1. Our Commitment to Forests

Book production requires paper. Typically, one of our books starts out in a spruce or pine forest in North America or Scandinavia or in a Eucalyptus Forest in Latin America. Each felled tree can pass through a saw mill, a pulp mill, a paper plant, a printer, warehouses and a retailer or distributor before reaching the learner. It is our duty to think about the entire journey from forest to printed page.

We are committed to treating the members of our supply chain fairly, right back to the forest owner – sharing with our partners a care for the environment and respect for local communities. This annual paper report forms part of our commitment to share with stakeholders what we have done and what we plan to do this year. All data relates to the year to 31st December 2017.

2. Making a Commitment

We want to see sustainable forests. Our future business success depends in part on the continued availability of the different grades of paper we use.

In 2004, we led our industry by publishing our paper purchasing guidelines – a first for a major global player in our industry. We regularly review our guidelines, taking into account feedback from our paper suppliers and environmental groups.

The policy aims to encourage everyone from forest owners to paper merchants to help us meet our objectives to respect the environment and to promote sustainable forestry. Our paper purchasing policy is available to view on our website, www.pearson.com.

3. Mapping Paper Sources

We are committed to work with our suppliers to find out where the trees that go to form the paper we purchase comes from. This remains no easy task, as our supply chain is large and complex; mills can be supplied by hundreds of individual forest owners.

We first established a comprehensive global database of the environmental characteristics of our paper supply chain over a decade ago. We capture data from manufacturers, paper merchants and printers that purchase paper on our behalf and our database is global in scope. Overall, this database held information on just under 90,000 metric tonnes of paper for 2017 and covers all our businesses. It includes:

- supplier and paper name
- quantity purchased
- recycled content, both pre-consumer and post-consumer
- certification methods used
- mill name
- species of wood
- country of origin of wood
4. Working with Partners

One of the important ways that we can improve the quality of data available to us is to work with industry partners to establish a common approach to environmental data collection.

We helped set up PREPS - Publishers for Responsible Environmental Paper Sourcing. This group was set up to extend the approach used by Pearson and others on mapping the environmental characteristics of the paper purchased by opening this to other industry members. Through working with our industry peers we have helped establish an industry reporting standard helping improve data quality.

Pearson has adopted the PREPS approach and grading system as our global standard and we use it to assess the papers we purchase. A description of the grades is attached as Appendix 1.

Pearson has also been a member of the WWF Global Forest and Trade Network in the UK since 2004. This group actively promotes and facilitates increased trade in independently, credibly certified forest products and encourages good forest management worldwide. As part of its membership, Pearson submits an annual report on the environmental characteristics of the paper we purchase in the UK. Our 2017 report is included in Appendix 2.

Each year, a sample of the GFTN membership reports are independently verified. Three submissions from Pearson have been verified to date, most recently in 2015 reviewing 2014 data. We also agree an annual action plan with WWF. This plan includes working with WWF to increase the supply of Forest Stewardship Council (FSC) and other certified papers available to Pearson and the wider publishing industry. We also commit to eliminate material classified as unknown or unwanted under the WWF reporting template.

Pearson has a longstanding policy to promote the Forest Stewardship Council system of certification. During 2016, Pearson joined a Stakeholder Working Group established by FSC as part of its conditional approval of a roadmap to end the disassociation of Asia Pulp and Paper (APP) from the system. Pearson is a member of the economic chapter sitting alongside Fuji Xerox and Essity.

5. What determines the amount of Paper used by Pearson?

Our business strategy has long included a deliberate and significant shift from print to digital. As increasing numbers of people around the world access fast and reliable digital media at home, at school, at work and on the move, so the opportunities for us to enhance the accessibility of our content and services also increase.

In 2017, digital and services accounted for 68% of Pearson revenue. In 2007, they accounted for 31%. We expect that trend to continue and as we increasingly focus on digital and services. This shift to digital is also changing the shape of our environmental footprint.

As well as the broader trend of a shift towards digital resources at Pearson, there are a number of other factors that are out of our control that determine the amount of paper we use to generate our print revenues. These include the decisions taken by our textbook authors, and the number of books we commission, print and sell.
However, there are aspects of our use of paper which we can control, and an important metric of our business efficiency is the metric tonnage of paper we use per million pounds of sales.

Using 2008 as a baseline, our target is by 2020 to reduce the number of metric tonnes of paper we use to generate one million pounds of revenue by 80% compared to our 2008 baseline. We achieved 73% in 2017 against 72% in 2016. The volume of paper used to generate one million pounds of non-digital revenue is down 39% in the same period.

