VMED O2 Green Bond Framework

Introduction

Virgin Media O2 Joint Venture

Virgin Media O2 ("the Joint Venture") launched on 1 June 2021, a 50:50 joint venture between Liberty Global and Telefónica SA, which brought together Virgin Media’s operations in the UK (Virgin Media) with O2 Holdings’ operations in the UK (O2 Group). This Green Bond Framework was developed ahead of the Joint Venture forming – a period in which legal restrictions prevented O2 Group and Virgin Media from developing a combined sustainability programme for the newly combined operations – and as such, the focus of this Green Bond Framework is on Virgin Media’s already existing sustainability strategy, the Meaningful Connections Plan.

Now the transactions to form the Joint Venture have closed, the Joint Venture will review the existing programmes and establish a single sustainability programme for the newly combined operations. Once the sustainability programme for the combined operations is in place, this Green Bond Framework will be reviewed and where necessary amended. We would expect the outcome of this review to be the identification of additional Eligible Green Projects for the Joint Venture as opposed to any material removal of VM Eligible Green Projects (as defined and discussed below), as well as revision to the governance committee arrangements.

The Joint Venture will use its combined connectivity, people and brands to create a lasting positive impact on the communities we serve, while accelerating action on climate change – this includes a public goal to achieve net zero carbon operations (scopes 1 & 2) by the end of 2025.

Virgin Media in the UK

Virgin Media (Virgin Media Inc. and its subsidiaries) offers four multi award-winning services across the UK: broadband, TV, mobile phone and landline.

Our network delivers the fastest widely-available broadband speeds to homes and businesses. We’re expanding this through continued investment in our Project Lightning programme, which has seen our network footprint reach an additional 2.6 million premises so far to pass 15.4 million UK premises overall. We are also investing to bring next-generation gigabit speeds to our entire broadband network by the end of 2021, making us the UK’s largest gigabit operator.

Our interactive TV service brings live TV, thousands of hours of on-demand programming and the best apps and games to customers through a set-top box, as well as on-the-go through tablets and smartphones.

Virgin Mobile launched the world’s first virtual mobile network and offers fantastic value and innovative services with 5G connectivity. We are also one of the largest fixed-line home phone providers in the UK.

Through Virgin Media Business we support entrepreneurs, businesses and the public sector, delivering a range of connectivity and tailor-made services.

Virgin Media Sustainability Strategy – Meaningful Connections Plan
We’re here to build connections that really matter. Through our products and services, we help people stay connected to the people and things they love, every day.

Our purpose, building connections that really matter, drives our decision making every day. We want to use the power of our brand, our people and our connectivity to create positive change in society.

That’s where our Meaningful Connections Plan comes in. It’s our bold new sustainability plan with three big promises to go even further over the next five years and beyond. It’s about building connections that really matter for people, communities and the environment.

Our three promises for the next five years

• **Better for people:** It all starts with us - our people and our customers. We want to build a business where all our people and customers feel they belong, and no one is left behind. That’s why we’re creating hundreds of new opportunities for people from underrepresented communities to access skills and employment.

• **Better for communities:** As a society, we’re more digitally connected than ever before, and yet loneliness and isolation continue to rise. We’re going to bring people and communities closer together, harnessing the power of our network and brand to help 1.5 million people feel more meaningfully connected to their communities and each other by the end of 2025. And by ‘Meaningful Connections’ we mean “a connection, human or digital, that reduces loneliness and builds community belonging.” We’re starting by supporting unpaid carers whose experiences of loneliness often goes unseen. We’ll also empower our people to connect to their communities through volunteering, connect people in local neighbourhood digitally and in person, and support brilliant organisations helping put an end to loneliness and boost belonging in their towns.

• **Better for the planet:** Entertainment and digital services are at their best when they’re truly limitless – but our planet is not. So we’re going to shrink our impact on the planet by using the unlimited
potential of connectivity to accelerate a zero waste, zero carbon future, faster. We set a big goal to reach net zero carbon and zero waste across our operations by the end of 2025.

And our plan is underpinned by;

- **Better business:** We’re committed to running our business in a truly responsible way, just as our people and customers would expect. That means looking beyond our proactive environmental and social impact programmes and focusing on how we do business, every day.

**Better for the planet**

We believe entertainment and digital services are at their best when they are truly limitless - however it’s becoming more apparent than ever that our planet isn’t. As a digital enabler that serves millions across the UK, our ultrafast connectivity is the backbone for a green revolution, from home working to smart technology in the home and intelligent transport systems.

