Green Gown Awards

How do you write a good sustainability report?
Tips for Higher Education

Wednesday 7th December 2016, 12pm

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How do you write a good Sustainability Report?
Tips for Higher Education

7th December 2016

pwc

Agenda

12:00 Introduction to Sustainability Reporting

12:15 Fundamental reporting tips

12:35 Q&A

12:40 Advanced reporting tips

13:10 Q&A

13:15 Reporting your Total Impact

13:30 Finish

Introduction to sustainability reporting

Overview

- PwC has 8 years sustainability reporting experience in both the private and public sectors.

- Over the last 8 years PwC has continued to develop a series of sustainability reporting 'tips'.

- This is the first year PwC has collaborated with the EAUC to assess Universities Sustainability Reports.

- All finalists were considered in PwC's wider reporting awards (The Building Public Trust Awards) for sustainability reporting in the Public Sector.

Judged on the following key criteria

PHASE 1- Fundamental reporting tips

- How well sustainability is linked to core **strategy**

- Identification of **material impacts**

- Disclosure of **KPIs** and targets

- Whether reporting is **balanced**

PHASE 2- Advanced reporting tips

- Transparency, **accessibility** and style

- Identification of **risks and opportunities**

- Clear **governance** for sustainability

- **Stakeholder engagement**

- Independent **assurance**

Common Themes

Strengths

- Sustainability strategy linking to the universities core organisation strategy
- Report on KPIs for areas deemed as material
- Governance structure (highlighting individuals/teams responsible for sustainability)
- Stakeholder engagement – students, staff and local communities

Development areas

- Materiality, in general, is still not a high scoring area, and where material issues are identified the process and reasoning behind their selection is often not well described
- The identification and quantification of risks and opportunities is usually a weaker area of performance
- Most universities do not benchmark against each other.
- There is little sustainability assurance.

Fundamental Reporting Tips and Good Practice Examples

Sustainability Reporting Tip - Strategy

Clearly describe your sustainability strategy over the short, medium and long term. Demonstrate how this is integrated into your core corporate strategy and permeates throughout your business

Sustainability Reporting Tip - Strategy
Good practice example – University of Worcester

1. Our Commitment

The University has a long-standing commitment to act in a sustainable and environmentally responsible manner. The current Strategic Plan (2013-18) includes a commitment to make an outstanding contribution to economic, social and environmental sustainability. 'The University seeks to promote principles of sustainability in their broadest sense. Through its teaching, research and knowledge exchange activities to promote sustainable communities, services, businesses and use of physical resources. ... Sustainability is about the relationship of people with their environment.' This vision encapsulates our overarching aim to fully accept our broad responsibilities to society and develop our physical assets to provide excellent facilities and opportunities for students, staff and the wider community, but in ways which promote and champion environmental sustainability.

The University's Sustainability Policy was adopted in 2007 and is reviewed and updated annually. The policy notes that while responsibility for developing procedures, raising environmental awareness and recommending best practice ultimately rests with management, good sustainability practice is the responsibility of all those who attend the University. The policy's main principles are:

- to integrate environmental management into our day-to-day operations to ensure environmental issues are addressed, whilst providing a quality service to all stakeholders;
- embed inclusion of sustainability principles in the curriculum and support research in relevant areas;
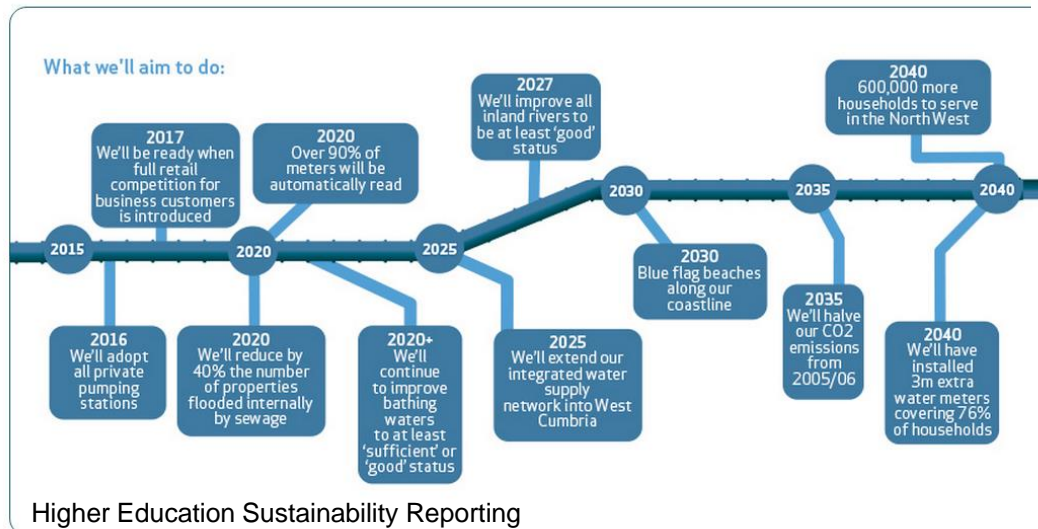
Green Impact

Green Impact is a staff behaviour change continuous improvement programme which uses students both as paid 'earn as you learn' sustainability mentors, and volunteer auditors to audit each team at the end of the year providing great employability experience. Last year 16 teams totalling 550 staff took part resulting in 478 actions being completed over the course of the year, 439 of which were as a result of the Green Impact. 13 auditors received Institute Environmental Management & Assessment (IEMA) training to audit departments and we employed 12 student Green Impact Project Assistants. The table overleaf summarises the past few years of the scheme.

Sustainability Reporting Tip - Strategy
Good practice example from the private sector - United Utilities

Our strategy – to deliver value by providing:

The best service to customers
Delivering excellent services to our customers by anticipating and responding to their needs.

At the lowest sustainable cost
Providing the service as efficiently as possible on a cost basis that can be sustained over the long-term.

In a responsible manner
Managing responsibly our interaction with the environment, the communities where we operate and our employees.

Our areas of focus:

- Improving customer service performance
- Investing to reduce the risk of sewer flooding
- Providing safe and clean drinking water
- Reliable supply of water now and in the future
- Maintaining the standards of our assets
- Building capability to compete in the expanding retail market

- Delivering capital commitments efficiently, on time and to a high quality
- Innovating to improve our use of technology and to improve our efficiency
- Generating energy from sludge to help power our assets
- Meeting our regulatory commitments
- Enhancing debt collection activities
- Providing support for customers struggling to pay

- Maintaining leakage at or below a sustainable economic level
- Improving the North West's river and bathing water quality
- Reducing our carbon footprint
- Improving environmental performance
- Ensuring we have a committed, capable and motivated workforce
- Continuing to support community groups
- Reducing pollution incidents

How we measure our performance – KPIs:

- Serviceability
- SIM – qualitative
- SIM – quantitative

- Opex outperformance
- Financing outperformance
- Capex outperformance

- Leakage
- EA performance assessment
- Dow Jones Sustainability Index

Our 25-year strategy

In order to maintain a reliable, high quality water service for our customers in the future, we have to look to the far horizon and anticipate those changes and core issues that are likely to impact on our activities.

What we'll aim to do:

2017 We'll be ready when full retail competition for business customers is introduced

2020 Over 90% of meters will be automatically read

2027 We'll improve all inland rivers to be at least 'good' status

2040 600,000 more households to serve in the North West

2016 We'll adopt all private pumping stations

2020 We'll reduce by 40% the number of properties flooded internally by sewage

2020+ We'll continue to improve bathing waters to at least 'sufficient' or 'good' status

2025 We'll extend our integrated water supply network into West Cumbria

2030 Blue flag beaches along our coastline

2035 We'll halve our CO2 emissions from 2005/06

2040 We'll have installed 3m extra water meters covering 76% of households

2015 2020 2025 2030 2035 2040

Higher Education Sustainability Reporting

Sustainability Reporting Tip – Materiality

Demonstrate an understanding of the sustainability issues relevant to you and your key stakeholders; report only those of material importance

Sustainability Reporting Tip – Materiality
Good practice example – Plymouth University

Materiality sustainability issues

Material sustainability issues are those that have the greatest importance for the University and our stakeholders. Students are our biggest stakeholder group and drive a number of our material impacts. The NUS issues a national sustainability skills survey to all students annually, and our students are usually the biggest respondents to this report, voicing their opinion on the importance of sustainability skills development and learning throughout their university education. We monitor this annually to assess any changes in the viewpoint of our student body. In 2014 we renewed our sustainability strategy and conducted consultation sessions across the University for feedback and review of our objectives and KPIs. The Sustainability Advisory Group (SAG) reviews sustainability performance with

community stakeholders to review progress in, and the direction of, sustainability objectives for the University. This, along with internal materiality review, forms the framework for our material issues.

The table on page 11 describes the material sustainability issues against which we report fully against. In addition to these issues, we report against the remainder of the framework where the aspect is relevant to our operations. Sustainability is a core issue of the University; as such, we monitor and measure performance against a broad spectrum of sustainability aspects. Additional aspects are included within this report which are outside of the GRI framework but which are material to us, such as teaching and research.