Our resource efficiency programmes include:
- reducing the base weight of our papers.
- being smarter at blending physical and digital content. For example, teacher notes accompanying text books for schools are now largely online
- custom publishing in higher education allows academics to pick and choose content from one or more texts for their course and combine it into a definitive course text
- new applications for digital printing and initiatives to save waste
- using papers made from groundwood (the whole tree, not just selected parts of it) which has reduced the number of trees we use if not the volume of paper we purchase.

6. Balancing our Responsibilities

Our primary purpose as a business is to help people of all ages to make progress in their lives through learning. Therefore, our most important social obligation is to deliver quality products and services that are accessible and affordable.

Our paper purchasing policy sets out our primary environmental objectives when purchasing paper including a preference for Forest Stewardship Council (FSC) certification and post-consumer waste. Limited or absence of supply coupled with growing demand can result in an ‘environmental premium’ being charged. We continue to believe that to achieve our long-term goals, there must be changes in the way the market is structured to erode and eradicate this premium.
We welcome the continued volume growth in the forests that carry certification. We will continue to use our influence as a purchaser of paper products to encourage and support this trend, as well as to encourage chain-of-custody certification.

Through dialogue with our paper manufacturers, we discuss issues relating to our policy, our interest in data collection and how our policy relates to our commercial purchasing decisions. However, the industry is large and complex and it will take many years to change.

7. Certification and well managed Forests

We believe that forest certification plays an important role as a benchmark for well managed forests. We follow the approach adopted by the UK Government which recognises two international certification schemes as satisfying requirements for sustainable and legal timber:

- Forest Stewardship Council (FSC)
- Programme for the Endorsement of Forest Certification (PEFC)

PEFC endorses national schemes of certification. The two most significant schemes for us endorsed by PEFC are the Canadian scheme, the Canadian Standards Association (CSA) and the Sustainable Forestry Initiative (SFI) which is used in both the US and Canada.

A challenge in meeting our environmental obligations is that there is insufficient supply of independently certified timber entering the paper manufacturing supply chain. Only about 10% of the world’s forests carry any type of certification. The majority of the fibre that we purchase does carry a certification and we continue to work to increase that proportion.

In 2016, we sustained the progress made over a number of years. In 2007, only 40% of the total fibre we reported carried any type of certification. By 2010, that figure had risen to just over 50% of the fibres used in our papers coming from certified sources while now we exceed 90%.
We continue to encourage and promote forest certification; however, further progress may be limited. A significant source of fibre in our papers is in North America, where many privately owned forest owners do not carry certification.

We have set a minimum standard against which we assess our papers based on the Publishers for Responsible Environmental Paper Sourcing (PREPS) grading system operated by the Bookchain Project. Based on the forest source information, PREPS awards each paper in the system a grade of 1, 3, or 5.

Our global standard is for the papers we use to be grade 3 or above. We work with existing and new suppliers to ensure that the papers we use are included in the system. This is largely complete for papers currently purchased, but we expect an ongoing need to introduce and grade new papers.

8. Forest Stewardship Council (FSC)

We promote the use of the Forest Stewardship Council (FSC) system of certification as this provides both independent third-party verification of sustainability claims and has the support of environmental groups such as WWF and Greenpeace. It has long been an objective for us to increase the tonnage and percentage of fibre in our supply chain carrying FSC certification. In 2003, only 1% of the tonnage reported carried FSC certification.

The table above shows the percentage of FSC certified fibres in our global paper supply chain. Penguin is included for the period 2010 to 2012 but then excluded for subsequent years following the creation of Penguin Random House. We also show the split between Pearson and the FT for 2015. The FT was sold as at the end of 2015.

A key achievement for Pearson was the increase in 2013 of the percentage of FSC fibres in our supply chain. This was sustained in subsequent years and we significantly improved the tonnage in 2017 albeit did not meet the ambitious goal to achieve 55% FSC certified fibres. We retain this as our goal for 2017.
For many of our grades of paper, FSC paper is currently unavailable or uneconomic to use. We continue to encourage our paper suppliers to increase overall levels of certification and in particular to adopt the FSC standard.

**Case study: Product labelling**

The Forest Stewardship Council or FSC® is considered the gold standard around the world in responsible forest management. Pearson in the UK has been FSC certified since 2015 - its certificate code is SA-COC-004951

At the end of February 2016, Pearson entered into a strategic business relationship with RR Donnelley, the global industry leader in print and communications services. The relationship saw Pearson transfer warehouses, print manufacturing and paper procurement, and supporting services in the United States to RR Donnelley. The company has since split and is known as LSC Communications. This was in line with our business strategy that focuses our talent, resources, and investments on digital solutions and services that measurably improve learner outcomes. Continued environmental reporting forms part of the agreement with LSC Communications.

