

Toward Carbon-Neutral

Managing Publishing's Environmental Footprint

Overview of today's discussion

- ❑ BISG and sustainability
- ❑ Case study: Macmillan
- ❑ Case study: Managing returns
- ❑ Discussion: Where to focus our efforts

Webinar participants

- David Hetherington, Books International (moderator)
- Brian O'Leary, BISG
- Ariel Russ, Macmillan
- Stephen Day, consultant; formerly Pearson

A bit about BISG



To create a more informed, empowered and efficient book industry

To serve as publishing's primary resource for addressing issues that affect more than one part of the supply chain

- Focus
- Shared solutions
- Results orientation
- Best in class
- Collaborative

- Information
- Standards
- Research
- Community

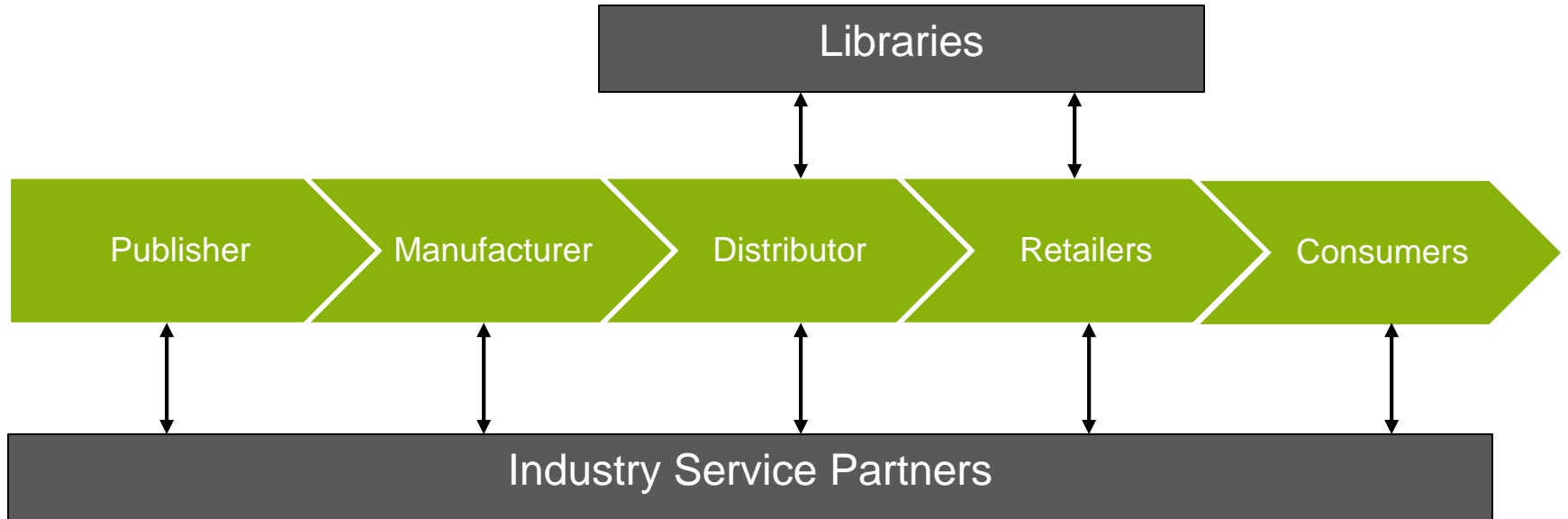
BISG objectives

Objective	Detail
Information	Establish BISG as the “ <u>information hub</u> ” for the book industry supply chain.
Standards	Foster the development, refinement and use of standards that <u>improve revenue</u> , <u>promote product visibility</u> , <u>reduce costs</u> and <u>ensure transparency</u> across the book industry supply chain in the U.S. and across global markets.
Research	Shape the conversation about the current state and future of book publishing by studying and communicating about <u>emerging topics, issues and trends</u> that affect the book industry.
Community	Maintain relevance by growing a <u>diverse membership base</u> that reflects the various segments and participants of the book industry supply chain.