MATERIALITY ISSUE	DETAILS	SCOPE
Carbon emissions	Reducing our carbon emissions as far as possible and investigating offsetting for remaining emissions. (It is important to create a campus that is a living example of sustainability, reducing our impact in practice as well as translating this through our teaching and learning environment)	Internal and external (scope 3 emissions)
Energy use	Supporting our carbon targets by focusing on reducing energy through energy efficiency and new technologies	Internal
Water use	Reducing consumption through technology innovation and behavioural change	Internal
Waste generated	Reducing waste generated and increasing the proportion of recycling and reuse in waste management methods	Internal
Travel and transport	Monitoring and reducing the amount of business travel where possible and supporting a move to sustainable modes of transport; supporting sustainable commuting	Internal and external (staff and student commuting)
Food and catering	Delivering high-quality, sustainably and ethically sourced food within our café outlets and hospitality provision	Internal
Community	Helping people to transform their lives through education, opening up our facilities and skills to the wider community, engaging in partnerships which improve the lives of others, and improving learning for our students	Internal and external
Teaching and learning	Differentiating our academic offer by ensuring issues and principles of sustainability permeate and inform our programmes and modules, learning from existing best practice so that students engage positively with sustainability issues	Internal
Research	Contributing towards defining the problems, and creating solutions, for the world's most pressing environmental, economic and social challenges	Internal
Procurement	Embedding sustainable procurement by ensuring that the University is purchasing from socially, ethically and environmentally responsible businesses	Internal and external (supply chain)
Financial sustainability	Achieving resilience, sustainability and effectiveness through a continued focus on diversifying and growing income, securing efficiencies, maximising academic synergies and improving the effectiveness of our processes	Internal
Student experience	Enabling excellence in all dimensions of University life and raising the aspirations of our students by delivering excellence in teaching and learning, and a first-class student experience alongside world-class research, in a culture of equality, respect and inclusion. We aim to have highly satisfied students.	Internal

Sustainability Reporting Tip – Materiality

## Good practice example – The Home Office

Materiality

As set out in previous Home Office sustainability reports, we began to explore our material impacts by comparing the carbon footprint of our estate and travel (captured within the GGC framework) to the unreported wider impacts associated with the work we do. This year we present our supply chain emissions for the last few years and an updated footprint of IRCs.

The GGC targets are material to our sustainability programme as they are the main measure of success for Government. We will continue to report on our supply chain footprint based on expenditure but have found it difficult to realise savings in this area. This is also true of some of our estate which we occupy but which is paid for as part of a service charge, operational removal flights and fuel used by our fleet of cutters. We have very little construction waste and our ICT is mostly provided by outsourced suppliers. We have contributed to discussions to consider setting formal greenhouse gas reduction targets for police forces within the auspices of GGC but as part of a wider public sector approach.

What is therefore most material to the Department are the areas where we can have most impact: these make up our sustainability priorities:

- Delivering the Greening Government Commitments (GGC)
- Assessing and managing the social and environmental impacts
- Seize opportunities in policy development and decision making
- Procuring from small businesses and achieve the overall, cross-government target of 33% of all spend in contracts to be spent with small and medium enterprises (SMEs) by the end of 2019-20

Home Office Sustainability Report 2014-15 footprint comparisons

Footprint (CO_2e)
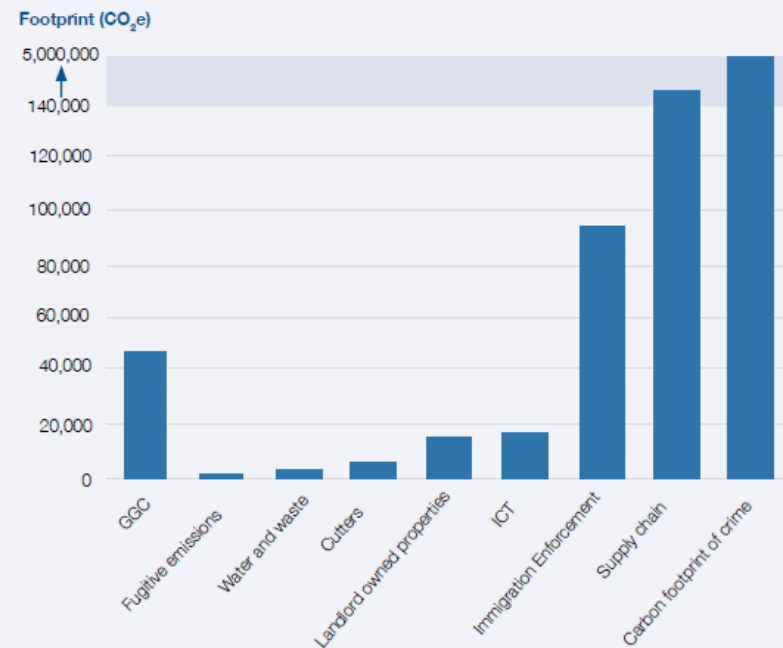
Future plans

Our Sustainability Champion has encouraged us to challenge our approach and in Summer 2016 we will be holding a series of workshops to help us review our sustainability programme. We shall review our vision and governance, determine what drives sustainability, review how we add value and determine if our sustainability programme meets our existing and future needs.

Sustainability Reporting Tip – Materiality

Good practice example from the private sector – RSA Insurance Group plc

MATERIALITY

Every year we compile a risk matrix to help determine the material issues for our CR strategy and reporting.

Issues are assessed through a variety of channels. These include our group risk framework, stakeholder engagement process, external benchmarking, investor assessments, sustainability ratings and the employee CR survey, as well as a materiality review by Forum for the Future.

Issues being flagged in any of the processes are assessed against:

- Significance to RSA (including importance to stakeholders);
- Alignment to our core business; and
- Our ability to influence.

Our 2011 materiality assessment confirmed that financial and social inclusion, flood risks associated with climate change, safety and disasters remain key issues for us. We are tackling these through our strategic focus on safety, the environment, social inclusion (see page 19) and community activities (see page 30). Rising up the agenda this year are issues concerning the economy and public spending. While we have little control over these, they are important considerations for the company as they will affect the environment in which we operate.

STAKEHOLDER VIEWS

	Limited influence or no ability	Able to influence or encourage mitigation	Direct control or ability to mitigate
High priority		Economic situation	Social inclusion Flooding / Climate Safety Disasters
Medium priority	Ageing populations	Investments	Tranparency Customer service Employee wellbeing Employee training
Low priority	Obesity Urbanisation Water scarcity Emerging markets Resource prices	Corruption Ecosystem decline New technology Energy security	Product innovation Supply chain Diversity Direct environmental impact Business ethics

OUR ABILITY TO INFLUENCE

Sustainability Reporting Tip – KPIs and Targets

Identify KPIs which are directly relevant to your sustainability strategy. Explain why they are relevant and how they are defined. Set and review your performance against challenging but realistic targets

Sustainability Reporting Tip – KPIs and Targets

Good practice example – Manchester Metropolitan University

Key Performance Indicators

Sustainability Area	Key Performance Indicator	Target and date achieved by (if applicable)	Baseline year	Progress 2014-15	On-track
Environmental Management Systems and Legislative Compliance	Level of EcoCampus Environmental Management System	EcoCampus Platinum (ISO14001) achieved by 2015-16	N/A	EcoCampus Gold achieved	●●●
Sustainability Engagement	Percentage of students who perceive the University to have an 'eco-friendly attitude'	Maintain score of over 80%	2013-14	83%	●●●
Sustainability Research, Innovation and Knowledge Exchange	Percentage of staff carrying out sustainability research at the institution	Maintain and increase sustainability research	N/A	Not achieved	●●
Learning for a Sustainable Future	Responsible Futures Accreditation Mark achieved	Test and achieve the NUS Responsible Futures Accreditation Mark by 2015-16	2013-14	Responsible Futures Accreditation achieved	●●●
Emissions and Discharges to the Environment	Scope 1 & 2 carbon emissions reduction	35% less by 2015-16	2005-06	-10.7%	●
		50% less by 2020-2021			●●
Energy Management	Electricity consumption	35% less by 2015-16	2005-06	Electricity consumption +0.1%	●
		50% less by 2020-21			●●
	Gas consumption	35% less by 2015-16	2005-06	Gas consumption -34.8%	●●●
		50% less by 2020-21			●●●
Sustainable Buildings	Display Energy Certificate rating of existing estate	Maintain average DEC rating of University buildings of above 'C'	2007-08	Achieved average 'C' rating (72.8)	●●●
Sustainable and Ethical Procurement	Level of Flexible Framework	Level 3 Flexible Framework reached by 2014-15	2011-12	Level 2	●●
Travel Plan Management	Single Occupancy Vehicle (SOV)	37.5% by 2018-19	N/A	31%	●●●
Waste and Resource Management	Reuse and Recycling (excluding capital construction and refurbishment projects)	60% by 2015-16	2007-08	42.2%	●●
		85% by 2020-2021			●●
Water Management	Water consumption	Down 25% by 2015-16	2010-11	-3.2%	●
Biodiversity and Growing Systems	Land area used for biodiversity enhancement and growing food	Measure and increase	2013-14	3%	●●●

