Pearson

Environmental Review 2017

1. Introduction

As an education company, we are committed to helping people of all ages to learn. We also have a duty to play our part in making sure everyone has a healthy and sustainable planet in which to progress.

This thinking underpins why Pearson has a long track record of investing in green initiatives. Our flagship environmental initiative is climate neutrality but our commitment goes wider to embrace a concern to protect the natural resources on which we all depend.

Our vision is shared by others in the world of education and many of the institutions we serve are environmental leaders both in thought and practice. We know that our customers and learners value the commitment we have to being a responsible environmental citizen.

In 2015, Pearson reviewed its sustainability strategy through an inclusive process involving internal leaders within the company as well as external experts. As a result, we adopted our 2020 Sustainability Plan and confirmed our most material issues. This process confirmed Greenhouse Gas emissions and climate change as one of our nine issues which we believe as our most material at this time.

We report on the highlights of our environmental activities within our annual report and broader sustainability reporting but also produce this companion report providing additional detail on our climate neutral commitment as well as on paper purchasing as our two most material environmental areas that impact on GHG emissions and climate change.

2. Our climate neutral strategy

In 2006, concern over climate change first emerged onto the public policy agenda, rising up the list of issues raised by investors and was of interest to authors, employees, students and customers alike.

Pearson wanted to respond. We decided to adopt 'climate neutrality' as our flagship environmental goal that we could use to focus the organisation on reducing our environmental impact. Climate neutrality was achieved in 2009 and has been renewed and refreshed every year since.

Our climate neutral commitment covers company operations under our direct control such as buildings and travel. The commitment excludes supply chain activities such as our digital supply chain, paper purchase, printing and distribution. Our strategy is built on three key areas:

1. **Measure**. We have an established, independently-verified process to measure our climate footprint relating to our buildings and from business travel.

2. **Reduce**. We consistently cut the Greenhouse Gas emissions relating to our buildings and business travel year-on-year. We have introduced energy-efficient design across our buildings, invested in alternatives to business travel such as video conferencing as well as purchase and generate renewable energy to meet our global electricity needs.

3. **Offset**. Whatever emissions we have not been able to reduce or avoid are offset each year by supporting a range of forest based projects that either save or absorb a tonne of carbon for each tonne that we emit.

We involve all parts of Pearson in achieving our climate neutral commitment:

- Facilities departments work on introducing energy efficiency design and upgrades together with looking at renewable energy options across our main buildings.
- Internal communications teams have helped highlight environmental issues in our company newsletters.
- Our marketing teams have continued to develop innovative partnerships to raise awareness of environmental issues and boost our reputation.
- Editorial colleagues' commission learning curricula covering a wide range of environmental issues.
- Our purchasing teams have worked with industry partners and with suppliers on assessing and measuring our total carbon footprint.
- Finance colleagues offer budgetary funds to stimulate new ideas and innovation.

Our Approach

Development and implementation of our strategy is overseen by the Responsible Business Leadership Council. The council is chaired by the chief corporate affairs and global marketing officer and includes senior executives from across the company. Progress is reported to the Reputation and Responsibility Committee, a formal committee of the Board.

We have a dedicated Health, Safety and Environment committee made up of the operations leads for both our Core and Growth geographies. This is chaired by the Chief Operating Office for Core and Growth and meets quarterly.

Pearson has a global online data collection system in place covering utilities, waste, water and business travel. As part of our due diligence, we commissioned two independent reviews of the system. The first was carried out by Deloitte in 2014 and looked at management and implementation of the reporting system and subsequently data verification is assessed annually through an assurance process carried out by Corporate Citizenship.

3. Environmental management and measurement

Globally, our operations are accredited against the Carbon Trust Standard. Pearson was the second ever organisation to be certified against the standard which recognises leadership in measuring, managing and reducing year-on-year carbon emissions. Our Carbon Trust Standard certification was reviewed and reconfirmed in 2016 and will be reviewed again in 2018.

Pearson first introduced its environmental policy in 1992. Our businesses in the UK and Australia are accredited against ISO 14001, the international environmental management standard. Other parts of the world apply our own environmental management system based on ISO14001 standards. This system is described in the policies and downloads section on the Pearson corporate website.

