# Pearson

## Environmental Review 2015

# 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.   There is little point in our mission – to help people progress in their lives through learning – if there is no world to progress into.  It is not just the right thing to do; it is the 'must' thing to do.

Education and caring for the environment are fundamentally connected - so looking after our planet is fundamentally important to our learners.  It is not just the right thing to do; it is the 'must' thing to do.

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.

We report the highlights of our environmental activities within our sustainability reporting but also produce companion reports providing additional detail on both our climate neutral commitment and on paper purchasing as our most material environmental impact area.

# 2. Our climate neutral strategy

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

Pearson wanted to respond.  We decided, we adopted 'climate neutrality' as a big 'hairy' environmental goal that we could use to focus the organisation on reducing our environmental impact.  This commitment 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 or 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 cut the Greenhouse Gas emissions relating to our buildings and business travel. 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 update Planet Pearson, our dedicated environmental collaboration space. It is available globally, bringing together information, ideas and signposts to

- local green groups as well as encouraging colleagues to work together.
- Our marketing teams have continued to develop innovative partnerships to raise awareness of environmental issues and boost our reputation.
- Editorial colleagues' commission books, magazine and newspaper articles on a wide range of environmental issues as well as host conferences on the issue.
- 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 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 network of country-specific committees supported by around 20 eco-committees at our key buildings that look for additional opportunities for improvement.

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 data verification is assessed annually through our 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.

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 this website.  During 2015, we also worked on securing accreditation against ISO50001, the energy management standard, a process we will complete in 2016.

We have also embraced LEED, the green buildings standard in the United States.  We have six buildings certified under the LEED standard which together account for over 740,000 square feet and we have set up a team of certified LEED assessors within the company. This year, our offices in Hoboken became the latest to secure LEED certification achieving a Gold Standard.

# 4. Climate footprint: 2015

Our climate footprint as at the end of 2015 was 146,368 metric tonnes of carbon dioxide equivalent ($CO_2e$); an absolute reduction of 10% over 2013 and 30% less than 2009, our baseline year.   This means we have exceeded our target of reduced our carbon footprint by 25%.
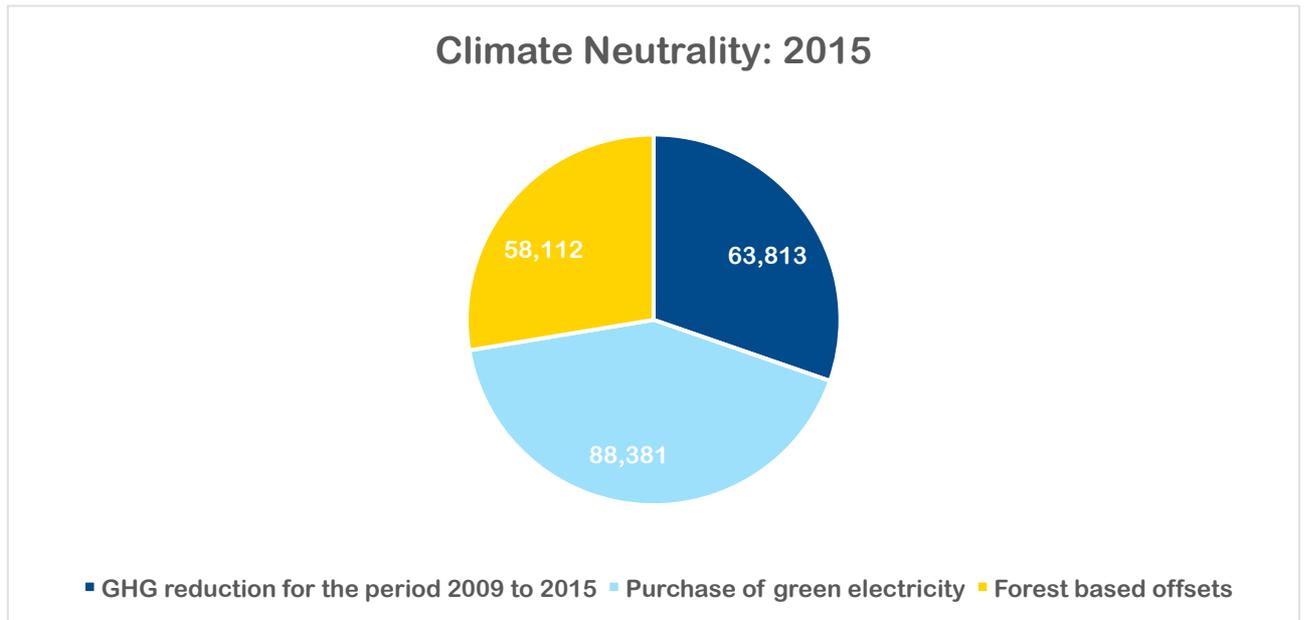
We are pleased with this performance as our overriding goal from adopting our climate neutral commitment is to reduce our climate footprint where possible.  Our climate footprint reduction was driven by a continued focus on reducing energy use and the distance we travel on business.