KEY PERFORMANCE INDICATORS   40

41   KEY PERFORMANCE INDICATORS

Sustainability Reporting Tip – KPIs and Targets

Good practice example – NHS BSA

- **Table 9d: Greenhouse Gas Emissions**

		2009/10	2010/11	2011/12	2012/13	2013/14
Non-Financial Indicators (t CO2e)*	Gross emissions Scope 1** (direct)	1.7k	1.3k	1.0k	1.1k	0.5k
	Gross emissions Scope 2*** (indirect)	5.4k	5.1k	4.7k	3.9k	2.7k
	Gross emissions Scope 3**** (indirect – business travel)	0.8k	0.8k	0.8k	0.7k	0.6k
	TOTAL	7.9k	7.2k	6.5k	5.7k	3.8k
	Building CO2e per FTE	2.91	2.69	2.65	1.55	1.37
	Business travel CO2e per FTE	0.18	0.21	0.27	0.20	0.08
Related Energy Consumption (KWh)	Gas	8.4m	6.0m	4.6m	5.6m	2.5m
	Electricity: Grid	11m	10.1m	9.4m	8.4m	6.1m
	Gas Oil	N/A	N/A	N/A	0.2m	N/A
Self-Generated Energy (kWh)	PV	N/A	N/A	N/A	65k	65k
Financial Indicators*****	Expenditure on Energy	£1.2m	£1.1m	£1.1m	£1.0m	£0.8m
	Expenditure on Carbon Reduction Commitment	N/A	<£2k	<£2k	£66k	£63k
	Expenditure on official business travel	£1.1m	£1.1m	£1.0m	£1.1m	£1.3m
	TOTAL	£2.3m	£2.2m	£2.1m	£2.2m	£2.2m

Performance Commentary Including Measures
Both absolute and per FTE emissions from energy use in our buildings continue to reduce significantly year-on-year. This is due to continued estate rationalisation and efficiency projects. Business travel emissions per FTE peaked during 2011/12 as a consequence of business reorganisation activity. This has now declined as this management model has become business as usual.

2013/14 Targets	2013/14 Performance	2014/15 Target
40% reduction in CO2e emissions from energy use in our buildings	54%	60%
26% reduction in water consumption in our buildings	32%	35%
22% reduction in CO2e emissions from business travel	18%	23%
49% reduction in office waste arising	49%	55%

Notes: Targets are based upon a 2009/10 baseline.
Table 9c: NHSBSA Environment Targets

Controllable Impacts Commentary
Our main impacts are from the operation of our offices (electricity and gas), and to a lesser extent our business travel, having offices spread around England with managers line managing staff at multiple sites.
Overview of Influenced Impacts
Our key influential impacts are related to our supply chain. We are currently reviewing our supplier engagement strategy as described in Sustainable Procurement below and have taken part in the Central Government CAESAR exercise to work with our suppliers. Our key impact is via our outsourced NHS Supply Chain Contract, also described below.

Sustainability Reporting Tip – Balanced Reporting

Present information in a balanced and transparent fashion. Celebrate success but also avoid glossing over negative sustainability impacts or poor performance against targets. Explain where and how improvements will be made.

Sustainability Reporting Tip – Balanced Reporting

Good practice example – Manchester Metropolitan University

Our Performance Explained

Since the baseline year 2010-11, our total water consumption has increased by 1.7%. In order to explain this, we have looked at the contributing factors.

- An increase in students living in Student Accommodation has meant that water consumption for domestic uses has had a significant impact.

- We're continuing to test our systems to make sure that water drawn through the borehole can be used for potable purposes at Birley Campus.

- The borehole at our Business School and Student hub was not operational for a period, which meant that mains water was supplied to the building to flush toilets.

- The greywater systems at Birley Campus are not yet supplying Brooks academic building and are being tested and improved from lessons learned from the Birley Student Living.

MMU's water reduction target of 25% by 2015-16 was based on the assumption that the water systems at Birley Campus and at the Business School would be fully operational throughout 2014-15. However, this has not been the case and the 2015-16 target may not be achieved. We will review our water consumption targets as part of our Environmental Management review.

Consumption put into perspective

Large reductions in energy consumption are possible across the university sector

WE CURRENTLY CONSUME

Enough electricity to power every house in a town the size of Buxton[1]

Enough gas to heat 2,392 average UK households per year[2]

Reasons for energy consumption increase in 2014-15

COLDER WEATHER

14.7%

INCREASE IN HEATING DEGREE-DAYS

+10%

ESTATE GROWTH

+550

LIVING IN STUDENT ACCOMMODATION
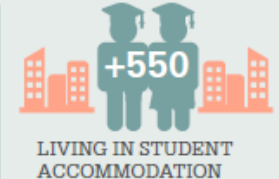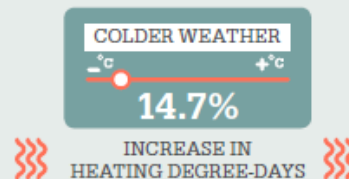
Sustainability Reporting Tip – Balanced Reporting

Good practice example – Foreign and Commonwealth Office

The FCO's performance against the 2015-16 GGC targets and associated expenditure is summarised in the table below:

Impact	2015-16 Performance	Target for 2015-16 (unless other year stated)	Result
Greenhouse gas emissions from UK estate, vehicles and domestic train and air travel	13,064 tonnes of CO2 equivalent (tCO2e). 35% reduction.	14,426 tCO2e (a reduction of 25% on 2009-10 emissions)	**Met Target**
Estate energy expenditure	£4,407,218		
Number of domestic flights	335 54% reduction	588 flights (a 20% reduction on 2009-10 flights)	**Met Target**
Vehicle and domestic train and air travel expenditure	£561,985		
CRC Energy Efficiency Scheme expenditure	£291,893		
Office water consumption	10 cubic metres per Full Time Equivalent (FTE)	>6m3 per FTE = poor practice 4m3 – 6m3 per FTE = good practice <4m3 per FTE = best practice	**Missed Target**
Office water expenditure	£104,330		
Waste arising	857 tonnes 34% reduction.	974 tonnes (a reduction of 25% on 2009-10 waste arising)	**Met Target**
Total waste disposal expenditure	£112,790		
Paper consumption	24,165 A4 reams equivalent 38% reduction.	35,036 A4 reams equivalent (a reduction of 10% on 2010-11 consumption).	**Met Target**
Expenditure on GCOF carbon offsets for UK originated international flights	£17,348		
Emissions associated with those international flights	8,674 tCO2		

Sustainability Reporting Tip – Balanced Reporting

Good practice example – Oxford City Council

Greenhouse Gas Emissions

Status: Oxford received a combined score of 79% for the three GHG emission indicators. The city's **per capita CO_2 emissions were 5.9 tonnes in 2013**[8], slightly above the 5.6 tonne average for the studied urban areas and above the 4.8 tonnes per capita emissions target required in 2030 to limit global warming to 1.5°C[9]. From an economic perspective, Oxford's emissions intensity of 0.09 kilotons of CO_2 ($ktCO_2$) per £1M GVA is below the 0.16 $ktCO_2$/£1M average for the studied urban areas, resonating with the city's ambition to promote **a vibrant sustainable economy**. To reduce the overall per capita emissions in the city, Oxford faces challenges relating to the poor energy efficiency of the relatively large proportion of heritage building stock. By working to reduce energy consumption with the private, third and especially domestic sector, the city can continue to mitigate the effects of climate change while reducing energy costs and alleviating fuel poverty.

Policy/Strategy: Oxford's Sustainability Strategy, Low Emission Strategy and forthcoming Sustainable Energy Action Plan (SEAP) set the ambition to reduce GHG emissions across the city. The target is to reduce the city's emissions by 40% by 2020 compared to a 2005 baseline, equivalent to an annual reduction of 2.7%, giving Oxford the **9th most ambitious climate target** of the 34 British signatories to the Covenant of Mayors.

79%

Case Study: Oxford

The Low Carbon Oxford Pathfinders is a unique public/private network of over 40 Oxford organisations committed to work together to reduce CO_2 emissions in Oxford and support a sustainable economy. Together responsible for nearly 50% of the industrial and commercial carbon footprint of the city, Pathfinders organisations have committed to reduce their emissions by 3% annually.

Indicator	Unit	Worst urban area	Best urban area	Oxford	Oxford's Score
CO_2 emissions per capita	tCO_2/capita	16.3	3.2	5.9	79%
CO_2 emissions per GVA	$ktCO_2$/£million GVA	0.35	0.03	0.09	80%
CO_2 reduction policies	% reduction/year	1.0%	3.2%	2.7%	77%

Questions?

Advanced Reporting Tips and Good Practice Examples

Sustainability Reporting Tip - Business Overview

Provide an overview of your business and the market environment in which you operate to contextualise your reporting for the reader

Sustainability Reporting Tip - Business Overview

Good practice example – Plymouth University

Sustainability Reporting Tip - Business Overview

Good practice example – Ministry of Defence

Sustainability Reporting Tip - Business Overview

Good practice example – Sussex Community NHS Foundation Trust

Sustainability Reporting Tip – Communication

Use multiple communication channels thoughtfully. Ensure that the medium, content and style are tailored to both the audience and the message being delivered.