We looked at sustainability in 2008

- ❑ *Environmental Trends and Climate Impacts: Findings from the U.S. Book Industry*
- ❑ 76 publishers, 13 printers, 6 mills
 - “A benchmarking survey which will establish a baseline for tracking climate impacts and progress by the U.S. book industry in environmental improvements.”
- ❑ A one-time report, not repeated in the time since
- ❑ In 2006, an estimate of 8.85 lbs of CO₂ per book
- ❑ Current estimates: 6 to 8.8 lbs of CO₂ per book

A diverse expanding supply chain

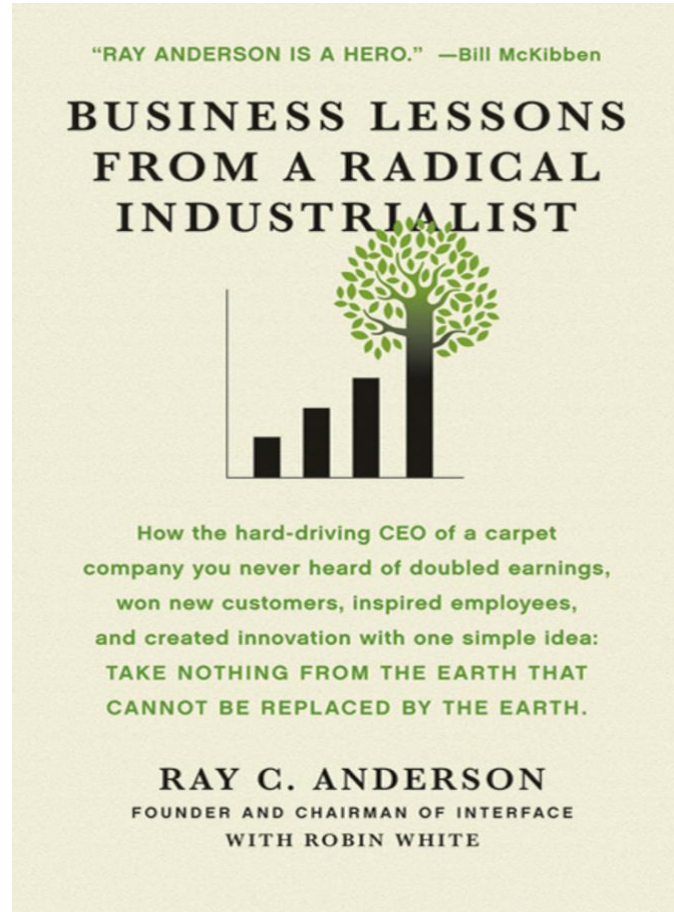


Supply-chain focus helps

- Useful to measure the industry
- Builds consumer awareness
- Framework for tradeoffs on competing concerns
- Re-establish the baseline for books
- Capture good work going on now

