

VIRGIN MEDIA

PRODUCT SCORECARD

Improving the sustainability
performance of every new
customer product.

Executive summary:

The overview

What is the product scorecard?

A tool to measure and improve the sustainability performance of every new Virgin Media customer product.

Why is the scorecard important?

It will enable us to achieve our five year 'Better products' sustainability goal to improve the sustainability performance of every new product by influencing decision making throughout the product development cycle.

How was the scorecard developed?

It has been developed in partnership with our parent company, Liberty Global and the sustainability consultancy, Thinkstep.

How does the scorecard work?

The scorecard works by identifying our products' most important environmental and social impacts.

Each impact area (e.g. resource consumption) contains questions about the characteristics of the product across the lifecycle stages.

The answers to the questions provide two types of results:

- A score out of 10 for each impact area – this is used internally to tell us if we're on track and where we need to focus our efforts to improve the social & environmental performance of the product.
- Comparable measures of impact that demonstrate if the product is more sustainable than the last.

What are the results of the first product?

The first product to be tested with the scorecard was the Hub 3.0, our latest wifi hub.

When compared to our previous wifi hub, Hub 3.0 delivers increased wifi capabilities, and new features such as Internet of Things, and telephony, yet it is more energy and resource efficient:

- 15%¹ more energy efficient during use - avoiding enough electricity to power over 7,000² UK homes each year.
- Avoiding 173¹ tonnes of plastics, metals and electronics and saving 40 tonnes of paper from documentation and 311 tonnes of cardboard from packaging.

What next?

The Hub 3.0 results form a baseline to measure future broadband products against. Our aim is to improve the sustainability performance of our products relative to this baseline.

¹ Energy and resource efficiency is calculated based on relative performance of the products that takes into account increases in functionality

² based on average UK household energy consumption (Source: DECC, 2015)

Introduction

About our product scorecard

Our product scorecard will enable us to achieve our 'Better products' five-year sustainability goal.

Our goal is to ensure every new Virgin Media customer product is more sustainable than the last, which means creating products that millions of customers in the UK and Ireland will love and that have an environmental and social story we can all be proud of.

This tool enables us to measure the impacts of our products so that we can improve the sustainability performance of every new product.

With the product scorecard we are now able, for the first time, to compare products in a like-for-like manner and demonstrate improvements made throughout the product development cycle – considering everything from packaging design to the accessibility of the user interface.

Three important things to remember about our scorecard

- It reflects both environmental and social impacts
- It underpins our 'Better products' five-year sustainability goal
- It will influence the design and development of our products right from the initial concept

BETTER PRODUCTS



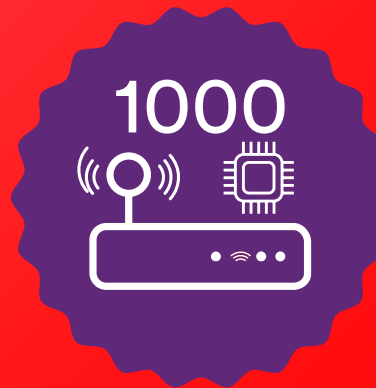
IMPROVE THE SUSTAINABILITY PERFORMANCE OF OF EVERY NEW CUSTOMER PRODUCT

The context

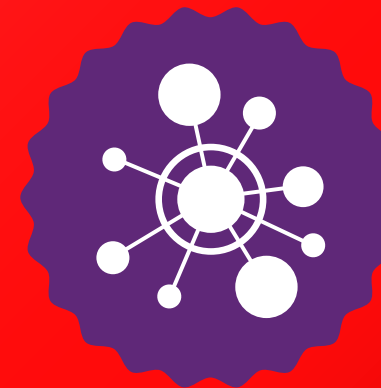
Why it's important to create a scorecard

Our products serve over 5.7m cable customers in the UK and Ireland and given the scale of the product manufacturing operation, improving the sustainability performance of every new product is not an easy challenge.

By creating a product scorecard we can ensure that we focus on the right areas to improve the environmental and social impacts of future products.



Each product has around a thousand components



Components come from around 50 different suppliers



These individual parts are sourced from several different countries

Including China, Japan, USA, Germany, Thailand and Taiwan.