Sustainability Reporting Tip - Communication

Good practice example – Plymouth University

EMISSION SCOPE	TYPE	BASE YEAR 2005–06	NOW 2014–15
SCOPE 1 ▶	Combined Heat and Power plant	Not applicable	Included
	Solid fuels	Not applicable	Included
	Liquid fuels	Included	Included
	Gaseous fuels	Included	Included
	Vehicle fleet	Data not available	Included (calculated)
	Refrigerant gases	Data not available	Included
SCOPE 2 ▶	Grid electricity	Included	Included
	Heat purchased	Not applicable	Included
SCOPE 3 ▶	Water	Included	Included
	Waste	Base year 2010–11	Included
	Business travel: hire vehicles	Base year 2012–13	Included
	Business travel: rail	Base year 2012–13	Included
	Business travel: air	Base year 2012–13	Included
	Employee commuting	Base year 2011–12	Included (calculated)
	Student commuting (daily)	Base year 2011–12	Included (calculated)
	Student commuting (home)	Data not available	Included (calculated)
	Procurement related: general	Data not available	Included (estimated)

Sustainability Reporting Tip - Communication

Good practice example – The Home Office

Sustainability Reporting Tip – Risk and Opportunities

Draw out and explain in detail the key strategic risks ad opportunities arising from the sustainability agenda. Explain the relevance and implications of each as they relate to your organisation and the actions put in place to mitigate risks and maximise opportunities.

Sustainability Reporting Tip – Risk and Opportunities

Good practice example – City University

Predicted Costs and Savings

The table below shows the predicted implementation cost of the schemes listed in the implementation plan in section 3. It also gives an indication of the likely savings both financially and in terms of tonnes of carbon. If these predicted savings materialise from implementing the measures, then the initial capital investment would pay for itself within the five year time frame.

It has not been possible to predict costs and savings for all measures so there will be additional costs and savings on top of those listed.

Summary of predicted costs and savings

Total Estimated Capital Expenditure	£ 7,824,000				
Total Annual Cost Savings					
	2008/09 savings	2009/10 savings	2010/11 savings	2011/12 savings	2012/13 savings
Annual savings (£)	£147,157	£242,480	£272,146	£959,727	£959,727
Total Annual Carbon Reductions					
	2008/09 savings	2009/10 savings	2010/11 savings	2011/12 savings	2012/13 savings
Carbon Reduction (tonnes Co_2)	574	1,204	1,361	3,695	3,695

The table and graphs below shows the marginal abatement costs (MAC) for the top 10 emissions reduction projects. The costs for each project have been plotted against the CO_2 saving, the marginal abatement cost of each project or cost/ tonne of Co2 is shown by the position of each project above or

Discount Rate	10%			
Project Name	**Capital Cost**	**Annual Benefit/Cost**	**Annual average $C0_2$ Savings for project**	**Project Life**
	£	£	tonnes/year	years
Cass Energy audit improvements	£ 20,000	£ 85,000	200	15
Lighting controls	£ 25,856	£ 31,204	170	10
BMS	£ 100,000	£ 66,682	419	12
Voltage Reduction	£ 60,000	£ 59,102	374	25
College window draught proofing	£ 46,866	£ 11,166	55	15
Economisers	£ 47,593	£ 22,858	232	25
Burner Controls	£ 20,000	£ 5,833	38	25
HVAC	£ 1,016,813	£ 121,706	447	25
Main site Cavity Wall insulation	£ 400,000	£ 98,082	713	30
CCHP at main site	£ 4,970,000	£ 480,000	1080	25

Thousand tonnes of carbon saved/year
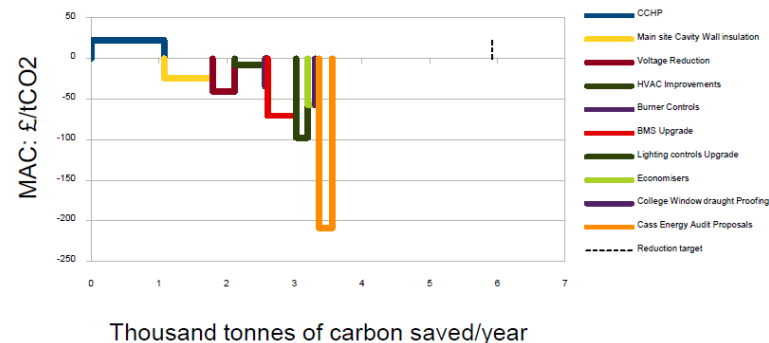
Sustainability Reporting Tip – Risk and Opportunities

Good practice example – DECC

Table 1: Summary of drivers

CATEGORY	DRIVER	AREA OF IMPACT	NATURE OF IMPACT	CONSEQUENCES, OPPORTUNITIES AND ISSUES FOR CARBON MANAGEMENT
Legislative	Climate Change Act	Estate	Sets legally binding emissions reductions of 34% by 2022 and 80% by 2050 over a 1990 baseline	As the Government department with responsibility for mitigating climate change it is expected to show leadership in meeting the targets
Legislative	Energy Performance of Buildings Directive (2002/91/EC)	Estates	All public buildings of 1,000m2 or more must display a valid Display Energy Certificate (DEC) Cost of compliance	Clearly indicates a buildings energy use and performance. Advisory reports provide detail for use in planning carbon reduction projects.
Political	'Greenest Government ever' commitment	DECC	10% carbon reduction target May 2010 - May 2011 Sustainable operations and procurement targets be set by March 2011.	Greater commitment to carbon management from Ministers and senior management. Improved reputation.
Regulatory & Financial	CRC Energy Efficiency Scheme	DECC	A mandatory "cap & trade" emissions trading scheme for medium sized energy users Liable organisations must report and purchase allowances. for CO2 emissions.	Failure to address carbon emissions will increase costs.
Regulatory & financial	Feed in tariffs	DECC	This scheme was introduced in April 2010 and aims to incentivise small scale (less than 5 MW) low carbon energy generation through a guaranteed payment both for the electricity generated and exported.	Savings in energy bills by generating own energy and a further financial incentive from the tariff paid.
Regulatory and financial	Renewable heat incentive	DECC	Introduced from June 2011 this scheme supports a range of renewable heat technologies through payments to bridge	Savings in energy bills by generating own energy and a further financial incentive from the tariff paid.

Project	Cost	Savings	Savings	Payback	Status
	£	£ p/a	CO2e p/a	Years	
Dedicated HW System at 3WP	63,312.00	5,313.00	29.70	11.90	
LED lighting in office areas at 3WP	252,000.00	18,792.00	53.00	13.40	
Pilot of LED lighting in touchdown zone	NA	NA	NA	NA	
Free cooling to server room 3WP	NK	NK	NK	NK	
Heat Recycling from main air handlers 3WP.	NK	NK	NK	NK	
Heat exchangers for hot water at 3WP	15,000.00	767.81	5.30	19.50	
Replace heat exchangers for heating at 55W	NK	NK	NK	NK	
RE:FIT Programme	200,000.00	20,676.00	41.30	9.70	
Reducing capacity of calorifier at 55	NK	NK	NK	NK	
Spring/autumn natural ventilation at 3WP	0.00	2,086.00	11.00	NA	
BMS controls (feasiblity study/design)	2,500.00	NA	NA	NA	
Further automation of BMS controls	NK	NK	NK	NK	
Refinement to lighting controls at 3WP	0.00	NK	NK	NA	
Modifications to real time display widget	NK	NK	NK	NK	
LED lighting in loading bay	NK	NK	NK	NK	
Green champions	0.00	NK	NK	NA	
EnMS development (ISO 50001)	9,821.00	NA	NA	NA	
Total	**542,633.00**	**47,634.81**	**140.30**		
Total less abandoned projects	527,633.00	46,867.00	135.00		

The Carbon Management Plan is estimated to achieve cumulative savings of £763,958, compared to Business as Usual (BAU), over the five year period 2010/11– 2014/15 for an investment of £426,050. The estimated financial investment costs are summarised in the table below alongside estimated operational savings compared to the BAU scenario.