Our climate footprint reduction performance for the period 2013 to 2015 for our three largest countries

and the rest of the world is as follows:

|      | UK     | US      | China  | ROW    |         |
|------|--------|---------|--------|--------|---------|
| 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 |
|      | -43%   | -25%    | -3%    | -2%    | -22%    |

We have maintained climate neutrality for the period 2009 through to 2015 by purchasing green electricity and then to offset any remaining unavoidable emissions.

## Climate Neutrality: 2015



- GHG reduction for the period 2009 to 2015
- Purchase of green electricity
- Forest based offsets

63,813 — 88,381 — 58,112

Since we completed our commitment to become climate neutral in 2009, we have reduced our absolute climate footprint by over 65,000 of metric tonnes of carbon dioxide equivalent.

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



- USA
- UK
- China
- South Africa
- India
- Brazil
- Canada
- Australia
- Rest of the World
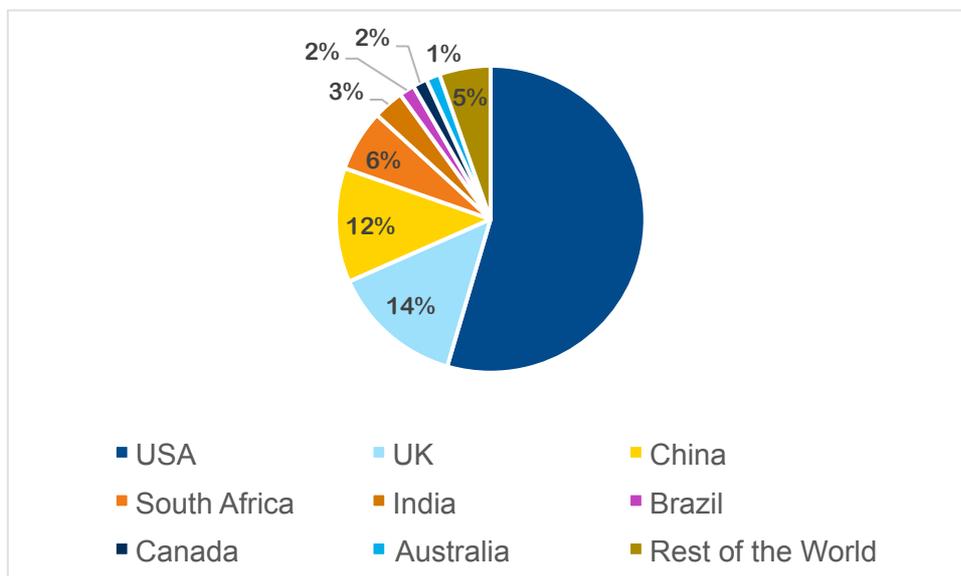
## Our Approach

