemented various improvement projects, as	2195			<1 year

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
	for example: • load optimization for tobacco transportation in Ukraine, increasing the load per travel and reducing the number of travels. • inbound and outbound synchronization projects in Indonesia, using empty backhaul to transport cardboards, supply and finished goods between factories and warehouses. The numbers accounts for the above examples.				

3.3c

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

Method	Comment
Dedicated budget for energy efficiency	Through our Energy Management Program which has been developed to achieve the energy reduction and related greenhouse gas emissions targets of 20% by 2015 compared to our 2010 baseline for our manufacturing affiliates (scope 1 & 2, target I1). Additionally, we have targeted a 30% reduction in our carbon footprint by 2020 compared to our 2010 baseline across our entire value chain (scope 1, 2 & 3, target I2).
Employee engagement	Through our objective setting, Long-Range planning process and through sharing of tools and best practices.
Compliance with regulatory requirements/standards	When negotiating Energy objectives reductions (example of Switzerland and carbon tax exemption) and when building new facilities (requirements for renewable energy generation for new buildings in Germany and Mexico).
Lower return on investment (ROI) specification	We have defined a longer rate of return (4 years or more) for certain energy savings and renewable energy projects.

Further Information

Our Energy Management Program (EMP) has been developed to achieve the energy reduction and related greenhouse gas emissions targets of 20% by 2015 compared to our 2010 baseline for our manufacturing affiliates (scope 1 & 2, target I1). Additionally, we have targeted a 30% reduction in our carbon footprint by 2020 compared to our 2010 baseline across our entire value chain (scope 1, 2 & 3, target I2).

The EMP consists of over 100 energy reduction initiatives and is managed through an organizational structure of regional and sub-regional energy leaders. The energy leaders, supported by the Operations Center Environment team, are responsible for coordination of the development and alignment of local Long Range Plan targets as well as implementation of the initiatives.

The scope of the EMP includes the following:

- Implementation of a global energy metering & targeting system in all manufacturing affiliates. The combination of automatic-reading meters with software will provide all 56 manufacturing facilities with the tools to better understand and monitor their energy consumption. We have initiated our pilot studies in 3 manufacturing centers in 2011 which are due for completion in 2012. Full roll-out is planned to be completed between 2012 and 2013, and it is expected to contribute to a 5% CO2 reduction by 2015.
- Management of global energy saving initiatives: The major initiatives are managed systematically and centrally, which allows leveraging of existing knowledge and economy of scale through central procurement opportunities, which can help reduce the payback period of projects.
- For selected projects, it includes a feasibility assessment at some selected facilities, the compilation of results and the creation of standard procedures for global roll-out. The selection of the major initiatives for global roll-out is done by agreement between the energy leaders and Operations Centers during a specific workshop. For 2010-2013, 5 major energy saving initiatives have been chosen and their implementation recommended to all of our manufacturing facilities. We also identified the next top-12 projects mainly focusing on utility equipment for global roll-out during the 2013 to 2015 period. We also short-listed 13 of the most promising initiatives focusing more specifically on production process optimization. All short-listed initiatives will go through feasibility assessment and standardization procedure including implementation guidelines.
- Energy factory assessment: a tool for local initiatives identification. We have developed a factory energy assessment tool which is used to regularly evaluate new opportunities in utilities, process equipment, and manufacturing lay-out. This assessment contains checklists for behavioral as well as technical aspects. The assessment results in a set of recommendations which range from initiating a whole new project (which may require investment) to implementing very simple actions, where no investment is required (e.g.: stop ventilation outside of production hours).
- New technology scrutiny, including renewable energy. As part of our technology scrutiny, in 2012 with an external partner, we assessed the applicability of renewable energy technologies in our different production locations. This study is complemented by a tool to assess feasibility of renewable energy initiatives. We launched these feasibility studies at 3 different production sites.
- Engagement of our equipment suppliers. Finally, we are looking at improving our process equipment performance. For this purpose, we are engaged in the tobacco colloquium with other members of our industry and equipment suppliers to help set cross-industry standards for the energy consumption of our equipment.

Page: 4. Communication

4.1

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
In annual reports (complete)	On page 5 : Environmental Sustainability and Safety	PMI Annual Report 2011
In voluntary communications (complete)	Environmental Initiatives	PMI.com Environmental Initiatives Internet 2011

Further Information

In our annual report, we describe our 20 % reduction objective of CO2, Energy, Water and Wastes in 2015 vs our 2010 baseline and our commitment to reducing our overall company carbon footprint by 30 % by 2020.