IMPACTS	2010/11	2011/12	2012/13	2013/14	2014/15	TOTAL
Total annual capital cost	£172,900	£58,150	£125,000	£50,000	£20,000	£426,050
Total annual operational savings compared to BAU	£44,790	£93,884	£147,670	£206,570	£271,045	£763,958
Total net impacts	-£128,110	£35,734	£22,670	£156,570	£251,045	£337,908

Sustainability Reporting Tip – Risk and Opportunities

Good practice examples from the private sector – The Berkeley Group plc

THE CUSTOMER EXPERIENCE

KEY RISK	FINANCIAL IMPACT	MANAGEMENT THROUGH VISION2020
Failure to meet expectations	Fewer customer recommendations and sales as a result of damage to corporate reputation from poor service	Commitment that over 95% of customers would recommend us to a friend
	Lower market value of homes due to lack of customer appeal	

KEY OPPORTUNITY	FINANCIAL IMPACT	MANAGEMENT THROUGH VISION2020
Engaging with customers to inform better design	Higher sales due to highly desirable and comfortable home design	Commitment to survey 25% of customers on how sustainability influenced their home purchase decisions
	Increased market value of homes due to their customer appeal	

BUILDING GREENER HOMES

KEY RISK	FINANCIAL IMPACT	MANAGEMENT THROUGH VISION2020
Increasing legislatory/ regulatory requirements	Increase in cost of building homes	Commitment to undertake research to understand the implications of the Government's proposed zero carbon standard on our future developments
	Increase in research and development costs	

KEY OPPORTUNITY	FINANCIAL IMPACT	MANAGEMENT THROUGH VISION2020
Market differentiation of our product	Higher sales due to unique product offering to customers	Commitment to design all new homes to achieve at least Level 3 of the Code for Sustainable Homes
	Increased market value of homes due to demand for good design	Commitments to provide cycle storage, home office working and recycling facilities in all new homes

Sustainability Reporting Tip – Governance

Explain how the sustainability governance system operates. Identify the board member responsible for sustainability issues, describe the policies that have been implemented and explain how management ensure that these policies are working

Sustainability Reporting Tip – Governance

Good practice example – London School of Economics

How does LSE make decisions about environmental sustainability?
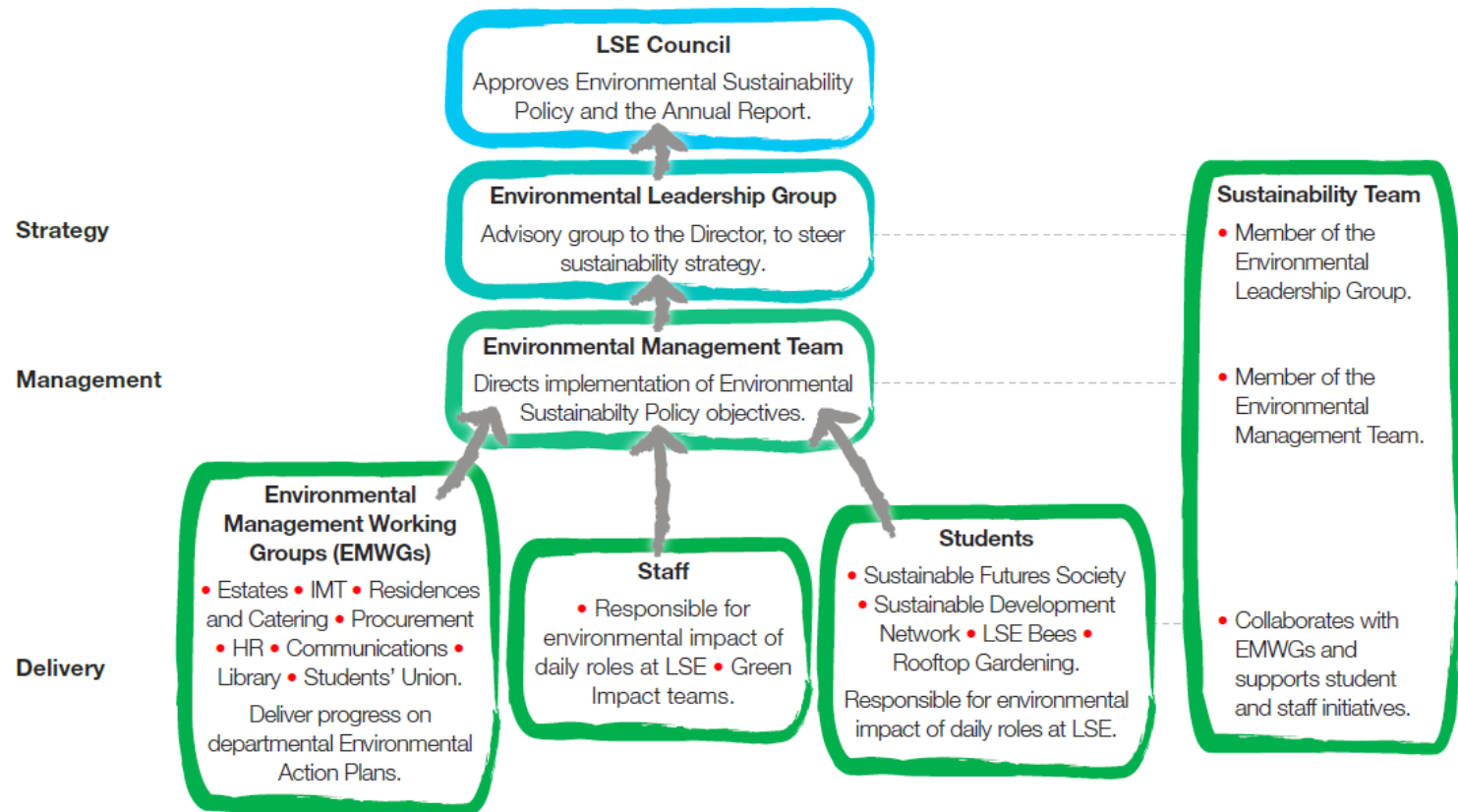
Sustainability Reporting Tip – Governance

Good practice example – NHS BSA

Responsibilities and governance

Our Chief Executive is ultimately responsible for the delivery of this strategy. This is delegated to the NHSBSA Corporate Secretary as Leadership Team representative.

At NHSBSA Board level, Mark Ellerby is our non-executive director champion, ensuring appropriate oversight of the executive directors' performance.

Our Community, Environment and Wellbeing (CEW) Committee drives the agenda from a strategic level. This is chaired by our Corporate Secretary, and is made up of senior managers from across the business (terms of reference are available on request). The committee meets at least quarterly, and provides strategic oversight and assurance to the Board on delivery of the strategy.

Objective Area 1: Maintaining an appropriate governance framework to ensure compliance and continuous improvement

The objectives in this area support the following **NHSBSA strategic goals**:
- We will always improve service and deliver great results for customers
- We will derive insight from data to drive change
- We will invest time in our people, and we will recognise them for their commitment, contribution and passion

Trend considered: Value Change

	Action	Benefits / rationale	Lead(s)	Time-scale	Measure of success	Corporate target	Status
a	Include environment commentary in NHSBSA Annual Report and Accounts 2015/16, and more detailed Corporate Responsibility Annual Report	Information included in Annual Report(s), ensuring transparency and sharing approach with stakeholders (**L, Gov**) **Added value:** Sharing of approach with other organisations, encouraging responsible business practice	Head of Risk and Assurance	30/06/16	Mandated and stakeholder interest information included in Annual Report(s), made publically available	Staff survey	
b	Update Environment and Resource Efficiency Strategy and Action Plan for 2016/17, reviewed and approved by CEW Committee and NHSBSA Leadership Team	Agreed plan and monitoring arrangements in place (**Gov, EMS, M**) **Added value:** Sharing of approach with other organisations, encouraging responsible business practice	Head of Risk and Assurance	30/06/16	Agreed Strategy and Action Plan in place	Staff survey	

Sustainability Reporting Tip – Governance

Good practice example from the private sector – Experian plc
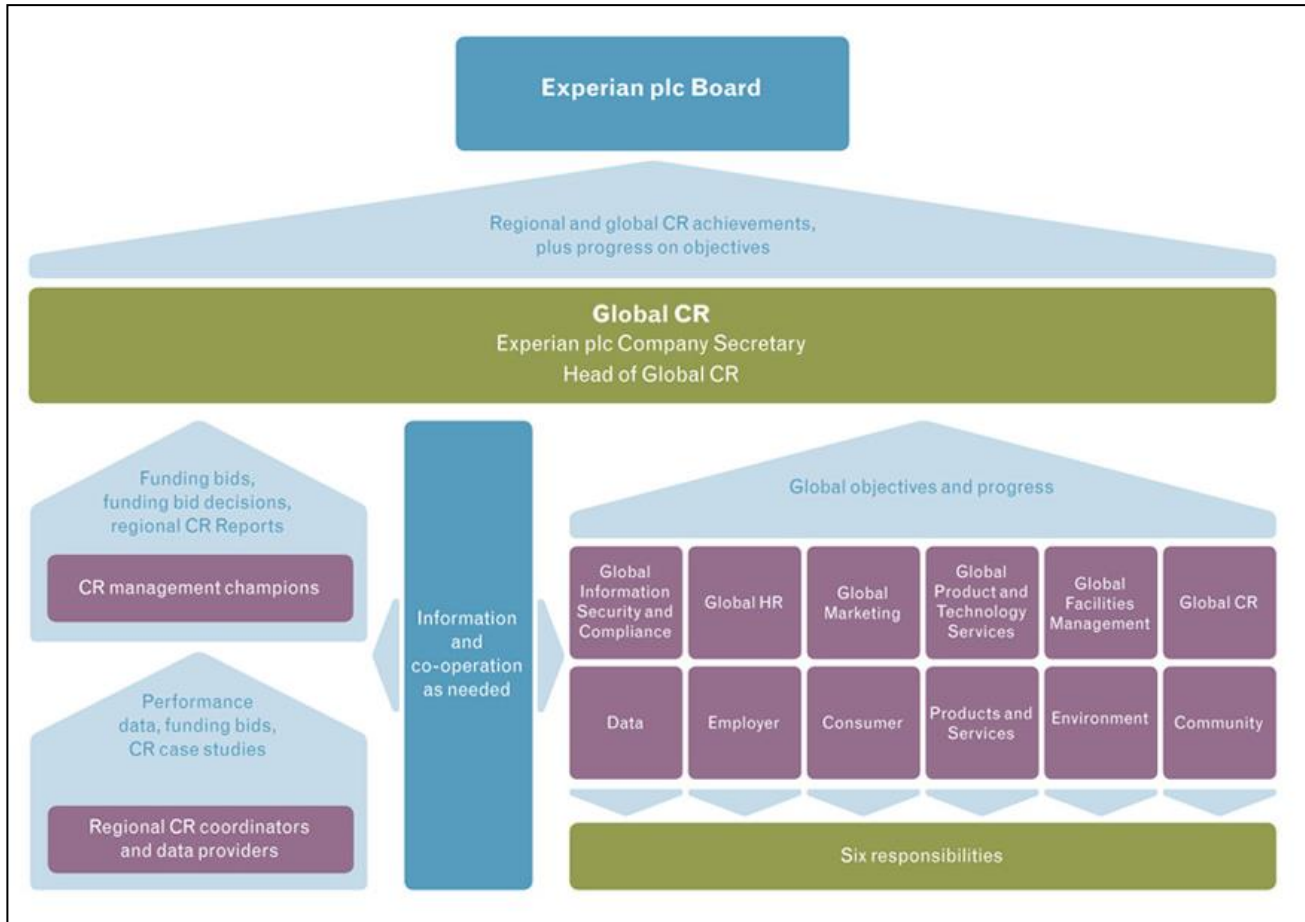
Sustainability Reporting Tip – Stakeholder engagement