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 (CO2e).
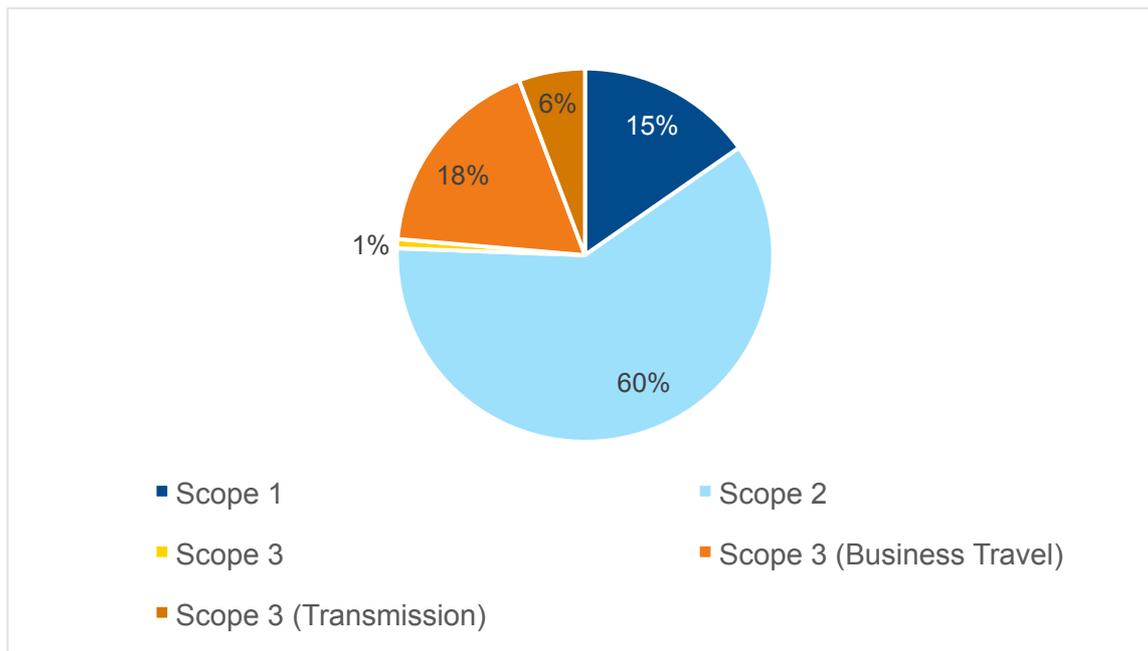


In our annual report, we disclose all of the emission sources required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. These sources fall within our consolidated financial statement. We do not have responsibility for any emission sources that are not included 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.

## 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 6 years, we have reduced our global climate footprint by 30% driven by a stellar performance in the US where we have reduced our footprint by nearly a half (46%).

Prior to adopting the commitment, we reduced our absolute footprint annually by around 2% per annum, but in the last 6 years, our average annual rate of reduction was 7%.

Our two flagship targets relate to energy use in our buildings and a second covering wider Greenhouse Gas emissions combining both buildings and travel:

| Global Targets | Baseline Year | 2014 | 2015 |
|---|---|---|---|
| To reduce our Greenhouse Gas emissions by 25% by the end of 2015 using 2009 as the base year. | 210,306 MT CO2e | 162,410 MT CO2e | 146,493 MT CO2e (-30%) |
| To reduce energy use in our buildings on an absolute basis by 15% by the end of 2018 using 2013 as the base year. | 285,590 MWh | 243,614 MWh | 215,177 MWh (-25%) |

Both targets have been materially exceeded delivering both substantial cost savings as well as enhancing our reputation on environmental management. 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.

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

- The Green Fund as a mechanism to stimulate investment and innovation. Our portfolio of renewable energy generation projects across 5 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.

Over the last 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 over 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.

<div align="right">Coram Williams, Chief financial officer</div>

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

## 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 C02e. To date, the Old Tappan solar panel project is generating 9% more than projected.

During 2011 we installed our first wind turbine project 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 MW of capacity installed at our buildings in Austin, Texas.