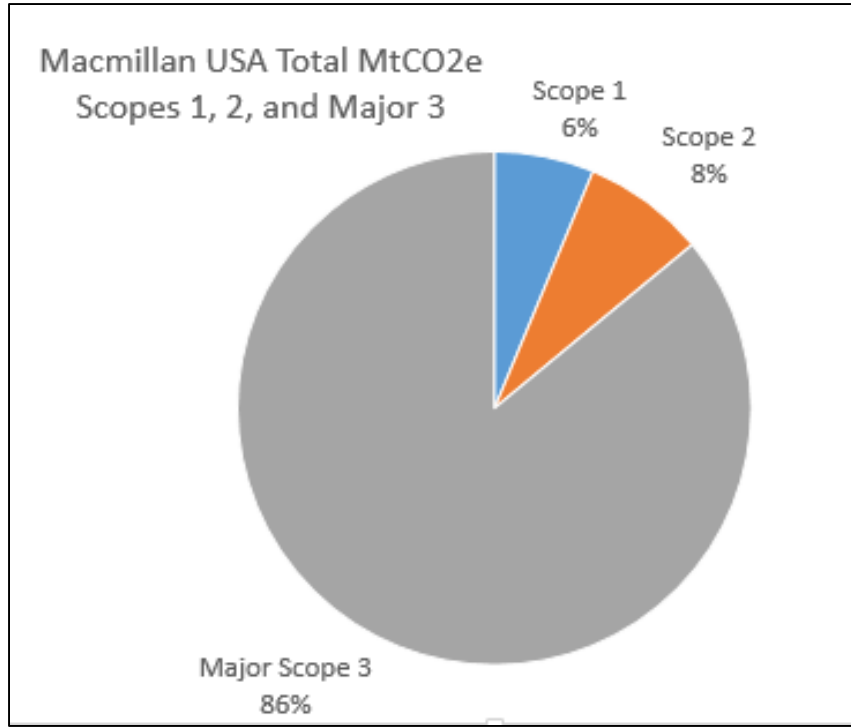
CASE STUDY: MACMILLAN

Macmillan Sustainability



Since 2009,
Macmillan has been
on a carbon reduction
journey

Emissions Breakdown

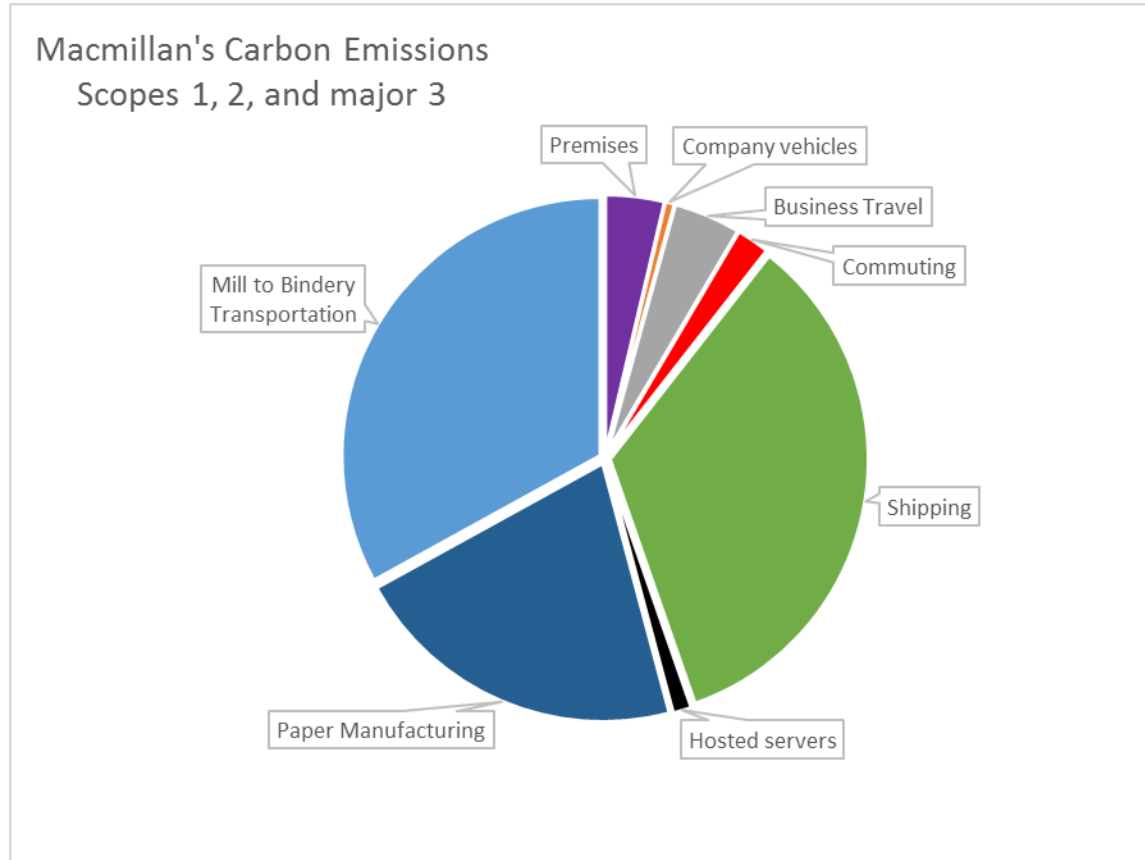


Scope 1: Direct emissions from sources that are owned/ leased (e.g., fuel to heat buildings, car fleet)

Scope 2: Indirect emissions from the generation of energy on site consumed by the company (e.g., electricity & steam heating)

Scope 3: Indirect emissions from sources not owned or controlled by the company, but are a consequence of the company's activities (e.g., paper, printing, shipping, commuting, and business travel)