PMI Annual report 2011:

http://media.corporate-ir.net/media_files/irol/14/146476/ar2011/index.html

Environmental Initiatives site on our company website 2011

http://www.pmi.com/eng/about_us/how_we_operate/pages/environmental_initiatives.aspx

Attachments

https://www.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/4.Communication/PMI Environmental initiatives Internet 2011.docx

https://www.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/4.Communication/PMI 2011_Annual_Report.pdf

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

Risks driven by changes in regulation Risks driven by changes in physical climate parameters Risks driven by changes in other climate-related developments

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
RR 1	Fuel/energy taxes and regulations	In various countries around the world there are electricity and fuel related levies or taxes and also CO2 related taxes such as the climate change levy in the UK and the CO2 tax in Switzerland.	Increased operational cost	1-5 years	Direct	Likely	Low- medium
RR 2	Cap and trade schemes	CO2 related schemes such as EU Emission Trading Scheme (EU ETS). We have 4 factories covered by the EU ETS and based on draft National Allocations all these factories can expect reduced emissions allowances in the future and thereby increased credit purchase costs.	Increased operational cost	1-5 years	Direct	Likely	Low- medium
RR 3	Product labeling regulations and standards	For example, EU regulations relating to product labeling and Lifecycle Assessment. This is possible for our both conventional cigarettes (longer term) or Next Generation Products (NGPs) which may include electronic components.	Increased operational cost	1-5 years	Direct	More likely than not	Low- medium
RR 4	General environmental regulations, including planning	Many of our factories are subject to general environmental regulations including emissions limits and permitting. Any new factories and other facilities will need to ensure that environmental considerations are fully addressed at the design stage.	Increased operational cost	1-5 years	Direct	Likely	Low- medium
RR 5	Emission reporting obligations	In various countries around the world we are subject to electricity and fuel related reporting obligations such as the National Greenhouse and Energy Reporting requirement in Australia and new tax code related regulations in the Ukraine.	Increased operational cost	1-5 years	Direct	Likely	Low- medium

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

- i) RR1 for our global operations, such levies and taxes are estimated at between \$0.1M to \$1M. RR2 based on our current 4 EU ETS factories, the annual cost of emissions allowance is expected to increase by over \$200K in the next five years, assuming a price of \$10 per tonne of CO2; the current cost is approximately \$150K per year. RR3 should product labeling be required for our future products we estimate a cost of over \$250K. RR4 tighter environmental regulation in the future could cost over \$1M per year across our global facilities. RR5 more environmental reporting obligations in the future could cost approximately \$1M per year across our global facilities.
- ii) RR1-RR5. We are managing these risks by having a comprehensive Energy Management Program (energy and CO2 reduction program) including ambitious internal energy and CO2 reduction targets (20% by 2015 for our manufacturing facilities) which can be the basis for carbon tax exemptions (we have already our Swiss affiliate exempted due to its energy reduction results) and reductions in the cost of compliance with the EU ETS. Standards for the design of new facilities which include for low carbon building design (e.g. low carbon building materials and energy efficient lighting) help minimize our risk exposure. As an example, in 2011 we specified energy efficiency measures as a prerequisite for the specification of our new London office. Drivers like EU ETS have led us to consider process changes in our factories, for example replacement of older combustion equipment to newer more efficient plant that can potentially reduce our energy load to beneath the 20MW regulatory threshold for our factory in Portugal (project assessment commenced in 2011). For our factory in Russia, following our internal energy and CO2 reduction targets means that the factory will already meet or exceed new state regulations "Energy conservation and improving energy efficiency in the period up to 2020". With respect to RR3, we have purchased a lifecycle assessment tool and have trained our staff in its use so that we can undertake these assessments in-house.
- iii) RR1-RR5. The costs associated are generally embedded in our Energy Management Program, with over \$6M USD already committed specifically in monitoring and targeting for 2011-2013. The wider best practice sharing approach and individual energy/CO2 saving projects are estimated to cost up to \$10M per year. With respect to RR3, the cost and use of the lifecycle assessment software is less than \$100K per year.