For 2014, we implemented a new 100MW solar panel installation project in South Africa – our first outside the United States.  A second solar panel installation was completed in 2015.

We have now invested in excess of $10 million in renewable energy generation.  Our generation capacity is as follows:

| MW | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| **Solar** | | | | | | |
| Old Tappan | 210 | 210 | 210 | 210 | 210 | 210 |
| Cranbury | | 2000 | 2000 | 2000 | 2000 | 2000 |
| Austin | | | | 260 | 260 | 260 |
| South Africa | | | | | 100 | 105 |
| **Wind** | | | | | | |
| Owatonna | | 95 | 95 | 95 | 95 | 95 |
| Total | 210 | 2305 | 2305 | 2565 | 2665 | 2670 |

## 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 over 375 in 2015 and our aim continues to be to grow the number of hybrids in the fleet.

# 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 2015 by 10% compared to 2014.  Our footprint for 2015 was 146,493 metric tonnes of carbon dioxide (CO2e).

We avoided a further 88,381 metric tonnes through our global commitment to purchase electricity from renewable sources.

This left Pearson 58,112 metric tonnes to offset for 2015 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 offered 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 2015, we have once again agreed to purchase and protect rainforest in Colombia adding to our existing commitment to protect rainforest in both Colombia and Costa Rica for previous years of the Pearson climate neutral commitment.

Since 2009, our climate neutral program has seen us protect over 1,300 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, and sales of magazines are small. We are committed to recycling as much of our unsold product as possible. Sometimes this happens through industry-wide agreements - as was the case for newspapers in the UK - whilst other initiatives are specific to Pearson.

Avoiding unsold product is a key business objective. Improvements in stock control and sales forecasting contribute significantly to reducing the amount of unsold product and to lower cost. Responsible disposal of unsold product is a significant environmental responsibility for us.

| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | %age change 2015 vs. 2014 |
|------|------|------|------|------|------|------|----------------------------|
| 98%  | 98.5% | 98.6% | 98.7% | 98.9% | 98.9% | 98.6% | -0.3% |

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

## 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. Our use of plastic has reduced by over 85% over the last seven years and foamfill use is over 50% less than 2004.

# 8. Supply Chain

Pearson is changing.  Today, digital services and direct delivery together account for considerably over half our revenue and these continue to grow in importance bringing a growing technology-related supply chain which is reshaping our future 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**. This year we introduced a companion **Business Partner Code**.
In line with our commitment to climate neutrality, we started the process of measuring and assessing product carbon footprints.  Our first product footprint covered the Financial Times and FT.com.

<div>

## Trucost / Financial Times

Trucost worked with Pearson and the Financial Times on a lifecycle analysis of the impact of the shift of its subscription model from print towards digital.  A LCA is a quantitative measurement tool used to assess resource use and potential associated environmental impacts at different stages of the life cycle stage, from raw material acquisition through production and use to disposal of a product, service or process.