During 2016, Pearson was accepted by FSC to join a Stakeholder Working Group set up as part of the process to confirm a roadmap to end the disassociation of Asia Pulp & Paper. APP is one of the largest paper and pulp manufacturers in the world. This work continued in 2017.

9. **Programme for the Endorsement of Forest Certification (PEFC)**

Our focus and preference is to purchase papers containing fibres coming from well managed certified forests. SFI is critically important for us as the majority of the papers we purchase comes from the United States and Canada and with more than 280 million acres now certified, the SFI forest management standard is influencing responsible forestry on a significant and fast increasing scale.

However, there are many small landowners and forest owners who do not carry any type of certification. This is particularly the case in certain regions of the US such as the South-East. So, how to reach those smaller landowners is a challenge. That is why in 2012 we joined the SFI Forest Partners program along with four other North American publishers. The objectives of Forest Partners to grow the certified forestland base chimes closely with our sustainability strategy and the target is ambitious - growing the certified forestland base by 10 million acres by the end of 2017. The programme achieved 9.2 million. Recognising the success of the programme, it has been extended to 2020 with a new target of 15 million acres adopted.

Through this project, we are also sending an additional signal that as buyers we support and value responsible forestry and are willing to invest in the future of our forests by growing certified forestlands, certified sourcing and chain of custody in the supply chain.

10. **Where in the World does Pearson paper come from?**

As part of our mapping, we collect information on the forests that supply the paper and pulp mills we use to source paper. The most significant countries for us are:
11. Implementing our Policy

We believe that a concern for environmental matters should be seen as part of normal commercial practice. We run training and information sessions for our internal production teams and their editorial colleagues. Our professional paper buyers and production management visit suppliers in China, Malaysia, the Nordic countries and elsewhere to discuss environmental practice among other issues.

Within Pearson, environmental responsibility is a regular item on the agenda of team meetings for paper buyers and production. Our production teams sit on the Bookchain governing body and participate in the WWF Global Forest & Trade Network paper meetings in the UK.

Focus on Indonesia

Paper and pulp sourced from Indonesia is a key area of focus and a number of environmental campaigning groups are asking questions of purchasers of wood fibre including Pearson on our policy and approach.

Campaigners are concerned over the loss of natural forest arising from the pulp and paper industry. Our approach is to review all the papers we purchase against the PREPS grading tool described in the section above on certification and well managed forests. The PREPS approach incorporates a country forest risk assessment designed to help assess threats to High Conservation Value Forests and to avoid controversial fibre entering the supply chain. Only papers graded 3 or above under the PREPS system meet our standards.

No paper manufactured in Indonesia or paper that contains pulp from Indonesia currently meet our standards. Our use of PREPS is well established among production teams in Pearson. We also communicate our standards to printers and others who purchase paper on our behalf.

During 2016, Pearson joined the economic chapter of the Stakeholder Working Group set up by FSC to help confirm a roadmap to end the disassociation of Asia Pulp & Paper from the FSC system.
12. **What about Recycled Paper?**

We aim to use recycled fibres made from consumer waste where we can. However, many of the papers we use in our books are not available in recycled form. We continue to talk to our suppliers about increasing the use of recycled fibres.

Our use of post-consumer recycled fibres has always been limited and we saw a reduction last year in North America. Availability and affordability of recycled paper grades remains a challenge.

13. **Paper Purchasing and Climate Neutrality**

Pearson views climate change as a huge global challenge to our planet and we understand how extreme weather can devastate communities.

Our response at Pearson is centred on our commitment to climate neutrality. We wanted a clear and ambitious commitment to provide a catalyst for generating ideas and enthusiasm among the people who make up Pearson on how to reduce our environmental impact.

We meet our climate neutral commitment by reducing our footprint where possible and then by offsetting unavoidable emissions. We focus on forest based offsets, reflecting our purchase and use of paper. Pearson partners the Children's Tropical Forests UK through a project to purchase and protect rainforest in Colombia. Since 2009, our climate neutral programme has seen us protect over 1,600 hectares of forest globally.

14. **Towards a Total Carbon Footprint**

Pearson through Penguin piloted a new tool to measure our total carbon footprint for the company and its products in 2012. The tool, known as Bookcarbon was originally set up under the auspices of the Publishers Association (PA) as a bespoke book carbon footprint tool for the industry.
The calculator extends from forest to warehouse and allows trade publishers to vary materials and processes to understand the carbon implications of their decisions. It was initially conceived and funded by Penguin together with Hachette, Harper Collins, Random House and the Independent Alliance and Clays. The tool has been designed and developed by Innventia Edge, a consultancy that has supported the pioneering work done by the Periodical Publishers Association.