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
PR 1	Change in precipitation extremes and droughts	Supply Chain-Tobacco Leaf: Tobacco leaf growing is strongly influenced by physical climate change such as changes in temperature and precipitation and cyclones (hurricanes and typhoons) PMI sources tobacco from over 30 countries across the world. Increased drought / flooding would disturb the tobacco leaf life cycle stages (seedling; transplanting; harvesting). The yield, quality and availability of the tobacco crop would be influenced by the seasonal frequency and the intensity of such extreme rainfall events. This changes our crop buying pattern which results in increased operational cost. Extreme rainfall may require pumping of excess water, similarly, extreme droughts would require long-term irrigation, both of which increase energy consumption, and the tobacco production cost, With respect to our supply chain, the transportation of raw materials and finished good products, as well as availability of ports would be interrupted; similarly damage to those stocks in storage facilities such as warehouses would impact the uptime of the manufacturing centers. Extreme rainfall could cause damage to buildings including our manufacturing centers which would increase our cost both in management and insurance fees. The risk of damaged goods and manufacturing centers, and interrupted supply chain would weaken our competitive advantage as we would be unable to supply products to our customers. Overall, the well-being of society, for example our farmers in tobacco growing areas, would be impacted as the frequency of extreme climatic conditions (flood or drought) would force people to move to less risky locations resulting in less employment opportunities in such areas. PMI's operations are widely spread mitigating the effects of	Reduction/disruption in production capacity	6-10 years	Direct	Likely	Medium- high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		severe catastrophic climatic disruption. Furthermore, PMI's business continuity management plans are designed to mitigate the consequence of supply chain interruption and disruption caused by building damage, and or stock/material damage.					
PR 2	Change in precipitation extremes and droughts	Supply Chain- Acetate Tow and Pulp: The acetate tow market is tight with a capacity utilization of over 90%, and acetate facilities face increased risk from cyclones, floods, and drought. If anything were to disrupt activities in acetate tow plants, acetate tow supply would be impacted, and disruptions to supply over several months would present challenges for PMI. Cyclones – S.E. USA is frequently subjected to cyclones which could disrupt acetate facilities and delay supply Floods – S.E. USA the area has suffered a number of heavy rain events in the past, and if the sites are vulnerable to flooding (i.e. low-lying, or near a body of water) they could face disruption Drought – S.E. USA is more likely to be at risk of severe droughts by 2030s. Facilities water use may come under pressure if local water use is restricted to maintain reserves.	Reduction/disruption in production capacity	6-10 years	Direct	Likely	Medium- high
PR 3	Change in precipitation extremes and droughts	Supply Chain: Clove Clove is an essential raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves. It takes at least 5-7 years for clove trees to become productive and 20-40 years before they reach peak production. Yields are complex; harvests can vary by up to 60% over a 4 year harvest cycle. Clove production is weather sensitive, and climate changes such as intensification of the wet season would impact clove growing areas (such as damages to bud development; more pest problems from increased rainfall, and oscillation between drought / flooding presenting difficulties to small scale farmers and clove trees). This would reduce the supply and increase the price of cloves.	Reduction/disruption in production capacity	6-10 years	Direct	Likely	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
PR 4	Change in mean (average) temperature	The change in the mean (average) temperature could affect our sites globally (manufacturing, agricultural, other business operations). In terms of agricultural impact, the quality and yield of tobacco crop and other raw materials we use would be affected. While slight increase in average temperature can lengthen the growing season in some regions, it can adversely impact the yield and quality of the crop where summers are long and already hot. Increase of mean (average) temperature may cause drought, which in turn resulting crops to require water irrigation. This would impact our energy consumption, and the tobacco production cost. Overall, in all our sites, change in mean (average) temperatures from climate change would also increase the use of air conditioning or heating systems, leading to substantial increases in demand for energy. Moderately high temperatures would also impact the well-being of our people which in turn would reduce our productivity.	Increased operational cost	6-10 years	Direct	Virtually certain	Medium- high
PR 5	Sea level rise	Rising sea levels in leaf growing areas, as well as near manufacturing and warehouse centers that are closer to seas / rivers (e.g. Netherlands, and some Asian Manufacturing centers) would impact our leaf sourcing (yields and quality), disturb our supply chain distribution causing delays and downtime which results in reduction/disruption in production volumes. Rising sea levels could impact the underground water, which is used for consumption. Water treatment processes (chemical/physical) for consumption, irrigation, for manufacturing use would be costly and increase our energy consumption. Rising sea levels would also leave people (our farmers, manufacturing employees, and others) who live in low lying areas in danger of being flooded, resulting in migrations.	Reduction/disruption in production capacity	6-10 years	Direct	Likely	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
PR 6	Induced changes in natural resources	Change in climatic variability and extreme events such as changes in the frequency and severity of heat waves, drought, floods and hurricanes, as a result the availability of water, could affect the distribution of pests and crop predators, which could affect the yield and quality of tobacco crop and of other raw materials we use. Lack of response to the impact of physical climate changes in those agricultural areas (e.g. some Asian countries such as China and Philippines, and eastern US), or insufficient investment in R&D agricultural programs, could weaken our productivity and increase operational cost.	Reduction/disruption in production capacity	6-10 years	Direct	Very likely	Medium- high

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

While we do not grow tobacco ourselves, PMI sources tobacco from over 30 countries across the world. We do directly contract farmers for 32% - 36% of our worldwide tobacco needs depending on the pattern of our leaf purchases.