### Total natural capital cost of the FT's global circulation

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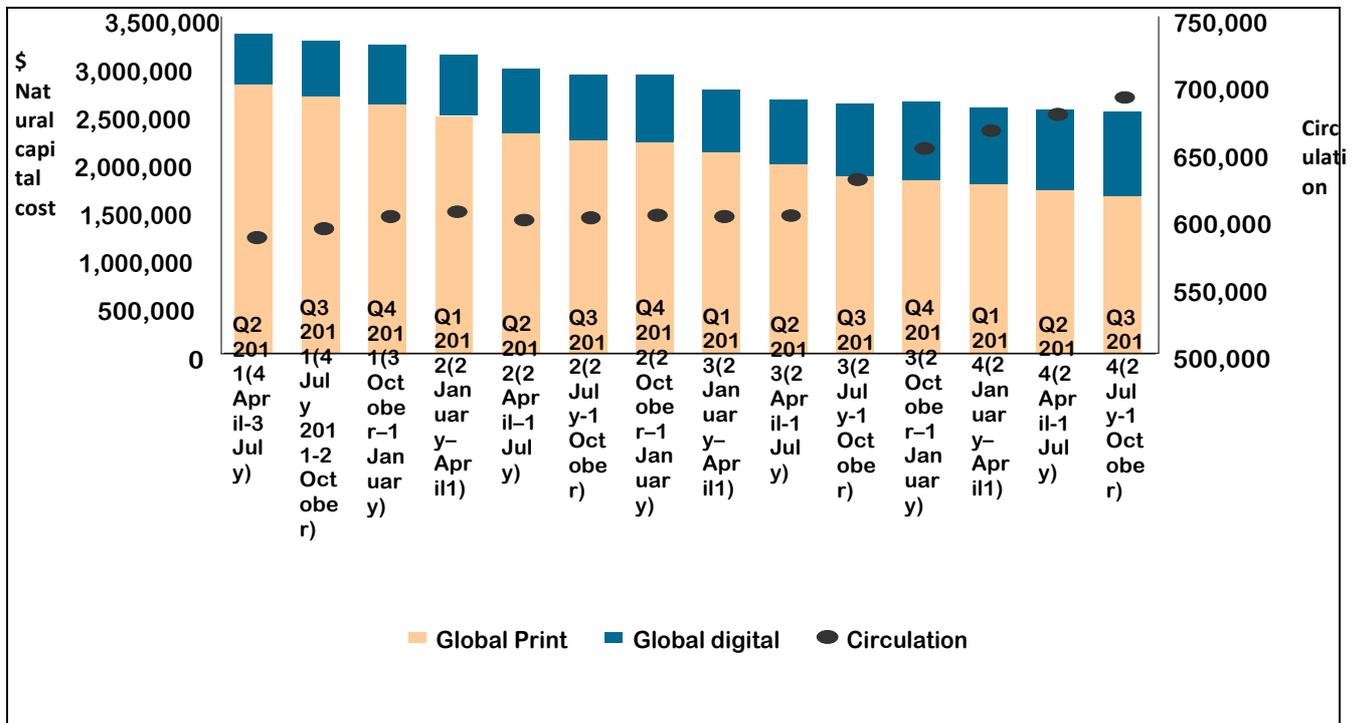
The research conclusion was that the rise of digital was instrumental in decreasing the FT's intensity, or environmental impact per subscription. Indeed, as circulation increased by 18% between Q2 2011 and Q3 2014, the total natural capital cost decreased by 25% and the natural capital intensity by 36%. We plan a second review in 2016.

## 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 2015 saw a significant acceleration of that trend.  We purchased 146,000 metric tonnes of paper in 2015.