Bookcarbon allows trade publishers to calculate the carbon footprint of black and white printed hard covers and paperbacks for trade publishers. Pearson commissioned Innventia Edge to produce a bespoke tool for use globally covering all book formats. Based on data collected so far, Pearson can estimate that approximately 10% of the footprint for our physical book operations is accounted for by our directly controlled emissions.

15. Targets and Commitments

We have set ourselves the overarching global goal of eliminating all papers graded category 1 by PREPS in our supply chain. We will also continue to follow our paper purchasing policy and its commitments to continue to work to increase our use of papers that contain recycled fibre and to ensure that the paper we purchase comes from certified, well-managed forests. A key objective is to continue to increase the use of paper sourced from forests certified by the Forest Stewardship Council (FSC).

16. Performance against Targets

<table>
<thead>
<tr>
<th>2017 Target</th>
<th>Performance</th>
<th>2018 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>To continue to eliminate all category 1 primary fibres in our supply chain</td>
<td>1.6% remaining down from 2.7%</td>
<td>To continue to eliminate all category 1 primary fibres in our supply chain</td>
</tr>
<tr>
<td>To reduce the number of metric tonnes of paper we use to generate one million pounds of revenue by 80% compared to our 2008 baseline by 2020.</td>
<td>Achieved 73% up from 72% in 2016</td>
<td>To reduce the number of metric tonnes of paper we use to generate one million pounds of revenue by 80% compared to our 2008 baseline by 2020.</td>
</tr>
<tr>
<td>Extend our commitment to purchase forest based offsets under our climate neutral commitment to 2017</td>
<td>Achieved</td>
<td>Extend our commitment to purchase forest based offsets under our climate neutral commitment to 2018</td>
</tr>
<tr>
<td>Increase the %age of FSC fibres in our supply chain to 55% by 2017.</td>
<td>Achieved 51%</td>
<td>Increase the %age of FSC fibres in our supply chain to 55% by 2018.</td>
</tr>
<tr>
<td>By the end of 2020, for 75% of the total fibres we purchase for use in our products to carry FSC certification</td>
<td>On track</td>
<td>By the end of 2020, for 75% of the total fibres we purchase for use in our products to carry FSC certification</td>
</tr>
<tr>
<td>Assess overall carbon footprint</td>
<td>Completed for Bug Club</td>
<td>Assess overall carbon footprint</td>
</tr>
</tbody>
</table>
17. Want to know more?

Our environmental and social standards cover much more than just the paper we purchase. For example, we set targets to reduce the energy we use as well as to reduce, reuse and recycle waste. Most notably, we have a commitment to maintain climate neutrality for our existing businesses.

For more information on how we aim to meet our responsibility to the environment, please see our website at www.pearson.com or if you have any questions on paper purchasing at Pearson, please contact sustainability@pearson.com.
### Appendix 1
**PREPS GRADING SYSTEM**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| ** ***** | Paper is FSC/PEFC certified or 100% recycled  
Awarded if:  
• the paper is certified and labelled FSC Pure, FSC Mixed or FSC Recycled. **OR**  
• the paper content is 100% recycled; **OR**  
• the paper is entirely made of a combination of recycled, FSC and PEFC certified material; **OR**  
• for PEFC papers all the forest sources are from a certified source i.e. the non certified portion must be made up of FSC and/or FSC Controlled Wood forest sources. |
| *** | Low risk. Forest sources are known and responsible  
Awarded if:  
• all material comes from a low risk source, as defined by the Country Forest Risk, and is not originating from within a WWF-defined Ecoregion5 (see Appendix III); **OR**  
• all high risk material is verified by either FSC or PEFC but the paper is not certified. **OR**  
• there is a PEFC certified paper with material originating from low risk uncertified sources.  
If a forest source is high risk, or is from within a WWF Ecoregion, the source must be verified. Verified means that a source is either:  
• certified as meeting the FSC Controlled Wood standard (FSC-STD-30-010); **AND/OR**  
• certified by a recognised forest certification scheme.6  
A brand previously graded can be suspended where no up to date data has been received from mill or a fibre test has been failed. |
| * | Paper contains unwanted, high risk material or  
High risk. Unknown sources: no data from mill or failed fibre test  
Awarded if:  
• any portion of the paper is known to, or suspected to, come from an unwanted source; **OR**  
• any of the material is from an unknown source – no data or failed a fibre test.  
Unwanted material is material from a controversial source which is not certified under an acceptable forest certification scheme. |
GFTN-UK FOREST PRODUCT REPORTING SUMMARY FOR 2017

Pearson has been a member of WWF’s Global Forest & Trade Network (GFTN) in the UK since 2004.