- (i) The financial implications of the risk before taking action: Identification of the potential risks and their financial implications that are driven by the change in physical climate parameters is carried out through a specific climate change risk assessment process in 2011 which is appropriate to both our corporate and asset level risk/opportunity management. As a result of the process, we have developed a risk impact matrix for our key internal assets such as factories and warehouses, supplier assets (including port facilities, warehouses, tobacco leaf growing regions and some other strategic suppliers). The financial implications of these risks vary depending on the asset that is impacted. For example, in relation to PR1 and PR4, the threat of flooding in Netherlands, cyclones in Philippines could cause damage in our manufacturing and warehouse sites (10-20 million USD for each location). Similarly, in relation to PR1, PR3, and PR5, such as a severe drought or change in temperature extremes in leaf growing regions could result in poor/reduced crop yields (this would also be the case for clove yields), loss of revenue from decreased supply volumes, increased supply cost, and decreased quality in tobacco products in the supply chain, and eventually loss of sales due to unsatisfied customers. Depending on the size of the area impacted, the financial implications would vary significantly, however, the incremental financial implications from these risks are currently assessed to be low (under several million USD).
- (ii) The methods to manage the risk: PMI is committed to the sustainable use of natural resources and to the identification of significant environmental risks throughout the business. Our climate change risk management process which we completed in 2011 covers all of our company value chain from growing tobacco to the management of waste from our products and is strongly linked to the risks and opportunities of physical climate change both at the corporate and asset level. We completed a specific climate change risk management process in 2011 which is appropriate to both our corporate and asset level risk/opportunity management. The risk assessment process includes our key internal assets such as factories and warehouses, supplier assets (including port facilities, warehouses, tobacco leaf

growing regions and some other strategic suppliers). This risk management process covers material physical and regulatory risk impacts for those key assets (internal / external) regions and our company as a whole, it uses a current risk state assessment against projected changes in the 2020-2030 time horizon. The outcome of the process, incorporated into our business strategy, drives our strategic initiatives at the corporate and local levels.

At the local asset level we can analyze the results of our 2011 climate change risk assessment process down to the specifics of, for example, potential increased flood, drought and cyclone risk for individual company assets and we have assessed that risk in terms of potential financial and raw material volume impacts. Other tools that we use in identifying significant risks and/or opportunities from climate change include:

- Environmental risk assessments are conducted at both global company level and individual affiliate level to identify material risks and opportunities. In manufacturing centers the process is formalized through our environmental management systems (to the international standard ISO 14001). These risk assessments include asset details such as the need for flood risk management plans which we discuss with our insurers.
- Due diligence surveys are performed at least annually to identify material environmental risks. The results of these surveys are collected from affiliates and analyzed by the central PMI EHS&S team. Information is then assessed with relevant corporate departments, for example, finance and legal.
- We conduct annual compliance risk assessments at all affiliates which take into account CO2 emissions, reporting and climate change.

With respect to PR1, PR2, PR3, PR4, since 2002, we have trained farmers on Good Agricultural Practices (GAP) and the sustainable use of resources. This training is undertaken by agronomy technicians employed by our suppliers and/or PMI who provide the farmers with technical advice.

We have established GAP guidelines, and the implementation of the guidelines is compulsory for all our tobacco suppliers. Moreover, we regularly perform direct GAP assessments wherever we source our tobacco. In addition, we ask all of our tobacco suppliers to perform yearly GAP self-assessments and identify improvement plans. See attached GAP description at the end of this section.

We promote and implement programs supporting forestation which also help manage water and soil quality, these programs are in place in various locations around the world including Africa, Asia Pacific and Latin America, for example a current program in Argentina involved the distribution of 4.6 million tree seedlings (representing 4380 hectares) to 6600 farmers.

(iii) The costs associated with these actions: In regards to PR1-PR9 (all physical changes from climate impacts). The data from our risk assessment identified key areas which could be the base of longer term actions. We have already identified our key assets at risk of climate change impacts (both PMI owned and in our entire value chain). We invested around USD\$200,000 for 2010-2011 period in this global risk assessment as well as internal time and resources. In terms of reforestation activities, we have invested around \$20M to date and in an average year expect to invest \$2-5M.