For 2016, we expect Pearson to be directly responsible for the purchase of around 70,000 metric tonnes of paper reducing further to around 45,000 MT in 2017.  Key factors behind this reduction alongside the shift to digital are the transfer of paper purchasing responsibility in North America to RR Donnelley, 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 2015:
-   Pearson in the UK gained Chain-of-Custody accreditation by the Forest Stewardship Council (FSC). This means that Pearson product can carry the FSC logo.
-   Core and Growth doubled the volume of paper purchased carrying the highest sustainability rating (FSC or equivalent certified) to around 45% of the total.
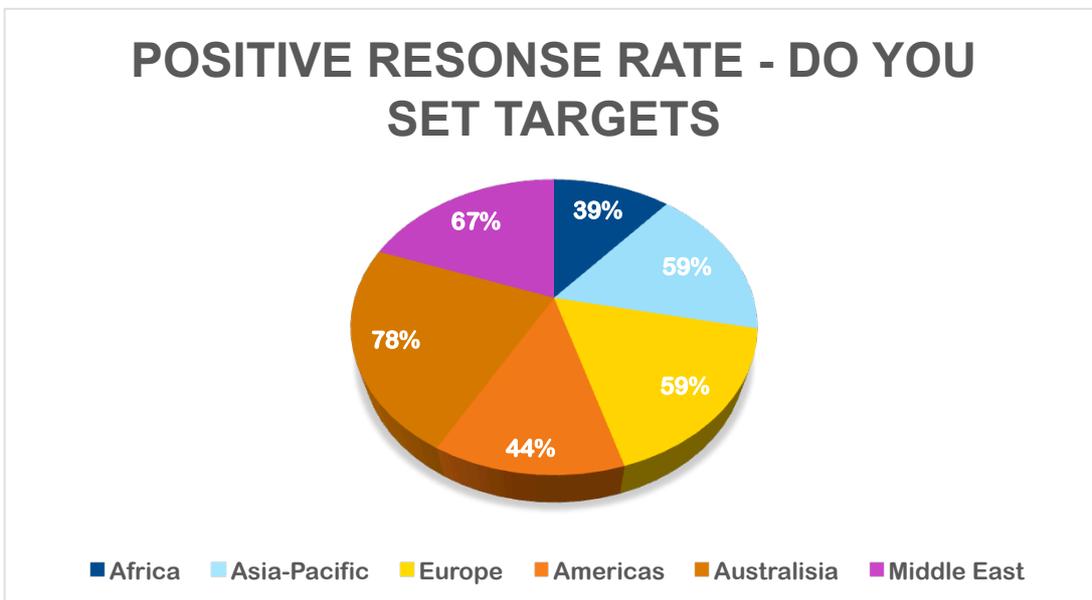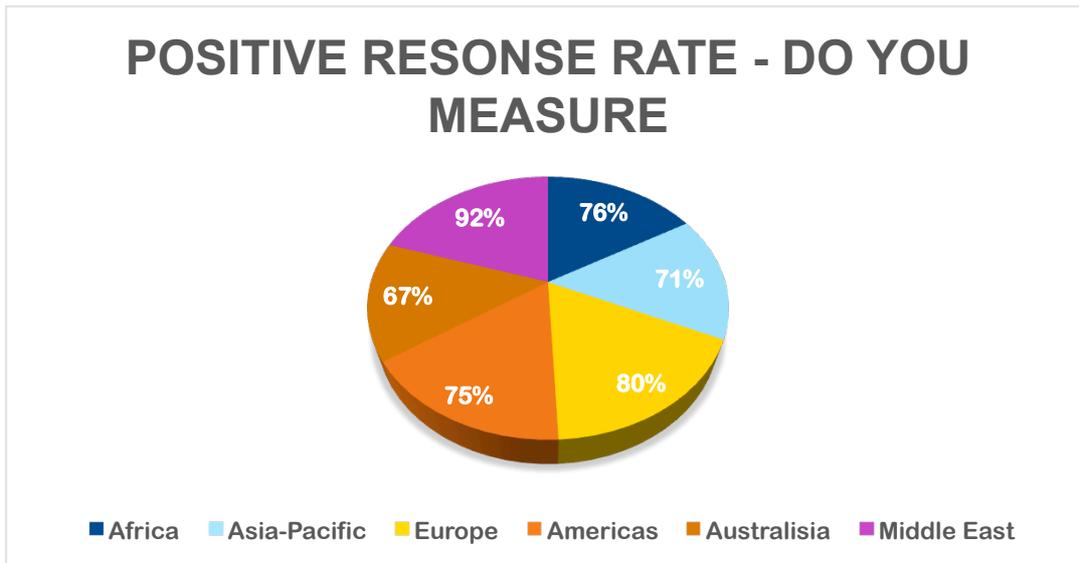
## Printing

Following the disposal of a small printing press as part of the Financial Times sale in November 2015, Pearson no longer directly prints any of our products.  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 overall results for 2015 were as follows:

## POSITIVE RESONSE RATE - DO YOU MEASURE



92% 76% 71% 67% 75% 80%

■Africa ■Asia-Pacific ■Europe ■Americas ■Australisia ■Middle East

## POSITIVE RESONSE RATE - DO YOU SET TARGETS



67% 39% 59% 78% 59% 44%

■Africa ■Asia-Pacific ■Europe ■Americas ■Australisia ■Middle East

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 2015, Pearson people undertook visits to existing and potential printers in the US, the UK, China and India. 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.