We have also embraced LEED, the green buildings standard in the United States. We currently have four buildings certified under the LEED standard which together account for over 840,000 square feet and we have set up a team of certified LEED assessors within the company. Our offices in Hoboken was the last to secure LEED certification in 2015, achieving a Gold Standard. We are currently working on securing a further LEED certification for a building In Maryland.
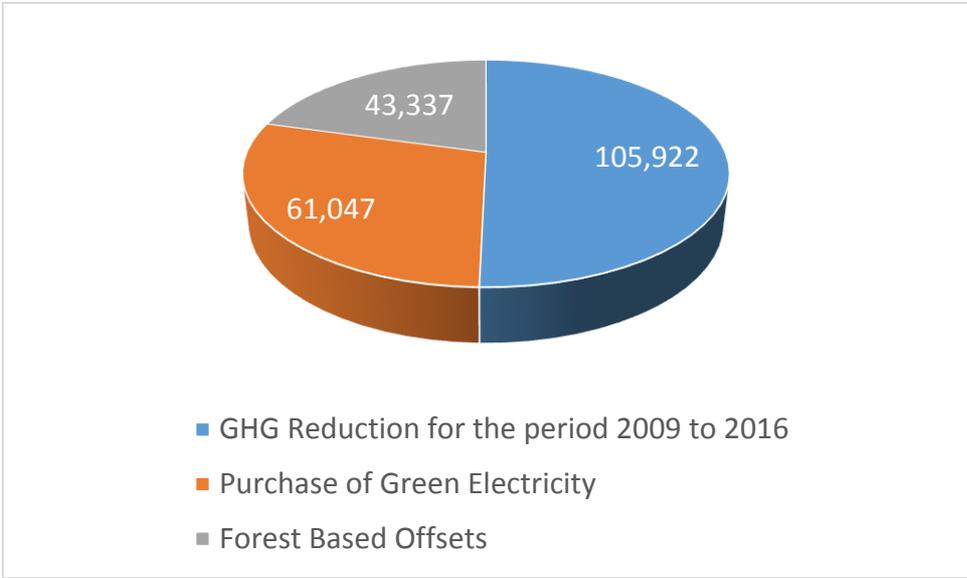
4. Climate footprint: 2017

Our climate footprint as at the end of 2017 was 104,384 metric tonnes of carbon dioxide equivalent (CO2e); an absolute reduction of 17.4% over 2016 and 50% less than 2009, our baseline year.   This means we have met our target three years early of reducing our carbon footprint by 50% by 2020 compared to our baseline year.

We are pleased with this performance as our overriding goal from adopting our climate neutral commitment is to reduce our climate footprint where possible.   Our climate footprint reduction was driven by a sale of a business in China (GEDU), a continued focus on reducing energy use, the distance we travel on business as well as wider business transformation.

Our climate footprint reduction performance for the period 2013 to 2017 for our three largest countries and the rest of the world is as follows:
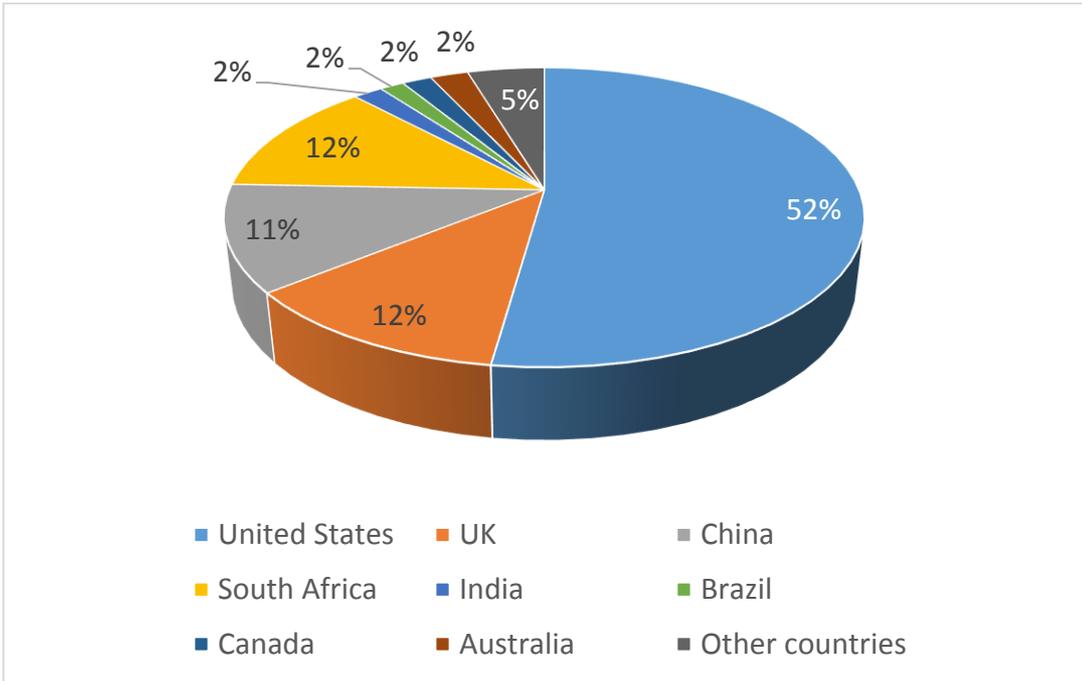
	UK	US	China	ROW	Global
2013	35,236	105,994	18,208	29,254	188,692
2014	21,599	94,348	19,960	26,503	162,410
2015	20,251	79,872	17,655	28,715	146,492
2016	17,167	64,590	18,478	26,150	126,385
2017	12,462	54,503	11,963	25,457	104,384
2013 vs 2017	-65%	-49%	-34%	-13%	-45%

We have maintained climate neutrality for the period 2009 through to 2017 by purchasing green electricity and then to offset the remaining unavoidable emissions.

GHG Reduction for the period 2009 to 2016 — 105,922
Purchase of Green Electricity — 61,047
Forest Based Offsets — 43,337

Since we completed our commitment to become climate neutral in 2009, we have reduced our absolute climate footprint by over 100,000 of metric tonnes of carbon dioxide equivalent.