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
CR 1	Reputation	The risk that society does not view our company positively with respect to our climate change credentials. The investor and consumer perceptions about PMI's climate change actions could affect the reputation and consumer demand for our products and may limit investment opportunities.	Reduced demand for goods/services	6-10 years	Direct	Unlikely	Medium- high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
CR 2	Changing consumer behaviour	The risk that inaction on climate change related topics discourages our customers and consumers to buy our products. Climate change could be seen as a brand differentiator for consumers and there may be stigma attached to some products due to reputation aspects.	Reduced demand for goods/services	6-10 years	Direct	Unlikely	Medium
CR 3	Fluctuating socio-economic conditions	The risk of climate change related socio-economic crises which could impact demand for our product.	Reduced demand for goods/services	6-10 years	Direct	Unlikely	Medium
CR 4	Increasing humanitarian demands	The risk that climate change related issues cause agricultural prioritization for food crops over non-food crops.	Reduction/disruption in production capacity	6-10 years	Direct	Unlikely	Medium

5.1f

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

i) CR1 and 2 - PMI is aware that there is a general regulatory and reputational risk from not responding responsibly to climate change issues. Reputation may also become a more significant factor in our customers' purchasing decisions in the future, but at this time, we do not see this risk as significant. We are also aware that regulatory and reputational risk may impact the decisions of our stakeholders, specifically our consumers and shareholders. If these risks were to materialize then they could impact our business by many millions of dollars.

CR3 – Fluctuating socio-economic conditions due to climate change related issues could impact the demand for our products and increase price sensitivity. If these risks were to materialize then they could impact our business by many millions of dollars.

CR4 – It is possible that future regulatory initiatives could seek to prioritize agricultural food crops (in terms of water supply, land availability etc.) over non-food crops, thereby impacting the security of our supply chain. If this risk were to materialize then it could impact our business by many millions of dollars.

ii) CR1 and 2 – Corporate Sustainability and climate change strategy, programs and transparent communications including this CDP, carbon footprinting of new product and packaging developments. Working with customers (e.g. Tesco) on carbon reduction value chain initiatives.

CR3 – General business risk management and forecasting

CR4 – PMI has developed a Sustainable Agriculture Program to specifically address and minimize the impacts of tobacco farming and ensure our supply chain in the long term.

iii) CR1 and 2 - The internal costs associated with these actions are estimated at in excess of USD \$10M.

CR3 – This is an internal cost within the general running of our business and is not separately quantifiable

CR4 – This is largely an internal cost which is estimated at over USD\$10M per year.

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

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

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

Further Information

Per comment in 5.1d, Good Agricultural Practices information attached.

Attachments

https://www.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/5.ClimateChangeRisks/Good Agricultural Practices.xps

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

Opportunities driven by changes in regulation Opportunities driven by changes in physical climate parameters Opportunities driven by changes in other climate-related developments

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
RO1	Cap and trade schemes	Expansion of EU Emissions Trading Scheme or similar schemes in other countries and regions. There is the potential to use our experience of these schemes to enable performance ahead of allocated emissions and thereby generate carbon credits.	Reduced operational costs	1-5 years	Direct	More likely than not	Low- medium
RO2	Fuel/energy taxes and regulations	Subsidies for renewable Energy generation have been developed in many different countries and we factor in these subsidy plans to our cost-benefit analyses for pertinent projects so that improved return on investment can potentially be delivered.	Other: Reduced operational costs and Energy security	1-5 years	Direct	More likely than not	Low- medium

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

RO1 i) Estimated at up to \$1M USD based on current financial exposure in the EU and potential future inclusion of larger manufacturing centers such as in Russia. ii) We track this through our Energy Management Program and regulatory radar screen. iii) There is no additional cost associated with this as we are already implementing our Energy Management Program and radar screen.

RO2 i) Estimated at up to \$1M USD. ii) We track this through our Energy Management Program and regulatory radar screen including 2011 considerations in the UK and Portugal. iii) There is no additional cost associated with this as we are already implementing our Energy Management Program and radar screen.

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
PO1	Change in mean (average) temperature	Supply Chain-Tobacco Leaf: Tobacco leaf growing is strongly influenced by physical climate change such as changes in temperature. PMI sources tobacco from over 30 countries across the world. Temperature changes would impact the tobacco leaf life cycle stages (seedling; transplanting; harvesting).	Increased production capacity	6-10 years	Indirect (Supply chain)	Likely	Medium- high
PO2	Change in mean (average) precipitation	Supply Chain-Tobacco Leaf: Tobacco leaf growing is strongly influenced by physical climate change such as changes in precipitation. PMI sources tobacco from over 30 countries across the world. Increased precipitation would impact the tobacco leaf life cycle stages (seedling; transplanting; harvesting) Watershort leaf growing areas would benefit from increases in precipitation (i.e. level, timing and variability) due to increase of soil moisture. This would positively impact the tobacco crop patterns; crop production capacity and quality.	Increased production capacity	6-10 years	Indirect (Supply chain)	Likely	Medium- high

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

PO1 and 2 - i) the potential financial implications are not quantifiable in the short-term but increased tobacco yields can provide benefits running to several millions of dollars. ii) We continually assess promising tobacco leaf growing areas and assess if climate change elements would favor increased tobacco yield. iii) The cost of this work is mainly internal time and resources, and is estimated at up to \$1M per year.