Emissions Breakdown

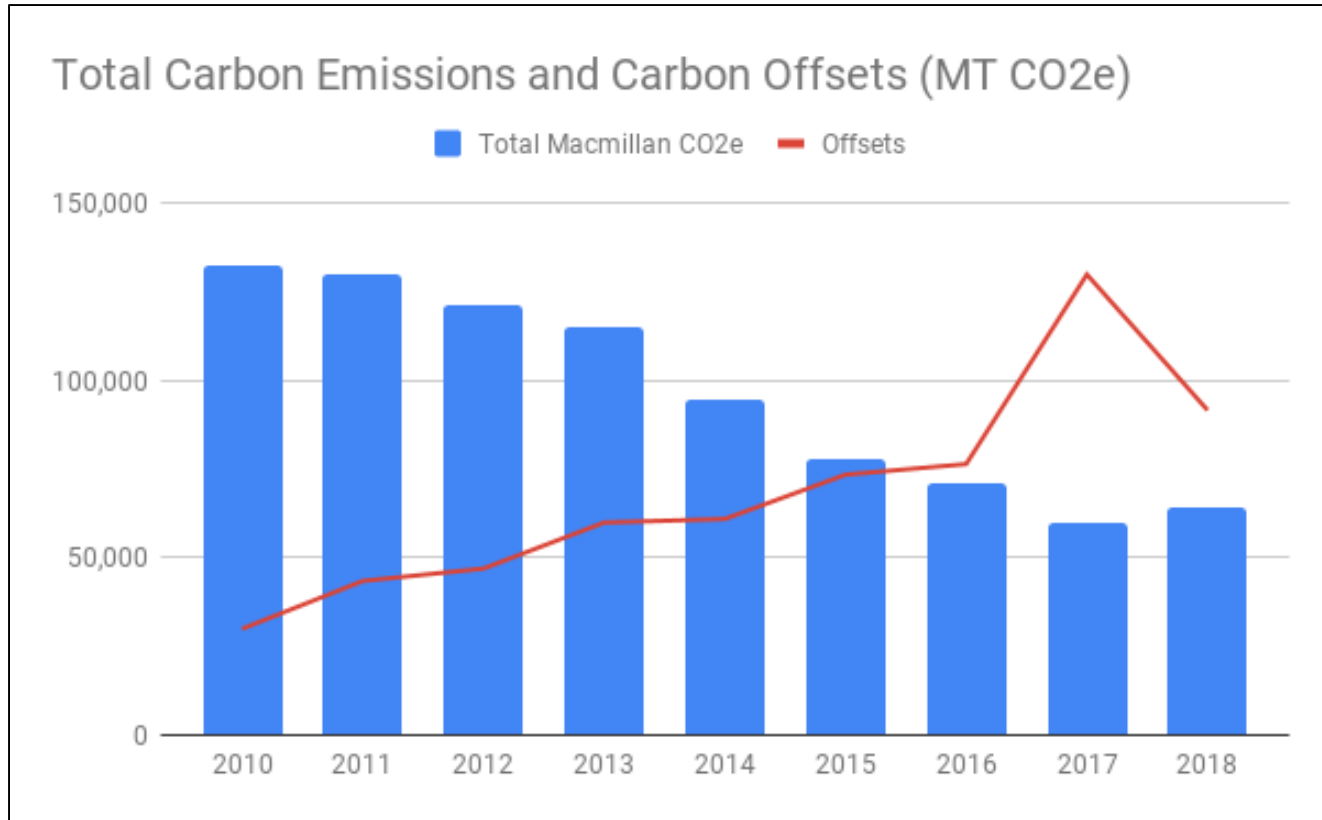


Emissions Reduction

Example Paper Mill Carbon Intensities:

1st Scope	2nd Scope	1st and 2nd Scope Intensity	3rd Scope^
142	11	153	245
346	1025	1371	560
75	209	284	113
46	120	166	98
2788	47	2835	n/a
535	263	798	n/a

Carbon Neutrality



Renewable Energy