Explain how you engage with principal stakeholders and how this has impacted your sustainability strategy and reporting

Sustainability Reporting Tip – Stakeholder engagement

Good practice example – Plymouth University

%	NATIONAL STUDENT SURVEY	2012	2013	2014	2015	2015 sector average
TEACHING	Staff are good at explaining	91	90	90	93	90
	Staff make the subject interesting	86	85	85	87	84
	Staff are enthusiastic	89	89	89	91	88
	The course is intellectually stimulating	86	86	85	87	86
ASSESSMENT AND FEEDBACK	Criteria used are clear	79	79	78	81	77
	Assessment arrangements are fair	79	78	78	80	78
	Feedback is prompt	67	68	70	71	70
	Received detailed comments	75	75	76	76	73
	Feedback has helped me understand	67	67	68	70	68
ACADEMIC SUPPORT	Received sufficient advice and support	80	81	81	84	80
	Able to contact staff when required	85	87	86	89	87
	Good advice for study choices	78	79	80	82	78
ORGANISATION AND MANAGEMENT	Timetable works efficiently for my activities	77	79	80	81	81
	Changes in course or teaching have been communicated effectively	73	78	77	77	78
	Course is well organised and running smoothly	72	76	75	75	77
LEARNING RESOURCES	Library resources are good enough	80	83	85	85	87
	Able to access IT when needed to	80	83	87	87	89
	Able to access specialised equipment, facilities or rooms when needed	75	76	82	83	82
PERSONAL DEVELOPMENT	Course helped me to present myself with confidence	81	81	82	84	82
	Communication skills have improved	84	84	85	86	85
	I feel confident in tackling unfamiliar problems	82	81	83	84	83
OVERALL SATISFACTION	Overall, I'm satisfied with the quality of my course	86	85	85	87	86
STUDENTS' UNION	I am satisfied with the Students' Union	72	73	78	77	68

In 2015, we scored higher than the sector average in 15 questions, and the same or lower in eight questions. In the areas of teaching, assessment and feedback, academic support, personal development, overall satisfaction and the Students' Union, we scored higher than the sector in all questions. In most of the questions we are improving our own scores year on year, showing that we continue to offer a high standard of education that generates high levels of student satisfaction.

SOCIETY, LOCAL COMMUNITIES AND COMMUNITY ENGAGEMENT

Plymouth University is firmly connected with place and people, playing a significant role in driving economic, social and cultural vitality

We are strongly connected to our community, helping people to transform their lives through education, and providing opportunities to foster social inclusion and build a future-facing society distinguished by innovation, where people are encouraged to use their abilities, experience and talents to make a difference.

Our approach to community engagement is to open up our facilities and skills to the wider community, and engage in partnerships which improve the lives of others and improve the learning for our students.

We have a dedicated External Relations partnerships and community engagement team that lead on such outreach and partnership activity, leveraging mutually beneficial opportunities across core University business, including brand and reputation, student experience, academic endeavour and research, giving visibility to those outcomes to inspire others.

Performance

The past two years have seen many successful community and partnership projects. Partnering with our local community, the University encourages shared use of campus facilities – from using meeting and conference rooms and attending public lectures and seminars, to visiting the Peninsula Arts Gallery, Jill Craigie Cinema and campus cafés.

Drake's Place Gardens and Reservoir

Friends of Drake's Place

Drake's Place restoration was an inclusive project that involved community-wide consultation, garnering 800 comments and ideas on how to restore the space, and as a result the gardens and reservoir have been restored for the benefit and use of our students, staff and local community. Individuals can volunteer to help look after this award-winning community space with the 'Friends of Drake's Place' group, undertaking activities such as litter clearing, spot weeding, creating insect boxes, sanding benches and supporting biodiversity activities and other events in this tranquil space. Volunteers with the Friends group comprise local residents, councillors, faith leaders, teachers and University staff and students, and we have enabled local school pupils to volunteer with us towards achieving their Duke of Edinburgh awards. It is also possible to book Drake's Place for community and University events, and the space has been used by the city to support civic events such as Lord Mayor's Day and Fishing Feast in 2015.

Sustainability Reporting Tip – Stakeholder engagement

Good practice example – Royal Mail

Sustainability Reporting Tip – Assurance

Ensure the credibility of your reported content, for example, by reference to independent studies, external benchmarking, expert review panels or through conventional assurance. Where assurance is used the opinion should clearly state the scope of work

Sustainability Reporting Tip – Assurance

Good practice example – Bristol City Council and DECC

Verifier's Statement

"The information in this report has been verified as representing a true statement of fact, and the information included has been validated as accurate.

Bristol City Council's annual updated Environmental Statement meets the requirements of EC Regulation (EC) No 1221/2009 (The EMAS III Regulation) as amended"
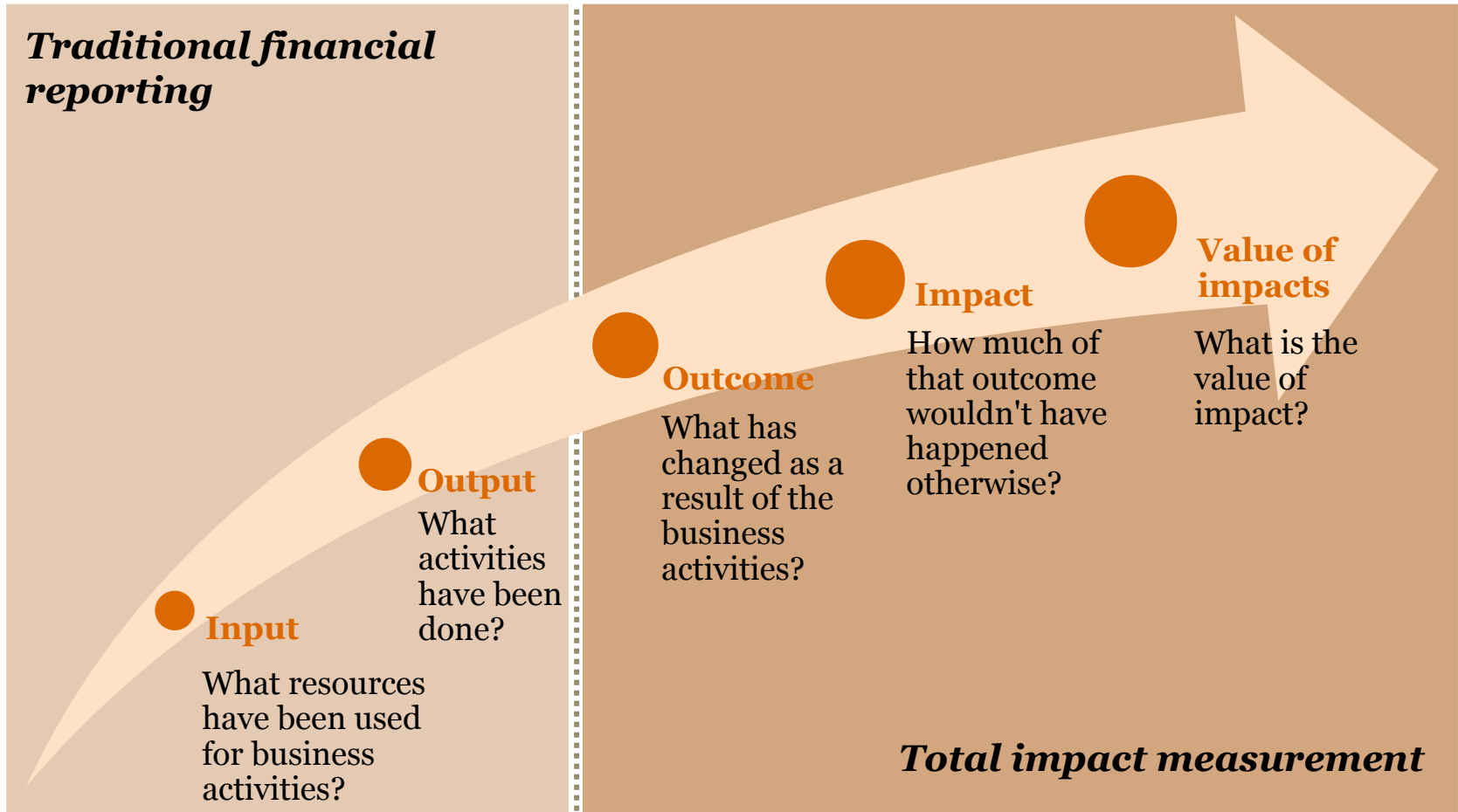
Signed:

Mike Arrigoni
VCA Accredited Verifier for EMAS
Verifier' No UK-V-0014

Governance and data validation

The Department for Education's Property Asset Management Unit (PAMU) manages sustainable operations for the Department as part of a property shared service. PAMU's responsibilities, those of the Department and associated governance arrangements are clearly laid out in a Memorandum of Understanding. Overall responsibility for sustainable operations lies with the Department's People and Operations Director, who in turn, reports to the Executive Committee. Internal data validation checks are carried out by PAMU's Sustainable Operations team and external validation audits of GGCs data are carried out by Carbon Smart.

Questions?

Building on the current model

Traditional financial reporting

Input — What resources have been used for business activities?

Output — What activities have been done?

Outcome — What has changed as a result of the business activities?

Impact — How much of that outcome wouldn't have happened otherwise?

Value of impacts — What is the value of impact?

Total impact measurement

Why reporting on your impact matters

- Extends insight of analysis

- Allows for comparability and ability to maximise societal benefits

- Highlights who winners and losers are from impacts, including:

  - UK Governments

  - Local Authorities

  - Public

  - Customers

What Total Impact Measurement and Management (TIMM) does

TIMM takes these…. ⟶ and expresses them *all* in these…

PPM of PM2.5

Tonnes of Waste

Community cohesion Health

Environmental tCO₂

Social

Kg of Pb

Education

impacts

impacts

Litres of Water tNO$_x$

Livelihoods

Acres of **Land**

Empowerment

Environmental taxes

Payroll

Investment

Economic

Production taxes

Tax

Intangibles **impacts**

impacts

Property taxes

Exports

People taxes

Profits

Profit taxes

£
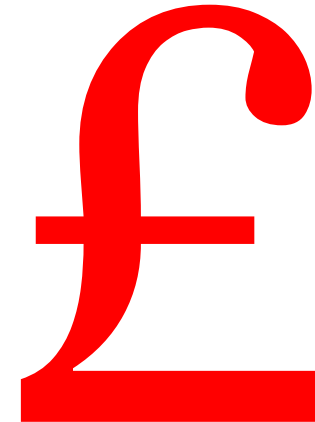
The holistic picture allows comparability and understanding
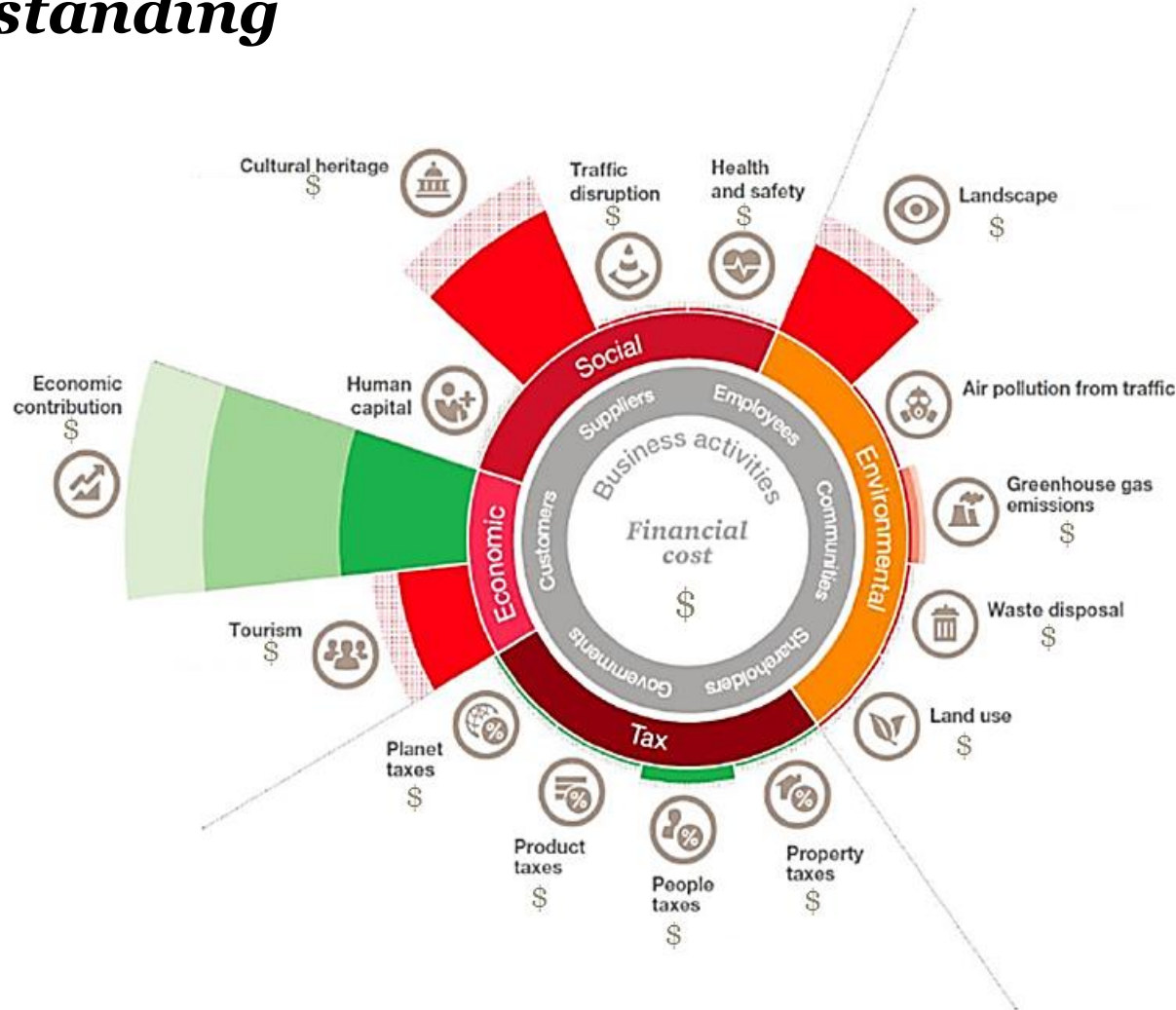
How do we measure impact?
Example social impact pathway