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
CO1	Reputation	We expect that by tackling sustainability and climate change issues appropriately, our company reputation could be enhanced; however we will continue to do the right thing regardless of reputational drivers.	Increased demand for existing products/services	1-5 years	Direct	About as likely as not	Medium
CO2	Changing consumer behaviour	Consumers are more and more interested in climate change and sustainability aspects of products and many of our business customers reflect that interest. By working with our customers and providing company performance information and product developments we expect to be able to take the opportunity of this market driver.	New products/business services	1-5 years	Direct	More likely than not	Medium- high

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

CO₁

- i) We cannot quantify the financial implications of this opportunity at this time.
- ii) Corporate Sustainability and climate change strategy, programs and communications including this CDP.
- iii) The internal costs associated with these actions are estimated at USD \$5-10M.

CO2

- i) We cannot quantify the financial implications of this opportunity at this time.
- ii) Corporate Sustainability and climate change strategy, programs and communications including this CDP, carbon footprinting of new product and packaging developments. iii) The internal costs associated with these actions are estimated at in excess of USD \$10M.

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

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

6.1i

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

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)
Fri 01 Jan 2010 - Fri 31 Dec 2010	383729	408897

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
Australia - National Greenhouse and Energy Reporting Act
Defra Voluntary Reporting Guidelines
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

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 Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 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
			see Excel spreadsheet attached below

Further Information

PMI Fuel conversion factors (conversion to CO2-equivalent) presented in the attached Excel Spreadheet following CDP format.

Attachments

https://www.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/7.EmissionsMethodology/PMIFuelconversionfactorsCDP.xlsx

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

8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

8.2a			
	Please provide you	ur gross global Scope 1 emissions figure in metric tonnes CO2e	
	373641		
0.01			
8.2b			
	Please provide you	ur gross 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 you	ur gross global Scope 1 emissions figures in metric tonnes CO2e - Part 1	Total
		global Scope 1 emissions (metric tonnes CO2e) – Part 1 Total	Comment
	Gloss	global Scope Fernissions (metric tornes Coze) – Fait Frotal	Comment
8.2d			
	Please provide you	ur gross global Scope 1 emissions figures in metric tonnes CO2e - Part 2	

Gross global Scope 1 emissions (metric tonnes CO2e)

Comment

Boundary

Please provide your gross global Scope 2 emissions figure in metric tonnes CO2e

Please provide yo	ur gross global Scope 2 emissions figures in metric to	nnes CO2e - Part 1	breakdown	
Boundary	Gross global Scope 2 emissions (metric ton	nnes CO2e)	Comment	
	ur gross global Scope 2 emissions figures in metric to	nnes CO2e - Part 1	Total	
Please provide yo	ur gross global Scope 2 emissions figures in metric to		Total Comment	
Please provide yo				
Please provide yo				
Please provide yo				
Please provide yo		al Part 1	Comment	
Please provide yo	s global Scope 2 emissions (metric tonnes CO2e) - Tota	al Part 1	Comment	

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

8.4a

Please complete the table

Reporting Entity	Source	Scope	Explain why the source is excluded

8.4

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Jordan	Scope 1 and 2	Newly acquired manufacturing facility in 2011, estimated to be less than 1 % of current total.

8.5

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
More than 2% but less than or equal to 5%	Data Gaps Extrapolation	A new manufacturing facility in Jordan was integrated into our business in 2011 but CO2 data was not fully available. For offices outside of Switzerland: emission factors from a business case study have been applied to PMI's office area (square meters) by extrapolation.	More than 2% but less than or equal to 5%	Data Gaps Extrapolation	A new manufacturing facility in Jordan was integrated into our business in 2011 but CO2 data was not fully available. For offices outside of Switzerland: emission factors from a business case study have been applied to PMI's office area (square meters) by extrapolation.