- 100% renewable electricity in owned and leased offices and warehouses in 2019

Carbon Offsets

DARFUR COOKSTOVES

Fuel Efficient Stoves For North Darfur Women



More information

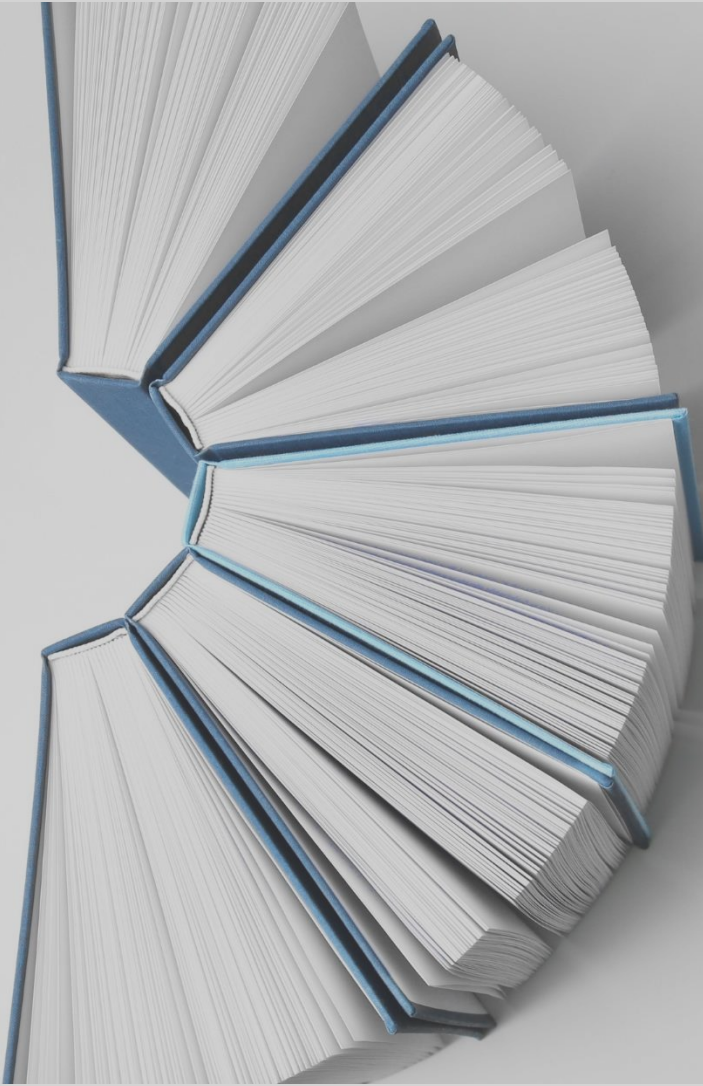


sustainability.macmillan.com

CASE STUDY: RETURNS

Building a Greener Publishing Supply Chain

Stephen Day



The environmental cost.....