The nine most significant countries for us as sources of emissions in 2017 were the US, the UK, China, South Africa, India, Australia, Brazil, Mexico and Canada which together account for over 95% of our climate footprint.

United States — 52%
UK — 12%
China — 11%
South Africa — 12%
India — 2%
Brazil — 2%
Canada — 2%
Australia — 2%
Other countries — 5%

Our Approach

We measure greenhouse gas emissions (GHG) relevant to our business and express our total as an equivalent in metric tonnes of carbon dioxide, the main greenhouse gas (GHG). This is known as carbon dioxide equivalent (CO_2e).
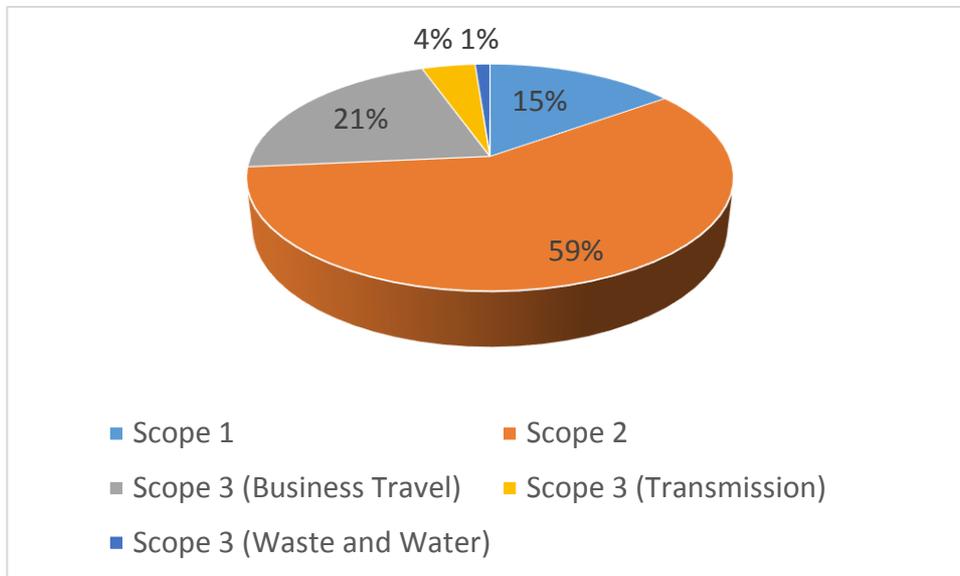
In our annual report, we disclose all of the emission sources required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. These sources fall within our consolidated financial statement. We do not have responsibility for any emission sources that are not included in our consolidated statement.

Assurance

Our climate footprint has been verified by the specialist consultant, Corporate Citizenship. The assurance statement covers the methodology, data collection and accuracy of data reported. This statement is disclosed on our corporate website - www.pearson.com/corporate.

External reporting

In addition to this annual environmental review, we also publicly disclose our carbon management performance to the Carbon Disclosure Project (CDP).

5. Reduction

Our main motivation for adopting our commitment to become climate neutral is to reduce our carbon footprint. And, the commitment has worked. Over the last 8 years, we have reduced our global climate footprint by 50%.

Prior to adopting the commitment, we reduced our absolute footprint annually by around 2% per annum, but in the last 8 years, our average annual rate of reduction was over 6%.

We have adopted two flagship targets relating to energy use in our buildings and a second covering wider Greenhouse Gas emissions combining both buildings and travel.

2020 Sustainability Plan Targets	Baseline Year	2016	2017	% 2017 vs. baseline year
To reduce our Greenhouse Gas emissions by 50% by the end of 2020 using 2009 as the base year.	210,306 MT CO2e	126,385 MT CO2e	104,384 MT CO2e (down 17% on 2016)	-50%
To reduce energy use in our buildings on an absolute basis by 50% by the end of 2020 using 2013 as the base year.	285,590 MWh	201,041 MWh	147,873 MWh (down 26% on 2016)	-48%

Factors behind this performance include:

- Our accelerating investment in digital content and the related switch away from physical related infrastructure such as distribution centres is reducing our directly controlled footprint.

- The sale of Global Education in China.

- New technology which is enabling more flexible and greater home working as well as reducing the need for business travel.

- The Green Fund. Our portfolio of renewable energy generation projects across Pearson buildings is an example of what has been delivered.

- Continuing efficiencies implemented by the operations teams as well as strategies such as limiting business travel.

Case study: LUCID: Energy Monitoring System

We first introduced the LUCID energy monitoring system (EMS) in 2012 and it is now installed in buildings representing 16% of the total US buildings footprint. The Lucid EMS system provides "real time" data on electricity, water and gas consumption allowing facility managers to actively review their use more closely and work with local utilities to reduce usage and avoid additional peak usage charges.

In its first 3 years, utility costs were reduced by 12%, the payback period on the $76k invested was just two months and the project delivered $945K savings over three years. Nearly 8 million kwh of energy is now avoided annually at participating sites.