Common to all GFTN members, Pearson is committed to progressively sourcing forest products from well-managed sources. We undertake due diligence to assess and mitigate any risk of illegal and unwanted forest products entering into the UK market from our supply chain. We collect as much information on supply chain sources as possible, and systematically work to eliminate sources which may not positively benefit forests as a future resource for people and nature.

To highlight our progress towards meeting our commitments to source well-managed and recycled materials, we’re publishing the status of our current supply chain for preferred categories of forest goods, as defined by the GFTN.

We hope the transparency of the UK GFTN members about their performance on forest sourcing will prompt others in the sector to follow suit. We also encourage all forest certification systems to continuously improve their performance in delivering responsible forest management.

At present, WWF and GFTN participants believe the FSC represents the gold standard and a credible benchmark for other forest certification schemes to match. Our preference is to source increasingly from credibly-certified forests or verified recycled sources.

The European Timber Regulation aims to limit the trade in illegal timber and we participated in the 2015 consultation arguing that printed paper should be brought into scope. Our view is that the EUTR provides a baseline of legality as a minimum for forest goods entering the European market and reaching consumers. GFTN members want to make sure they’re playing their part in reducing the UK footprint on global forest resources, by sourcing sustainably – going beyond a compliance-only approach.

Our forest products purchased for the UK market for the 2017 calendar year are as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.8%</td>
<td>Credibly Certified (FSC purchased with Chain of Custody)</td>
</tr>
<tr>
<td>0.2%</td>
<td>Post-consumer Recycled</td>
</tr>
<tr>
<td>50.6%</td>
<td>Source verified (FSC purchased without Chain of Custody)</td>
</tr>
<tr>
<td>6.2%</td>
<td>Source Verified (including e.g. PEFC purchased with Chain of Custody, FSC Controlled Wood)</td>
</tr>
</tbody>
</table>

Our paper policy is publicly disclosed on our corporate website

Scope of reporting

- All own brand forest products for resale
Challenges

Our books require paper. We want to see sustainable forests. Our future business success depends on the continued availability of the different grades of paper we use. It is our duty to think about the entire journey from forest to printed page. We are committed to treating the members of our supply chain fairly right back to the forest owner – sharing with our partners a care for the environment and respect for local communities.

We have made significant progress. In 2004, there was almost no availability of credibly certified papers in the UK market that we could use and now over 93% of our tonnage is either credibly certified or recycled. We are pleased with the progress we have made but challenges remain in that:

- book papers account for a relatively small percentage of total paper production which limits the influence of individual companies to affect change.
- the paper supply chain is fragmented and complex making it difficult to trace back to the initial felled tree particularly when small volumes are purchased. Each paper grade can contain several different types of pulp sourced from different parts of the world.
- for some grades we use, credibly certified paper is currently unavailable or uneconomic to use.

Priorities

Our priority continues to be to enforce our company standards. Reflecting the complexities of the industry, paper is still not currently included within the scope of the EU Regulation limiting the trade in illegal timber. Nevertheless, Pearson as a member of the WWF GFTN in the UK is acting as if it were in scope and we participated in the #saveforests campaign continue to encourage others to do the same. Our priorities for 2018 continue to be:

- To continue to improve the information we hold on the papers we purchase in particular those sourced in small volumes.
- Where appropriate, to work with industry partners, FSC as well as members of the WWF UK FTN in improving forest management practice. We are currently a participant in the FSC multi-stakeholder group looking at the Road Map process to end the disassociation of Asia Pulp & Paper from the FSC system.
- To continue to actively encourage all our paper suppliers but particularly those in the Asia to increase levels of certification and in particular to adopt the FSC standard.
- To review with WWF our changing paper footprint.

Pearson has also set out our strategy to accelerate our investment and growth in digital learning.

Objectives

Along with other members of the WWF’s Global Forest & Trade Network (GFTN) in the UK, we are committed to continue to increase the proportion of credibly certified and post-consumer recycled fibre we use.

Our target was that by the end of 2020, such fibres will be maintained at 75% of the total we use in our products and we will look to increase the proportion delivered under a chain-of-custody. For 2017, we can report that we have exceed this target and 93% of fibres purchased in the UK come from credibly certified and post-consumer recycled fibres. We will continue to work to increase the proportion purchased under our chain of custody.