The process

Designing the scorecard

When we set about designing our product scorecard we asked three big questions – and the answers gave us the basis for our product scorecard:

1. What environmental and social issues are most relevant for customer products?

This helped us to identify our impact areas, e.g. climate change

2. What specific activities in the life cycle influence these issues?

The answers to this gave us the categories within the impact areas to measure against, e.g. power consumption

3. How can we measure the performance of these categories?

This gave us the specific questions to score the categories against, e.g. power consumption in active use

To answer these questions we carried out a range of internal and external reviews that included:

- External benchmarking of impact areas against other companies and sectors
- Life Cycle Assessment on our previous broadband box the Super Hub 2
- Review of relevant standards and guidelines, including the EU's eco-design requirements
- Internal and external stakeholder interviews to identify the most important impact areas. For example, we interviewed our own product development and design leads and consulted the advisory panel at Thinkstep
- Technical review conducted by WRAP, the not-for-profit promotes sustainable resource use

WRAP's mission is to accelerate the move to a sustainable, resource-efficient economy and we're pleased to see Virgin Media taking such a proactive and methodical approach to sustainability. We reviewed Virgin Media's product scorecard in detail and believe it will play a key role in identifying the environmental and social impacts of their customer products, further delivering progress towards their 2020 Better Products goal

Norah Lewis, Technical Specialist, WRAP

The structure:

The impact areas that create our product scorecard

We identified the most important social and environmental impact areas.

For each of these we looked at how they are relevant to our customer products.

These issues form the basis of our products' sustainability performance and the structure of our scorecard.



Impact on natural environment

Reviewing where and how our suppliers source the components that make up our products, to avoid harming biodiversity and degrading the robustness and quality of ecosystems



Climate change

Reducing power consumption of products in use and standby modes to improve energy efficiency and decrease greenhouse gas (GHG) emissions



Supply chain

Ensuring the suppliers who make our products have stringent policies and practices in place. Covering conflict minerals, labour and business practices, sustainable sourcing etc.



Product responsibility

Ensuring products are accessible for everyone to use and support safe browsing and viewing help to keep young people safe online



Resource consumption

Promoting circular economy principles, especially where rare and non-renewable elements are present



Waste







Increasing equipment refurbishment and recycling and improving resource efficiency

The methodology 1

How the results are calculated

Each impact area contains a set of questions mapped to each lifecycle stage of the product, and each question is scored individually out of 10.

There are over 80 questions in the scorecard and they are scored in different ways.

Some questions are based on 'absolute performance' of the product.	Other questions are based on 'relative performance' according to the functionality compared to the previous version of the product.
 <p>What is the % of product that can be recycled at end of life?</p>	 <p>What is the power consumption during normal use?</p>
 <p>Are tools available to support safe browsing and restriction of access to adult content?</p>	 <p>What proportion of the product (by mass) can be recycled?</p>
 <p>Are auto sleep and standby options activated by default?</p>	 <p>What is the packaging mass?</p>



The methodology 2

How the results are calculated

The answers to the questions within each impact area provide two types of results

1. An internal measure of progress

Each of the questions within each impact area is scored individually out of 10 and weighted according to its importance (see page 8 for more information on how we determined the weightings).

The sum of the weighted scores for all questions in an impact area give the overall score for that area, which is also out of 10.

When we're developing a new product, we will use the impact area scores to identify where we're improving the sustainability performance of each product and where we need to focus efforts.

Impact	Resource consumption	
	Product & Manufacturing	Packaging
Question	What is the mass of electronic components & boards in the product?	What % of the product is made of recycled content?
Response	100g	>90%
Score pre-weighting	8	10
Question weighting	40%	2.5%
Score	3.2	0.3