Health and Safety
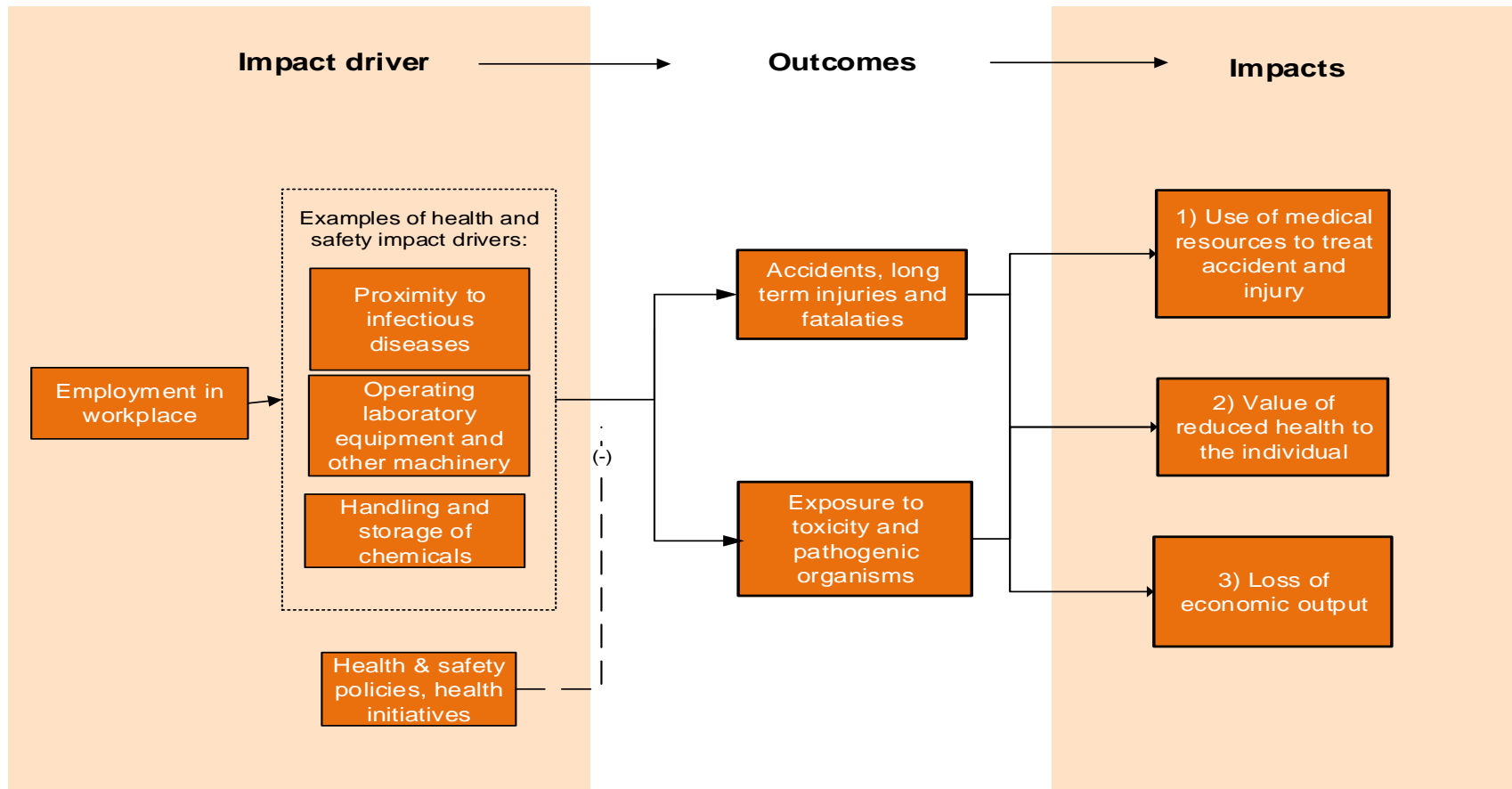
How do we measure impact?
Example environmental impact pathway
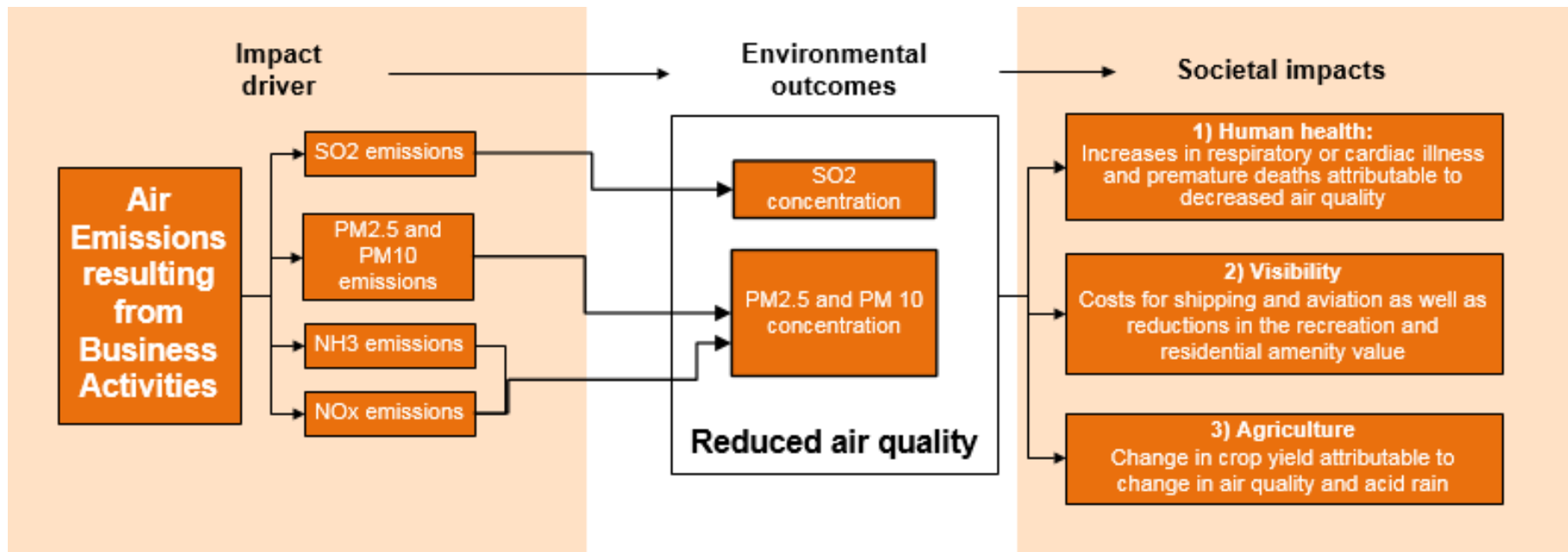
Corporate Footprint - PwC's total impact in 2016

Our impact 2016 (cf. 2015)
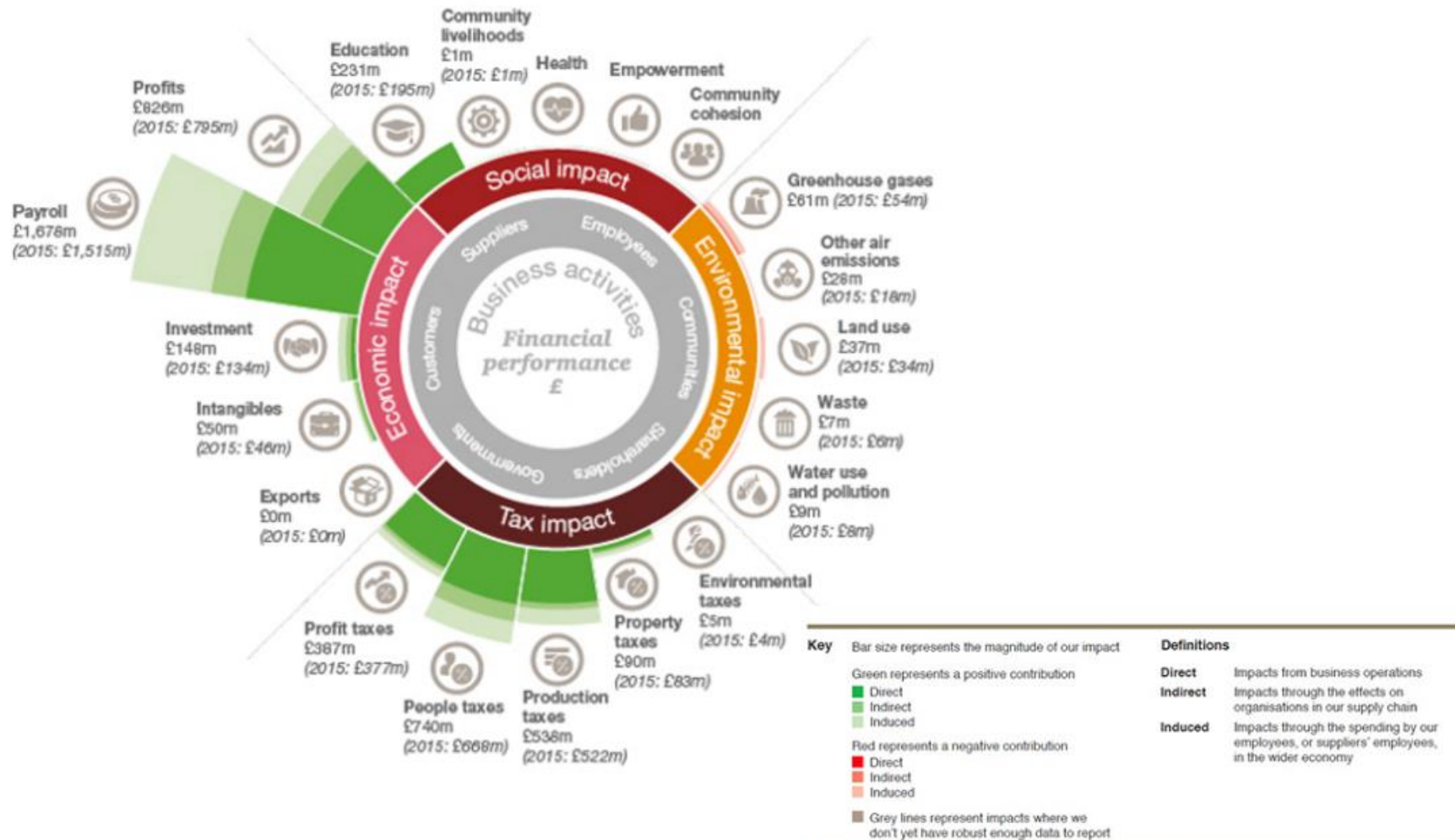
For more information and to download a copy of our 'Reporting with purpose' brochure see our website:

www.pwc.co.uk/services/sustainability-climate-change/insights/sustainability-reporting-tips.html

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Thank you