Renewable electricity: purchase

Our journey to purchase 100% renewable electricity started in 2008 and was completed in 2012. Our most significant focus area for us is our largest market, the United States. Pearson has consistently ranked in the top 50 largest purchasers of electricity from renewable sources in the United States and has twice received a Green Power Leadership Award from the US Environmental Protection Agency most recently in 2014.

RE100

During COP21 in Paris, Pearson announced that we had signed up to RE100, joining the then 50 companies helping build the market for renewable electricity. Our CFO explained our reason for joining as:

'This is the last generation that can take meaningful action against climate change. One practical step that business can take is through the purchase of electricity from renewable sources. Pearson has acted and we already purchase 100% of our electricity globally in this way. We are now pleased to join RE100 as by adding our voice alongside other businesses, we can help shift this important market.

Coram Williams, Chief financial officer

For more information on Pearson's commitment, visit **http://there100.org/companies**

Renewable electricity: generation

Our commitment extends to generating electricity from renewable sources at our sites. Our first renewable electricity project went live in December 2009. Over its lifetime the new solar panels on our building at Old Tappan in New Jersey is expected to produce electricity equivalent to 4,325 metric tonnes of CO_2e. We plan to sell this site in 2018 and the renewable electricity generation is no longer active pending the sale.

During 2011 we installed a wind turbine in Owatonna, Minnesota and completed a second solar panel installation project at our Cranbury Distribution Center in New Jersey. The Cranbury project was among the largest company owned single roof projects in the world. 2013 saw a further 260 kW of capacity installed at our buildings in Austin, Texas.

We have implemented two solar panel installation projects in South Africa. In 2016, one of these was sold as part of a wider initiative to reduce In-house distribution centre capacity. We have invested in excess of $10 million in renewable energy generation delivering the following capacity:

	2010	2011	2012	2013	2014	2015	2016	2017
MW								
Solar								
Old Tappan	210	210	210	210	210	210	210	
Cranbury		2000	2000	2000	2000	2000	2000	2000
Austin				260	260	260	260	260
South Africa					100	105	5	5
Wind								0
Owatonna		95	95	95	95	95	95	95
Total	210	2305	2305	2565	2665	2670	2570	2360

Travelling on business

For essential travel, we've been encouraging our people to avoid flights wherever possible and we continue to lower the emissions relating to our car fleet.

- We have invested over $200k in upgraded video conferencing facilities in key buildings and introduced new virtual meeting technologies across the company.
- Globally, we aim to replace our fleet with hybrid and lower emission vehicles where possible. The number of hybrids in our global fleet increased from 33 in 2009 to 317 in 2017 (410 in 2016).

6. Offset

Whatever emissions we are not able to reduce or avoid are offset through a range of forest based projects.   Through our efforts to reduce energy use and business travel, we reduced our climate footprint as at the end of 2017 by 17% compared to 2016. Our footprint for 2017 was 104,384metric tonnes of carbon dioxide (CO_2e). We avoided a further 61,047 metric tonnes through our global commitment to purchase electricity from renewable sources.

This left Pearson 43,337 metric tonnes to offset for 2017 to maintain our climate neutral status. We did this through partnerships such as with the Children's Tropical Forests UK, the Algoma Highlands Conservancy in Canada, the Woodland Trust in the UK and a new partnership in China.

- In the UK, we support Woodland Carbon offe30red by the Woodland Trust. Woodland Carbon was the first scheme to meet the UK's voluntary standard for woodland creation projects which sequester carbon. Our funding created over 20 hectares of new native woodland in Heartwood Forest in St Albans.

- In North America, our offset partner is Algoma Highlands Conservancy.   The Algoma Highlands area in Ontario, Canada covers approaching 50,000 acres and our support is the anchor funding for the project. A wide variety of plants and wildlife species are being protected including rare plants and animals that are iconic to the Canadian wilderness - moose, bear, timber wolves, otters, woodpeckers and loons.

- The Children's Tropical Forests UK is our primary offset partner. For 2017, we have once again agreed to purchase and protect rainforest in Colombia adding to our commitment to protect rainforest in both Colombia and Costa Rica in previous years of the Pearson climate neutral commitment.

Since 2009, our climate neutral program has seen us protect over 1,600 hectares of forest.

7. Water, Waste and Packaging

Water

Our offices do not use water beyond basic needs - we set targets to reduce usage and it forms part of our climate footprint. We declare water usage data in our section on data.

Unsold product

We sell a variety of products. Most are paper-based in the form of books. Less than 1% of our sales are products such as CDs and DVDs. We are committed to recycling as much of our unsold product as possible. Sometimes this happens through industry-wide agreements whilst other initiatives are specific to Pearson.

Our target is to maintain our reuse/recycle rate for all unsold books in excess of 95%. This has been achieved since we set the target in 2003 and remains a target.

Packaging

We use a variety of packaging materials in the distribution of our products worldwide: cardboard, plastic, shrink-wrap and foamfill (a void filler). A particular objective for us has been to reduce the use of plastic and foamfill in favour of packaging based on natural materials.

8. Supply Chain

Pearson is changing. Today, digital and digital enabled products together account for considerably over half our revenue and as they grow in importance so having a technology-related supply chain is reshaping our environmental footprint.