Please indicate the verification/assurance status that applies to your Scope 1 emissions

Verification or assurance complete

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

More than 90% but less than or equal to 100%

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
Limited assurance	ISO14064-3	SGS Greenhouse Gas Verification statement for manufacturing facilities and fleet, comprising 98 % of PMI Scope 1 emissions, i.e. 366'038 metric tonnes CO2e of our 373'641 tonnes scope 1 total as per our answer in 9.2d. Verified emissions are 366'038 of Scope 1 (manufacturing plus fleet emissions) and 380'555 of Scope 2 (manufacturing emissions) for a total of 746'953 verified metric tonnes CO2e (96 % of the PMI total for Scope 1+2 which is 774'524 metric tonnes CO2e)

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

More than 90% but less than or equal to 100%

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
Limited assurance	ISO14064-3	SGS Greenhouse Gas Verification statement for manufacturing facilities, comprising 95 % of PMI Scope 2 emissions, i.e. 380'555 metric tonnes CO2e of our 400'883 tonnes scope 2 total as per our answer in 10.2c. Verified emissions are 366'038 of Scope 1 (manufacturing plus fleet emissions) and 380'555 of Scope 2 (manufacturing emissions) for a total of 746'953 verified metric tonnes CO2e (96 % of the PMI total for Scope 1+2 which is 774'524 metric tonnes CO2e).

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

Yes

8.8a

Please provide the emissions in metric tonnes CO2e

1053

Further Information

- 8.2a We note that the country specific emissions provided in 9.1a are 7 metric tonnes lower (when summed) than the number provided in 8.2a this is due to rounding.
- 8.3a We note that the country specific emissions provided in 10.1a are 2 metric tonnes higher (when summed) than the number provided in 8.3a this is due to rounding.
- 8.8a Biofuels for Fleet (sales & distribution vehicles).

Attachments

https://webadmin.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/8.EmissionsData(1Jan2011-31Dec2011)/SGS Greenhouse Gas Verification Statement.pdf

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
Argentina	12714
Australia	2064
Brazil	11733
Canada	4858
Colombia	2381
Costa Rica	606
Czech Republic	5059
Dominican Republic	774
Ecuador	1950
Germany	16610
Greece	3056
Guatemala	637
Indonesia	13849
Italy	590
Kazakhstan	4476
Lithuania	3503
Malaysia	8875

Country	Scope 1 metric tonnes CO2e
Mexico	4980
Netherlands	23774
Pakistan	10556
Philippines	53075
Poland	11003
Portugal	8319
Romania	3146
Russia	18649
Senegal	884
Serbia	2428
South Africa	2625
South Korea	7
Switzerland	3590
Turkey	6497
Ukraine	6134
Uruguay	2
Venezuela	3878
Other: Fleet worldwide data	112749
Other: Offices worldwide data	7604

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

By activity

9.2a

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

Business Division	Scope 1 metric tonnes CO2e

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

9.2d

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

Activity	Scope 1 metric tonnes CO2e
Manufacturing facilities	253289
Fleet	112749
Offices	7604

Further Information

Country-specific emissions are manufacturing based. Fleet and offices emissions are calculated separately.

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
Argentina	12313
Australia	12963
Brazil	2510
Canada	4088
Colombia	1629
Costa Rica	60
Czech Republic	13018
Dominican Republic	926
Ecuador	1362
Germany	30187
Greece	13791
Guatemala	504
Indonesia	53907
Italy	3580
Kazakhstan	7832
Lithuania	2655
Malaysia	15644

Country	Scope 2 metric tonnes CO2e
Mexico	12138
Netherlands	36401
Pakistan	4855
Philippines	20924
Poland	31170
Portugal	11463
Romania	5665
Russia	31147
Senegal	2536
Serbia	7140
South Africa	2050
South Korea	5885
Switzerland	368
Turkey	19597
Ukraine	10014
Uruguay	259
Venezuela	1663
Other: Curacao	313
Other: Offices worldwide data	20328

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

By activity

10.2a

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

Business division	Scope 2 metric tonnes CO2e

10.2b

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

Facility	Scope 2 metric tonnes CO2e

10.2c

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

Activity	Scope 2 metric tonnes CO2e
Manufacturing facilities	380555
Offices	20328

Further Information

Country-specific emissions are manufacturing based. Offices emissions are calculated separately.

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?

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

0

11.1b

Explain the basis of the alternative figure (see guidance)

We purchase 100% renewable energy, from local hydroelectricity, for our two data centers in Switzerland as shown in 11.2.

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?

Yes

11.2a

Please provide details including the number and type of certificates

Type of certificate	Number of certificates	Comments
Renewable Energy Guarantees of Origin (RE-GO)	1	Electricity provider for ITSC (data centers) in Switzerland

Further Information

Attached: Romande Energie certificate ("Certificat Hydro Locale" or local hydro power) for PMI ITSC servers in Switzerland.