DID YOU
KNOW?

*The cost of scrapped inventory is more than just financial. For example, the resources used to produce the \$100 million worth of books pulped by just one publisher include: **



524,554 trees



Energy to power
9888 homes for a year

CO₂

Emissions equal to those
from 12, 217 cars for a year



Water to fill 656
swimming pools



1930 rubbish
trucks waste

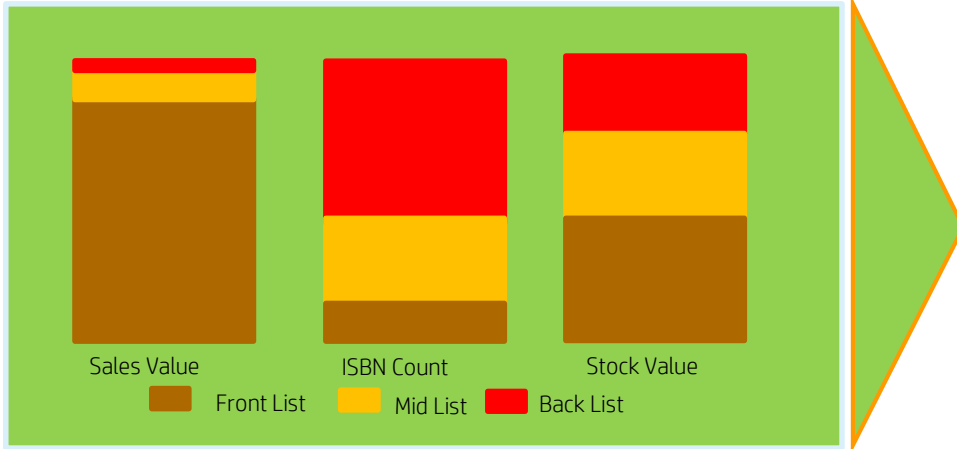


Enough aluminum plates
to build 51 F-18 fighter jet

*Source: HP Internal Calculations

The cost of inventory to the environment ?

Illustrative Inventory composition of a typical publisher



Little environmental awareness of inventory

- Current measures incentivize over production
- Little data flow between channels to understand channel inventory (unlike FMCG)
- **Pulping** together with **book miles** travelled to fulfil demand represent a significant environmental costs, as yet unrecognized

- 80% of sales is generated from a small % of catalogue
- A large stock holding representing a high proportion of costs