Nevertheless, it is our traditional paper-based products which continue to be the source of our most significant environmental impact. Pearson is a purchaser of paper for books, we have contracts with printers around the world as well as with distributors and shippers to bring our products to market.

Managing the environmental impacts arising from our supply chain was first identified as a priority for Pearson over a decade ago and has continued ever since. Including environmental responsibility as a contract requirement defines the nature of the relationship that we seek to build with our suppliers. In our contracts, we outline the standards of performance that we expect from our suppliers as well as the commitments we make as a responsible purchaser. The standards we set our suppliers reflect the standards that we set for ourselves. Pearson introduced specific environmental clauses for inclusion in key contracts agreed from 2002 onwards.

These clauses were reviewed following supplier feedback and the introduction by Pearson of a Code of Business Conduct. We now have a companion Business Partner Code which sets out the expectations we have of suppliers on environmental responsibility.

In line with our commitment to climate neutrality, we started the process of measuring and assessing product carbon footprints. Our first education product footprint was for Bug Club:

Bug Club

Bug Club is a whole school reading programme for primary schools. It comprises books and an online reading world designed to help build a love of books and confident young readers. As Bug Club combines digital and print components, it was a perfect case study for a life cycle analysis. Trucost, the specialist environmental consultancy carried out the analysis. As far as we are aware, this is a first lifecycle analysis of a learning programme.

The scope of the analysis covered Greenhouse Gas emissions, air and water pollution, freshwater consumption and land use change. The analysis used life cycle assessment to assess resource use and potential environmental impacts from raw material use / device manufacture, production, distribution and reading. It

The analysis reviewed the impact of different papers and printers used for the physical product as well as the impact of digital readers accessing books through desktop, tablets or smartphones. The results were expressed in terms of a natural capital cost.
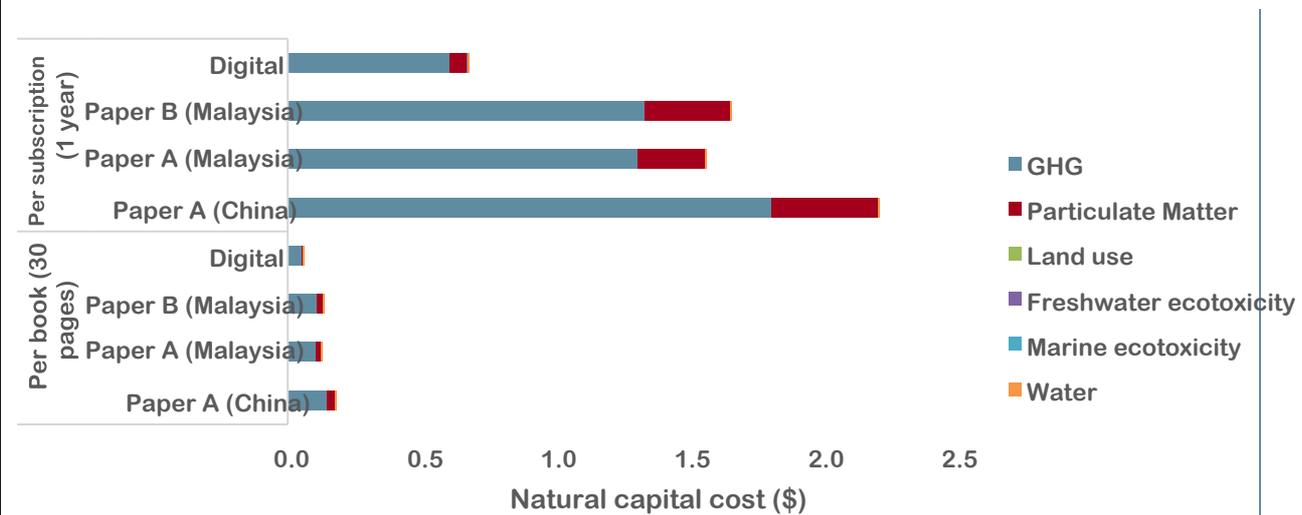
This report highlighted supply chain water risk as an area for further study.

Paper

Paper was traditionally the single most material environmental issue for Pearson reflecting our average purchase of some 300,000 metric tonnes each year –approximately 6.5 million trees.

As part of the wider shift to digital at Pearson, the materiality of paper purchase has massively reduced and both 2015 and 2016 saw a significant acceleration of that trend. We purchased 41,000 metric tonnes of paper in 2016 for our core and growth markets.

Key factors behind this reduction alongside the shift to digital are the transfer of paper purchasing responsibility in North America to LSC Communications, the sale of the FT Group and the establishment of Penguin Random House.

Nevertheless, paper remains an important environmental issues reflecting global concern about deforestation and illegal logging – something that has been made easier to identify by developments in fibre testing which allows easy analysis of book papers by tree species. This

focus is driven by the loss of natural forest cover as one of the biggest global sources of greenhouse gases accounting for 20% of global emissions or 10 times the emissions relating to air travel.