illustrative example

2. Impact reduction measures

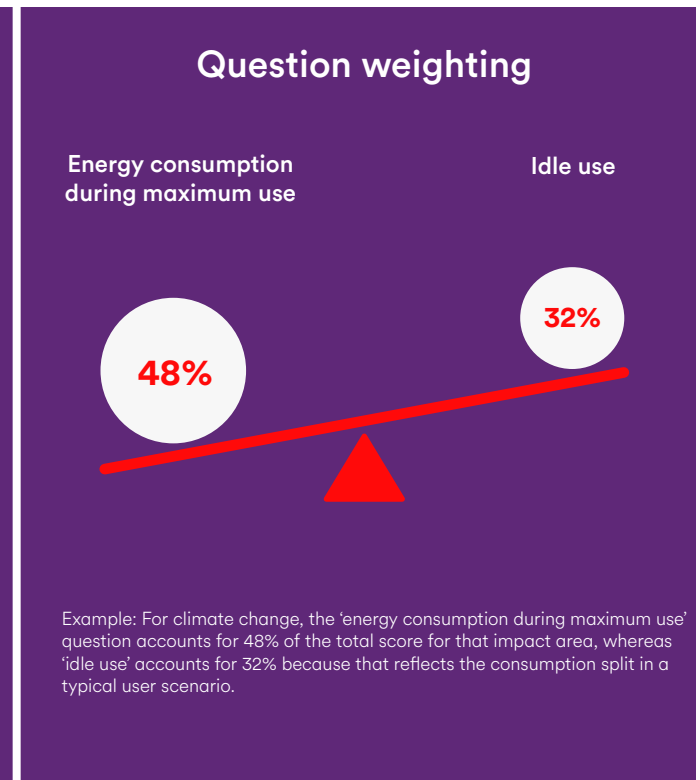
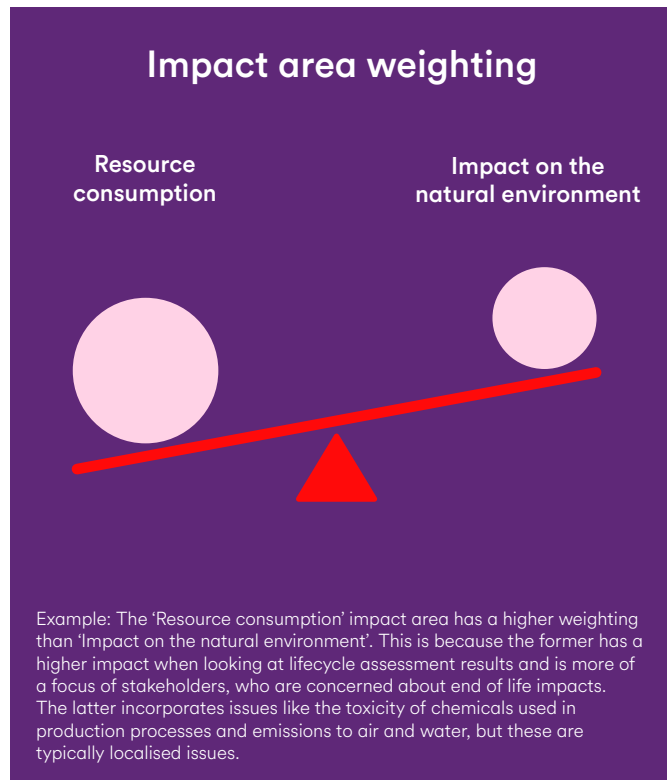
By comparing the characteristics of the product against to the previous model, using both absolute and relative comparisons (see page 6), we can demonstrate improvement across environmental and social impact measures such as power consumption, raw material use and accessibility.

Weighting

How we decided which impact areas and questions are most important

There is no standard protocol to follow when designing a holistic sustainability product scorecard for consumer electrical products. So in order to decide the weightings for the impact areas and the questions within those impact areas, we considered a range of factors:

- How other external organisations weigh their issues, such as the EPA Science Advisory Board
- The global vs local scale and impact of the issue
- Stakeholder expectations about which issues should be more of a focus
- The level of information available on the issues



The results:

Here are the first results for our latest wifi hub, Hub 3.0

Hub 3.0 delivers increased wifi capabilities, and new features such as Internet of Things, and telephony, yet is more energy and resource efficient than our previous hub.

15% ¹ more energy efficient during use - avoiding enough electricity to power over 7,000 ² UK homes each year.

Avoiding 173 ¹ tonnes of plastics, metals and electronics and saving 40 tonnes of paper from documentation and 311 tonnes of cardboard from packaging.



**WE SAVED
311 TONNES
CARDBOARD
& PACKAGING**

**40 TONNES
OF
PAPER**

WE AVOIDED

173

**TONNES OF
PLASTICS
METALS
& ELECTRONICS**

¹ Energy and resource efficiency is calculated based on relative performance of the products that takes into account increases in functionality

² based on average UK household energy consumption (Source: DECC, 2015)

What's next?

We're not done yet

Our first product scorecard forms the baseline for all future broadband products to be measured against.

Many teams at Virgin Media and Liberty Global will be involved in ensuring the product scorecard is embedded into our processes to drive an improvement in the sustainability performance of our products and therefore an improvement on the 3.0 results.

For us, the focus of the scorecard is not just the Hub 3.0 results, but how it will enable us to measure and drive improvement from that baseline over time.

And our latest TV product is already being put through the scorecard.

Next steps

- 1. Impact on the environment**
Continue to work with our suppliers to improve their environmental impacts and utilise their expertise in lifecycle thinking and eco-design
- 2. Resource consumption**
Focus on reducing the weight of electronics relative to the functionality of the product, and introduce recycled content into the product casing
- 3. Climate change**
40% of the energy our routers use in 24 hours is from their idle modes, so we're going to focus on making them more efficient
- 4. Waste**
Further advance our ability to refurbish, reuse and recycle our products by making it even easier to disassemble products into constituent parts
- 5. Supply chain**
Work with our suppliers to secure the highest standards in all areas of social issues such as labour rights and fair business practices
- 6. Product responsibility**
Maintain our high standard by ensuring all our products are accessible and are used in a responsible way, and look to improve where and when possible