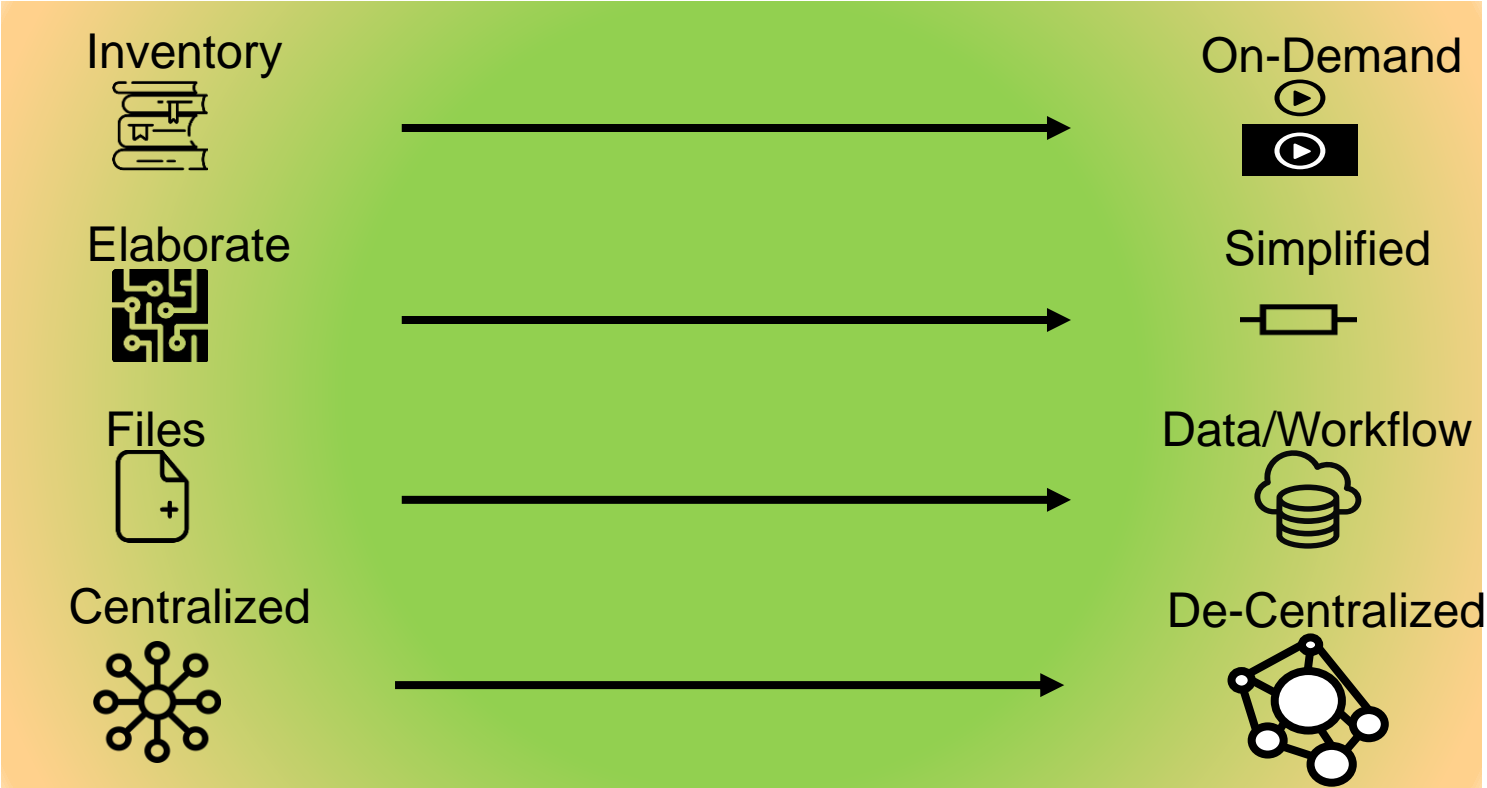
Environmental concerns evolving into new areas.....



Environmental awareness has become a prominent topic

- Initial concerns centered around, sustainable paper supply and working practices
- China has reduced the amount of recycled paper in the supply chain, due to concerns around the recycling process
- Shifting focus towards over production in the supply chain and the amount of **pulping** together with **book miles** travelled to fulfil demand
- The environmental impact of **data**

Operational changes to improve environmental impact



WHERE TO FOCUS EFFORTS?

Topics to consider

- ❑ Examples of growing interest in the topic; U.K. efforts
- ❑ Work that has been going on in the U.S.
- ❑ How do we foster a supply-chain discussion?
- ❑ What roles can organizations like BISG play?

Questions



Closing take-aways

Panelist	Keep these things in mind
Ariel	Systems thinking is key - think about the effects of making one small change multiplied out across millions of books and boxes of books
Stephen	We are about to embark upon an environmental revolution which will be larger than the industrial and agricultural revolution, and faster than the technological one.
Brian	Climate change is a supply-chain opportunity What gets measured gets addressed
David	Embracing and acting on environmental responsibilities is no longer a subject that manufacturers can put on a back burner. An active & visible sustainability program is become a condition of doing business.

For more information

- info@bisg.org
- www.bisg.org
 - Especially, “Events” and “Resources”