As well as reduced paper purchase, we achieved some key milestones in 2017:
- Pearson in the UK retained Chain-of-Custody accreditation by the Forest Stewardship Council (FSC). This means that Pearson product can carry the FSC logo.
- Core and Growth has over the last 2 years more than doubled the volume of paper purchased carrying the highest sustainability rating (FSC or equivalent certified).
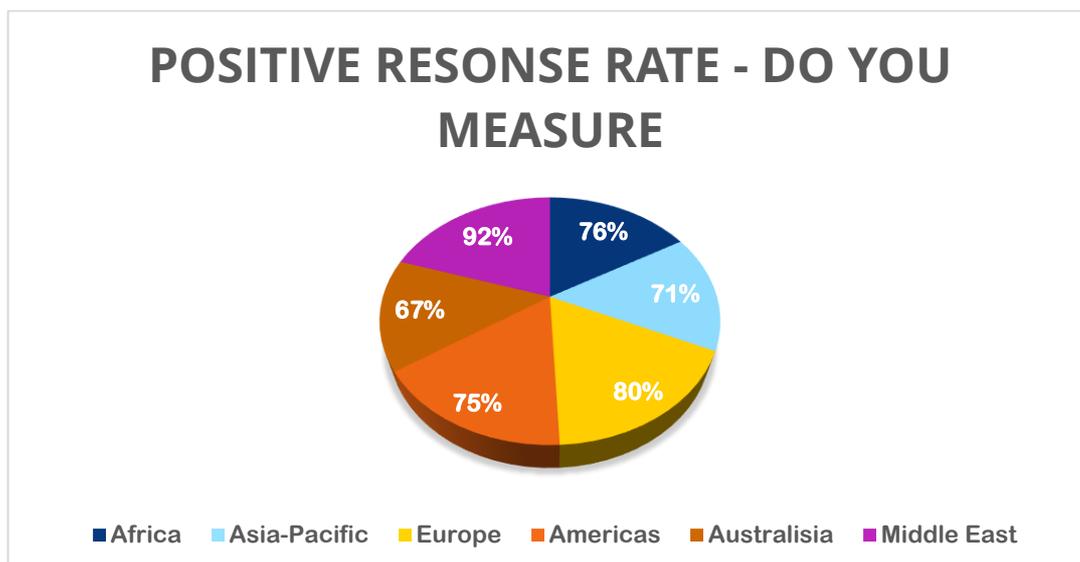
Printing

Pearson no longer directly prints product.   As such, we do not consider emissions to water as an issue for our own company reporting.

However, emissions to water are an issue facing our third-party printer partners. We see our responsibility as being to exert a positive environmental influence over the practices of our printers.

In 2003, we first set up a central register of key paper suppliers and outsourced printing relationships. This register provides Pearson with a picture of the environmental performance of its printers. The register includes over 90% of our printers by value. We survey our global printers every two years. The survey covers:

- Whether the printer uses a recognised system for environmental management.
- Measurement and reduction policies for water, ink, solvents, alcohol, energy and waste.

The survey was last completed in 2015 and will be repeated in 2018. The overall results were as follows:

POSITIVE RESONSE RATE - DO YOU MEASURE

Africa 76% | Asia-Pacific 71% | Europe 80% | Americas 75% | Australisia 67% | Middle East 92%

POSITIVE RESONSE RATE - DO YOU SET TARGETS
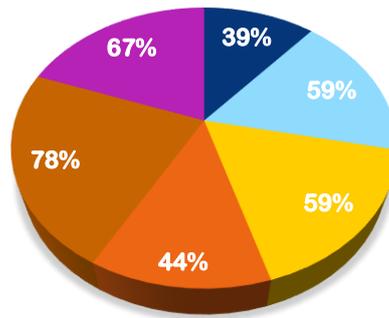
Legend: Africa, Asia-Pacific, Europe, Americas, Australisia, Middle East

Values shown: 39%, 59%, 59%, 44%, 78%, 67%

We continue to be concerned that the release of Volatile Organic Compounds (VOCs) which are present in inks and solvents are managed effectively and where possible reduced. We encourage our printers to introduce and operating companies continue to monitor reduction targets for VOCs as part of the work above.

Our production departments continue to use our vendor relationship management system which incorporates both environmental and labour standards data together with commercial data.

During 2017, Pearson people undertook visits to existing and potential printers in the UK, China and Malaysia. These visits provided an opportunity for Pearson to review performance standards in areas including environmental responsibility, health & safety, labour standards and human rights. The findings and issues identified have been discussed with our printers and are being managed as part of our normal commercial relationships.   A joint visit to printers in Malaysia was undertaken by the Production Department and the Sustainability team.

Distribution

Our books are produced around the world, requiring shipment from the printers to our distribution centres. We outsource road distribution and shipment of our products to third party carriers. We have worked with suppliers on consolidating shipments to maximise container loads and monitor environmental performance as part of the contractual arrangements. We have an internal reporting process by facility.

9. Engaging employees

Climate change affects us all. It requires leadership and vision to address and we all have a role to play. As most of our people work in offices, test and learning centres or in data centres, Pearson has a relatively small and reducing environmental footprint. However, we can have a much more significant impact through informing, engaging and inspiring the thousands of people who work for us and with us, and the millions who learn with us every day.