### 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 and learners

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 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:

- Pearson in the UK gained Chain-of-Custody accreditation by the Forest Stewardship Council (FSC). This means that Pearson product can carry the FSC logo.
- Planet Pearson, our dedicated green space is available to our employees globally. Planet Pearson is a way for Pearson people to share ideas, thoughts and to collaborate wherever they are in the world. The space provides ideas for carbon reduction, links to local green groups and access to performance reports.
- We have around 20 Green Teams in place in Pearson in buildings in the UK and the US along with country-wide teams in Canada, Australia & South Africa.

## 10. Green products

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 40% market share. We also offer Mastering Environmental Science, a collection of online homework, tutorial, and assessment products. Across the Environmental Science list, around 29,000 students are registered for the product.
- We are also a strategic learning partner for the US Green Buildings council (USGBC) and are working together to create learning materials and courses.
- The FT newspaper has a long tradition of reporting on environmental and energy related topics. Climate change is available as a theme to access articles on FT.com and special reports cover topics including responsible business and managing climate change. It also hosts a number of conferences and awards on climate change, water and resource scarcity.
- 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 for first teaching 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.

## 11. 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 2016. Pearson adopted a new baseline for data in 2009.

In light of the performance this year, we have adopted new stretch targets:
- To reduce our absolute Greenhouse Gas emissions by **50%** by the end of 2020 using 2009 as the base year. [i.e. an additional 20% for the period 2016 to 2020]
- To reduce energy use in our buildings on an absolute basis by **50%** by the end of 2020 using 2013 as the base year. [i.e. an additional 25% for the period 2016 to 2020]

In addition, we are looking at these additional areas as a focus for Pearson over the next 18 months:

| Focus areas | |
|---|---|
| Suppliers | Ensuring data centres are supplied by clean energy |
| Carbon footprinting | Look beyond direct emissions to capture impacts across the digital and physical value chain. |
| Low-carbon economy | Continue to invest in energy efficiency and renewable energy in order to remain carbon neutral |
| 'Mindprint' | Establish targets, key initiatives and/or partnerships to enable learning and skills development linked to specific sustainability challenges |
| Circular economy | Exploring potential for closing the loop on products and services by 2020 (zero waste to landfill) |

| Target 2015 | Progress | Plans for 2016 and beyond |
|---|---|---|
| Continue to extend our green team network | ⊗ Not achieved. Green team numbers fell to 20 from 30 in reflecting reorganisation | Review green team strategy In 2017. |
| Put in place a new global carbon footprint tool | ⊘ Achieved. Tool In place | Introduce total carbon footprint reporting. |
| Maintain our position in the indices of social responsibility | ⊘ Achieved. Pearson retained Bronze status 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 |
| Our stretch target is to reduce energy use on an absolute basis by 25% using 2013 as a baseline | ⊘ Achieved. We reduced energy use by 24.7% over the last 2 years | To reduce energy use in our buildings on an absolute basis by **50%** by the end of 2020 using 2009 as the base year |
| Using 2009 as the base year, we aim to reduce our Greenhouse Gas Emissions by 25% by the end of 2015 | ⊘ Achieved. We reduced our GHG emissions by 30.3% as at the end of 2015 | To reduce our absolute Greenhouse Gas emissions by **50%** by the end of 2020 using 2009 as the base year. |
| Maintain per employee air travel in 2015 | ⊗ Not achieved. Air travel (passenger km per employee) increased 15% compared to 2014 | Maintain passenger km per employee rate at 2015 level. |