Attachments

https://webadmin.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/11.EmissionsScope2Contractual/Certificat Hydro Locale ITSC.pdf

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	1668439
Electricity	953574
Heat	6384
Steam	5681
Cooling	0

12.3

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

Fuels	MWh
Anthracite	7151
Biodiesels	63
Biogasoline	6186
Brown coal	8761
Crude oil	4131
Diesel/Gas oil	274070
Distillate fuel oil No 2	20805
Distillate fuel oil No 4	6384
Distillate fuel oil No 5	186153
Liquefied petroleum gas (LPG)	47763
Motor gasoline	250420
Natural gas	862305
Propane	311
Wood or wood waste	321

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	4.2	Decrease	Driven by a 3.5 % reduction (per million cigarettes) in Manufacturing facilities

Reason	Emissions value (percentage)	Direction of change	Comment
activities			(2011 vs 2010) and a 6.9 % reduction in Fleet emissions.
Change in output	2	Increase	Increase in production mainly due to organic growth

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
10.15	metric tonnes CO2e	unit total revenue	13.33	Decrease	Energy reduction initiatives and strong net revenues growth

13.3

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
9.92	metric tonnes CO2e	FTE Employee	2.03	Decrease	Energy reduction initiatives and stable workforce

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
723	metric tonnes CO2e	unit of production	3.47	Decrease	Energy reduction initiatives in manufacturing affiliates : Scope 1 + Scope 2 divided by produced cigarettes

Page: 14. Emissions Trading

14.1

Do you participate in any emission trading schemes?

Yes

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
European Union ETS	Sat 01 Jan 2011 - Sat 31 Dec 2011	13909	0	12994	Facilities we own and operate
European Union ETS	Sat 01 Jan 2011 - Sat 31 Dec 2011	7417	18399	22312	Facilities we own and operate
European Union ETS	Sat 01 Jan 2011 - Sat 31 Dec 2011	12139	0	10443	Facilities we own and operate
European Union ETS	Sat 01 Jan 2011 - Sat 31 Dec 2011	5833	4000	8063	Facilities we own and operate

14.1b

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

Energy reduction targets until 2015 and remaining credit purchase within a 3-year period.

14.2

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

Yes

14.2a

Please complete the following table

Credit origination or credit purchase	Project type	Project 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
Credit Purchase	Wind	DHL GoGreen	CDM	299		Yes	Voluntary Offsetting

Further Information

Attached DHL GoGreen certificate

Attachments

https://www.cdproject.net/Sites/2012/12/14712/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/14.EmissionsTrading/120410_PhilipMorrisInternational_GOGREEN_2011_en.pdf

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	6737	Through air miles accounting, using the Guideline to DEFRA / DECC's GHG Conversion Factors for Company Reporting, Annex 6: Air Passenger Transport Conversion Factors.	
Purchased goods & services	3900000	Includes Tobacco (including curing) and direct materials composing the cigarette, the pack and transport packaging (packaging, cigarette papers, acetate tow for filters, etc.). Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions based on expert opinion. Elements of our carbon footprint, have been modeled using the Life Cycle Assessment (LCA) tool, Simapro and have involved LCA expert inputs. In 2010, our value chain data have undergone a 3rd party review by the company ERM against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	
Upstream transportation & distribution	340000	Estimates for tobacco and direct materials transport. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions based on expert opinion. Elements of our carbon footprint, have been modeled using the Life Cycle Assessment (LCA) tool, Simapro and have involved LCA expert inputs. In 2010, our value chain data have undergone a 3rd party review by the company ERM against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	
Downstream transportation and distribution	530000	Distribution of finished goods; estimate based on 8 key markets. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions based on expert opinion. Elements of our carbon footprint, have been modeled using the Life Cycle Assessment (LCA) tool, Simapro and have involved LCA expert inputs. In 2010, our value chain data have undergone a 3rd party review by the company ERM against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	
Use of sold products	150000	This includes mainly the use of lighters. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions based on expert opinion. Elements of our carbon footprint, have been modeled using the Life Cycle Assessment	

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
		(LCA) tool, Simapro and have involved LCA expert inputs. In 2010, our value chain data have undergone a 3rd party review by the company ERM against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	
End-of-life treatment of sold products	12000	Downstream wastes treatment and street cleaning. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions based on expert opinion. Elements of our carbon footprint, have been modeled using the Life Cycle Assessment (LCA) tool, Simapro and have involved LCA expert inputs. In 2010, our value chain data have undergone a 3rd party review by the company ERM against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	

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

Not verified or assured

15.3

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

Yes

Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Emissions reduction activities	0.6	Decrease	Increase use of teleconference and other Green IT tools when working with remote teams.

Module: Sign Off

Page: Sign Off

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

Andy Harrop – Director EHS&S Sustainability and Performance

Carbon Disclosure Project