In recognition of our commitment to play our part to reduce emissions to stem the causes of climate change, Pearson was an early signatory to the 'We are Still in' declaration in the United States. The declaration brings together Mayors, governors, and business leaders in a promise not to retreat from the global pact agreed at Paris to help combat climate change. The coalition now includes over 2,700 representatives from all 50 states, spanning large and small businesses, mayors and governors, university presidents, faith leaders, tribal leaders, and cultural institutions. The internal communication on our decision to sign the declaration was viewed by over 4,000 people within Pearson making it one of the highest rated communications of the year.

Pearson has a dedicated space

Green products - engaging learners

Climate change matters to our businesses. Our operating companies continue to respond to the climate neutral challenge by developing and investing in environmental products and services:

- Pearson is market leader in the Higher Education environmental science textbook market with a leading market share. We offer Mastering Environmental Science, a collection of online homework, tutorial, and assessment products.

- We are a strategic learning partner for the US Green Buildings council (USGBC) and are working together to create learning materials and courses.

- Over the last 25 years, BTEC qualifications in the UK have offered a vocational pathway into employment or further study. As part of a wider suite of qualifications on sustainability skills, the BTEC Level 3 National in Environmental Sustainability was offered from September 2011. This offers learners aged 16 to 19 interested in sustainability clear progression pathways into employment or into Higher, Specialist and Professional courses. 147 learners studied for BTEC environmental sustainability qualifications in 2017.

10.   Commitments and Targets

Our main environmental commitment is to be a climate neutral company for our directly controlled operations. First achieved in 2009, this means that we commit to reduce or offset our global Greenhouse Gas emissions by 100% each year for our existing operations excluding acquisitions made during the year.

Where it is not possible to reduce our emissions by other means, we purchase carbon credits. We have now continued this commitment into 2017. Pearson uses 2009 as its baseline year.

Last year, we introduced new areas of focus for Pearson. Our progress is as follows:

	Priority introduced in 2015	**Progress**
Suppliers	Investigate whether our third-party data centres can be supplied by clean energy	No progress. Project not to be progressed due to lack or resources.
Carbon footprinting	Look beyond direct emissions to capture impacts across the digital and physical value chain.	Bookcarbon – an initiative that allows us to calculate our physical impact from forest to distribution centre has now been introduced to the production team.

Mapped our first education product – Bug Club |
Low-carbon economy	Continue to invest in energy efficiency and renewable energy in order to remain carbon neutral	Achieved
'Mindprint'	Establish targets, key initiatives and/or partnerships to enable learning and skills development linked to specific sustainability challenges	Continued to map product portfolio and met key partners such as the US Green Building Council. (See pillar 3 on education for sustainable development for more information)
Circular economy	Closing the loop on all products and services by 2020 (zero waste to landfill)	Continued development a of textbook rental model

In addition, to these broad themes, we have a number of other targets:

Plans for 2017 and beyond	**Progress**		**Plans for 2018 and beyond**
We will now review the green team strategy in 2018 to allow the 2017 programme of cost savings to be completed.	◑	Green team numbers fell to under 20 reflecting changes in the organisational structure.	Green team review planned in 2018
Maintain our position in the indices of social responsibility	✅	Achieved. Pearson improved from Silver to Media Sector leader in the Dow Jones Sustainability Index and was again named as one of the Global 100 most sustainable corporations in the world.	Maintain our position in the indices of social responsibility

Plans for 2017 and beyond	Progress	Plans for 2018 and beyond
To reduce energy use in our buildings on an absolute basis by **50%** by the end of 2020 using 2013 as the base year	On track. We reported a 48% absolute reduction on 2013 levels in 2017.	To reduce energy use in our buildings on an absolute basis by **50%** by the end of 2020 using 2009 as the base year
To reduce our absolute Greenhouse Gas emissions by **50%** by the end of 2020 using 2009 as the base year.	Achieved. We reported a 50% absolute reduction on 2009 levels in 2017.	To set a revised target in 2018.
Maintain or reduce passenger km per employee rate based on 2016 levels.	On track. Passenger km per employee rose by 0.4%	Maintain or reduce passenger km per employee rate based on 2017 levels.
Maintain our reuse/ recycle rate for all unsold books in excess of 95%	Achieved.	Maintain our reuse/ recycle rate for all unsold books in excess of 95%
Using 2014 as our base year, reduce absolute water use across the company by 60% per square metre of occupied space by the end of 2020	On track. Water use per square metre is 36% lower in 2016 compared to our 2014 baseline.	Using 2014 as our base year, reduce absolute water use across the company by 60% per square metre of occupied space by the end of 2020
Maintain our commitment to purchase green electricity in 2015	Achieved. Pearson is also a member of RE100.	Maintain our commitment to purchase green electricity in 2016
Target 450 hybrid vehicles in the Pearson fleet in 2017	Not achieved. The number of hybrids fell to 317 vehicles from 409. Our overall fleet size continued to fall.	
Continue our drive for independently verified certification for the papers we use.	Achieved. Pearson in the UK retained FSC Chain of Custody accreditation	Continue our drive for independently verified certification for the papers we use.