| Target 2015 | Progress | Plan 2016 |
|---|---|---|
| | levels | |
| Use green messaging to promote video-conferencing technology | ✓ Achieved | |
| 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 new base year, our target is to reduce absolute water use across the company by 10% per square metre of occupied space by the end of 2018 | ✓ Achieved.  We reduced water use 21% per square metre in 2015 | Using 2014 as our new base year, our stretch target is to reduce absolute water use across the company by 30% per square metre of occupied space by the end of 2018 |
| Complete a second solar panel project outside of the United States by the end of 2016 | ◐ Ongoing.  Two solar panel projects are underway in South Africa | Complete a second solar panel project outside of the United States by the end of 2016 |
| Maintain our commitment to purchase green electricity in 2015 | ✓ Achieved.  Pearson also signed up as a member of RE100. | Maintain our commitment to purchase green electricity in 2016 |
| Target 425 hybrid vehicles in the Pearson fleet in 2015 | ✓ Achieved. We have 448 hybrid cars in the fleet | Target 450 hybrid vehicles for the Pearson fleet in 2016 |
| Continue our drive for independently verified certification for the papers we use. | ✓ Achieved.  Pearson in the UK gained FSC Chain of Custody accreditation | Continue our drive for independently verified certification for the papers we use. |
| Add a further building to be certified against Leadership in Energy and Environmental Design (LEED) | ✓ Achieved.  Our building in River Street, Hoboken as assessed as Gold. | Develop a global facilities management handbook. |

## 12.    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 2015.

### Environmental reporting measures

|  | Units | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|
| 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 |
| Full-time employees (in scope) | FTE | 37,164 | 35,978 | 41,520 | 48,500 | 42,115 | 40,876 | 37,265 |

### Energy Consumption

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

## Business Travel

| Measure | Units | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Air | Passenger km | 219,056,753 | 242,830,342 | 255,072,031 | 235,743,104 | 193,259,356 | 207,822,988 |
| Rail | Passenger km | 3,833,674 | 3,924,710 | 4,711,264 | 3,682,392 | 937,647 | 4,374,643 |
| Road (distance) | MWh / year | 9,930,039 | 7,284,921 | 3,486,138 | 6,735,312 | 6,356,549 | 1,447,092 |
| Road (fuel use) | litres | 6,336,425 | 5,815,052 | 6,120,706 | 5,849,850 | 5,312,226 | 4,894,843 |
| Road (derived energy) | MWh | | | | | | 43,889 |

We collect and report business travel air data where there is a centralised agency in the US, the UK, Australia, Brazil, Canada, China (including Hong Kong), India, Indonesia, Japan, Malaysia, Netherlands, Singapore, South Africa, South Korea, Spain, Taiwan and Vietnam which together account for around % of total full-time employees.   Three new countries – Brazil, Indonesia and the Netherlands were added to our centralised agency support in 2015.

## Greenhouse Gas Emissions

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

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 |
|---|---|---|---|---|---|---|---|---|
| Paper used | MT | 338,993 | 338,103 | 319,557 | 287,452 | 194,760 | 152,181 | 132,551 |

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

## Waste

| | Units | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|
| Total Waste to Landfill | MT | 5,508 | 3,834 | 9,097 | 7,134 | 3,273 | 2,005 | 1,112 |
| Total Waste to Landfill/FTE | MT/ FTE | 148 | 107 | 221 | 147 | 73 | 49 | 30 |

## Water

| | Units | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Total Water Consumption | m3 | 604,822 | 528,873 | 678,256 | 1,154,106 | 1,474,077 | 1,014,268 |
| Total Water Consumption/FTE | m3 / FTE | 17 | 13 | 14 | 26 | 36 | 27 |

## Legal Compliance

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Reported Environmental Prosecutions | Nil | Nil | Nil | Nil | Nil | Nil | Nil |

# 13.    Useful contacts

If you have any questions on the environmental review, please contact:

Peter Hughes
Director, Sustainability
Pearson plc
80 Strand,
London WC2R 0RL
Email: peter.hughes@pearson.com
Telephone: +44 20 7010 2249