Plans for 2017 and beyond	Progress	Plans for 2018 and beyond
Add a further building to be certified against Leadership in Energy and Environmental Design (LEED)	⊗ Not achieved in 2017. Application submitted for review in 2018.	Add a further building to be certified against Leadership in Energy and Environmental Design (LEED)

11.   Data and trends

Pearson has been collecting and reporting on its environmental impact since 2002. In 2007 we adopted a commitment to become climate neutral. We report here on our absolute environmental impact for the entire global business for the period 2009 to 2017.

Environmental reporting measures

	Units	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net internal area of reporting offices	m2	1,360,151	1,443,347	1,262,440	1,357,822	1,425,320	1,393,954	1,208,954	858,237	788,506
Full-time employees (in scope)	FTE	37,164	35,978	41,520	48,500	42,115	40,876	37,265	32,719	30,339

Energy Consumption

Measure	Units	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Electricity Consumption (including from renewable sources)	MWh / year	258,114	204,438	198,190	218,410	215,460	186,356	162,916	154,910	122,224
Total Electricity Consumption (from renewable sources only)	MWh / year	170,229	170,712	166,896	218,410	215,460	186,356	162,916	154,910	122,224
Total Gas Consumption	MWh / year	122,153	78,742	72,884	64,462	66,375	57,144	48,760	45,855	25,553
Total Fuel Oil Consumption	MWh / year	7,033	6,533	3,517	1,927	3,755	114	3,500	276	96
Total Energy Consumption	MWh / year	385,836	289,714	269,391	284,800	285,590	243,614	215,176	201,041	147,873
Total Energy Consumption/ employee	MWh / employee	10.4	8.1	6.5	5.9	6.8	6.0	5.8	6.1	4.9

Business Travel

Measure	Units	2011	2012	2013	2014	2015	2016	2017
Air	Passenger km	242,830,342	255,072,031	235,743,104	193,259,356	207,822,988	163,722,174	152,430,338
Rail	Passenger km	3,924,710	4,711,264	3,682,392	937,647	4,374,643	7,496,013	13,893,549
Road (distance)	Km / year	7,284,921	3,486,138	6,735,312	6,356,549	1,447,092	64,318,474	58,254,200
Road (fuel use)	litres	5,815,052	6,120,706	5,849,850	5,312,226	4,894,843	Nil	Nil
Road (derived energy)	MWh					43,889	45,071	41,511

Greenhouse Gas Emissions

Measure	Units	2009	2010	2011	2012	2013	2014	2015	2016	2017
Direct (Scope 1)	Tonnes CO2e	44,649	35,739	35,806	31,095	30,170	25,027	22,343	19,093	15,691
Indirect (Scope 2)	Tonnes CO2e	130,395	122,189	114,730	128,542	115,548	104,715	88,381	77,579	61,047
Other (Scope 3)	Tonnes CO2e	4,375	3,523	5,276	2,782	1,381	1,724	1,044	1,359	1,230
Electricity transmission (Scope 3)	Tonnes CO2e					10,538	8,204	8,345	5,647	4,418
Business Travel (Scope 3)	Tonnes CO2e	30,887	33,913	28,719	32,336	31,055	22,740	26,255	22,708	21,999
Total	Tonnes CO2e	210,306	195,364	184,531	194,756	188,692	162,410	146,368	126,385	104,384
Total GHG/ FTE	Tonnes CO2e/FTE	5.66	5.43	4.44	4.02	4.48	3.97	3.93	3.86	3.44

The method we use to calculate GHG emissions is the GHG Protocol Corporate Accounting and Reporting Standard (revised edition), together with the latest emission factors from recognised public sources including, but not limited to, Defra, the International Energy Agency, the US Energy Information Administration, the US Environmental Protection Agency and the Intergovernmental panel on Climate Change. In line with the GHG Protocol, we report on all our Scope 1 and 2 emissions and include the optional element for emissions relating to business air and rail travel.

- Scope 1: All fuel used in our buildings and in company vehicles plus refrigerants
- Scope 2: Electricity used in our buildings drawn from grids where we do business
- Scope 3: Emissions relating to air and rail travel, electricity transmission, waste and water

Paper

	Units	2009	2010	2011	2012	2013	2014	2015	2016	2017
Paper purchased	MT	338,993	338,103	319,557	287,452	194,760	152,181	132,551	43,027	40,953

We also prepare a separate **report** on the paper we purchase for use in our books.

Waste

	Units	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Waste to Landfill	MT	5,508	3,834	9,097	7,134	3,273	2,005	1,112	1,249	1,244
Total Waste to Landfill/ FTE'ooo	MT/ FTE	148	107	221	147	73	49	30	38	41

Water

	Units	2010	2011	2012	2013	2014	2015	2016	2017
Total Water Consumption	m3	604,822	528,873	678,256	1,154,106	1,474,077	1,014,268	526,297	530,728
Total Water Consumption/FTE	m3 / FTE	17	13	14	26	36	27	16	17.5

Legal Compliance

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Reported Environmental Prosecutions	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

12.   Useful contacts

If you have any questions on the environmental review, please contact:
Sustainability@pearson.com