But our efforts can’t stop there, so we are accelerating change within our own business and operations to make a zero carbon and zero waste future happen, faster. Our goal - achieve net zero carbon and zero waste operations by end of 2025.

Our plan:

**Net Zero Future – Achieve Net Zero Operations by end of 2025**

Businesses often feel compelled to choose between an approach that rewards investment in renewable energy or efficiency, when in reality both are needed. Recognising this, the Joint Venture is committing to address both.

- We will drive energy efficiency and transition our fleet to electric vehicles as part of Science Based Targets. Target - Reduce our operational footprint by 25% by the end of 2025 (on a 2019 baseline), putting us on track to support one of our parent company Liberty Global’s SBTi approved target of 50% reduction by 2030.

- We will support investment in renewable energy and carbon removal from the atmosphere. Target – Net Zero Operations by end of 2025 by sourcing 100% renewable electricity and investing in carbon removal offsetting schemes for remaining emissions

- We will work with our supply chain to reduce emissions with a particular focus on the lifecycle impact of our products Target – Support Liberty Global’s SBTi approved target to reduce scope 3 emissions by 50% by 2030

- We will support the decarbonisation of the UK economy by providing the connectivity to underpin a low-carbon digital revolution, support the rollout of on-street electric vehicle charging through Liberty Charge and use our TV platform and partnerships to amplify and encourage engaging climate content

- We will continue our support for the Media Climate Pact launched in November 2020

**Nothing wasted – Become a zero waste operation by end of 2025**

We have millions of electrical products in customers’ homes, a logistics operation that sends equipment around the country, we dig miles of trenches to expand our network, and we have over 11,000 people working across the country. All of this means we have a responsibility to address the waste we produce, and create a more circular model where material is valued and kept in use, so that
it never becomes waste. To address this we have committed to the following targets, all by end of 2025.

• Zero waste operations – with at least 95% of all potential waste created by our business being reused or recycled

• Every broadband or TV product sent to customers will contain at least 75% recycled plastic content or be a refurbished product. We expect to save over 5,000 tonnes through our avoiding material in design, using recycled content and refurbishing and reusing our customer products

• 100% of returned broadband and TV products to be reused or recycled

• 100% of customer packaging to be recyclable and no single use plastic

• We will work with our network expansion and field partners to set a target for excavated waste

**Green Bond Framework**

To support Virgin Media’s Meaningful Connections Plan, the Joint Venture has established this Green Bond Framework ("the Framework"), under which the Joint Venture can issue Green Bonds to finance or refinance projects of Virgin Media, enabling Virgin Media to meet its environmental objectives. The Framework is aligned with the ICMA Green Bond Principles ("the GBP", 2021), which are a set of voluntary guidelines that recommend transparency and disclosure, and promote integrity in the development of the green bond market.

The Framework is presented through the following key pillars:

- Use of Proceeds
- Process for Project Evaluation and Selection
- Management of Proceeds
- Reporting
- External Review

The Framework outlines the commitments made by the Joint Venture with respect to any Green Bonds that will be issued.

**Use of proceeds**

The Joint Venture will finance Eligible Green Projects of Virgin Media ("VM Eligible Green Projects") that support Virgin Media’s transition to a net zero carbon and zero waste future for the UK. Refinancing of VM Eligible Green Projects will have a look-back period of no longer than 36 months from the time of issuance. The net proceeds or an amount equal to the net proceeds raised through any green bonds will be allocated to the financing and refinancing of VM Eligible Green Projects as defined in this Framework.

A list of VM Eligible Green Projects that may be considered by Virgin Media is shown below, together with the alignment to the Sustainable Development Goals ("SDG") adopted by the United Nations:

<table>
<thead>
<tr>
<th>GBP category</th>
<th>VM Eligible Green Projects</th>
<th>SDG Alignment</th>
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| Energy efficiency| • Rollout of full-fibre networks which underpin the UK’s digital revolution and enable smart cities, smart homes and smart transport systems  
<p>|                  | • Achieving target of PUE &lt;1.5 for data centres through our data centre energy efficiency and free cooling programme known as OREO (overall room energy optimisation) |               |</p>
<table>
<thead>
<tr>
<th>Area</th>
<th>Actions</th>
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<tbody>
<tr>
<td>Energy efficiency</td>
<td>• Rolling out digital fixed-line telephony (VOIP) in place of traditional copper-based systems, driving energy efficiencies</td>
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<td>• Purchase of more power efficient Customer Premises Equipment (CPE) (CPE purchases also drive Circular Economy benefits including (i) increasing the recycled content in manufacture and (ii) maximising end of life recycling).</td>
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<td></td>
<td>• LED swap-outs in technical and people sites</td>
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<td></td>
<td>• Virtualisation of network delivering energy efficiency benefits</td>
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<td></td>
<td>• Electrical power monitoring systems for the network</td>
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<td></td>
<td>• Effective Life Cycle management of electrically powered Network, Technical site and IT assets</td>
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<td></td>
<td>• Vehicle fuel efficiency software</td>
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<tr>
<td>Renewable energy</td>
<td>• Sourcing renewable electricity to power our network and increase market demand for renewable generation</td>
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<td></td>
<td>• On-site renewable power generation to reduce grid dependency and increase security of supply e.g. solar PV installations on technical sites</td>
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<td>Clean transportation</td>
<td>• Switching fleet of over 4,000 vehicles to electric vehicles and hybrid vehicles that comply with a 75Gco2/passenger threshold</td>
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<td>• Electric vehicle charging at people sites</td>
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<td>Circular economy</td>
<td>• Electrical product take-back, repair and refurbishment to enable the reuse of customer products</td>
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<td>adapted products,</td>
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<td>production technologies and</td>
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<td>processes</td>
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The SDG noted above are:

7 Affordable and Clean Energy,
9 Industry, Innovation and Infrastructure,
11 Sustainable Cities and Communities, and
12 Responsible Consumption and Production

**Process for project evaluation and selection**

Projects financed through the net proceeds or an amount equal to the net proceeds of any Green Bond(s) issued under this Framework will be evaluated and selected based on compliance with the Green Bond eligibility criteria outlined above.

Virgin Media established a ‘Better for the planet’ steering committee (“the Committee”) which will oversee the selection of VM Eligible Green Projects in accordance with the eligibility criteria described above. The Committee is comprised of senior representatives from relevant operational teams and supported by the Sustainability and Finance teams. It is chaired by the Chief Technology Officer, previously a member of the Virgin Media Executive Committee and now a member of the Joint Venture Leadership Team. As set out in the Introduction to this Framework, this governance approach will be reviewed following the launch of the Joint Venture’s sustainability strategy for the combined Virgin Media O2 operations.

**Management of proceeds**
The net proceeds or an amount equal to the net proceeds of any Green Bonds raised under this Framework will be allocated by the Joint Venture to finance or refinance VM Eligible Green Projects, as per the eligibility criteria and project selection process outlined above. Such allocation will be reflected in the Joint Venture’s internal records by the use of a Green Bond Register. The Green Bond Register will be administered by the Joint Venture Finance team. Proposals for the allocations of eligible spend will be subject to the review and approval of the Committee prior to their inclusion in the Green Bond Register. The Joint Venture intends to allocate the net proceeds or an amount equal to the net proceeds of a Green Bond to finance or refinance VM Eligible Green Projects within three years from the date of issuance of the applicable Green Bond. Any portion of the net proceeds or an amount equal to the net proceeds of a Green Bond that has not been allocated to VM Eligible Green Projects will be managed in accordance with the Joint Venture’s standard liquidity management practices.

**Reporting**

The Joint Venture will make available reports covering allocation of the net proceeds or an amount equal to the net proceeds to the VM Eligible Green Projects and reports on the impact of the VM Eligible Green Projects. The reporting will be made available within one year from the issuance of any Green Bonds and will be updated annually until full allocation of the Green Bond net proceeds or an amount equal to the net proceeds. The reporting will be on an aggregate basis, at the level of the project portfolio. It will be available on the Joint Venture’s website [www.virginmediao2.co.uk](http://www.virginmediao2.co.uk) and will include:

**Allocation reporting**

- Total amount allocated to the VM Eligible Green Projects Portfolio, reported by project category
- Share of net proceeds or an amount equal to the net proceeds used for financing vs. refinancing
- Balance of unallocated proceeds

The Joint Venture intends to engage their external auditor to review the reporting of the allocation of proceeds towards VM Eligible Green Projects.

**Impact reporting**

On a best effort basis, the Joint Venture intends to report on the environmental impacts achieved by VM Eligible Green Projects funded by the net proceeds. The impact reporting will include a description of VM Eligible Green Projects and impact metrics such as listed below measured at the level of the overall business. Where relevant, information may be provided on data reporting, and impact assessment methodologies, to increase transparency. Impact indicators may include:

- Tonnes of CO2e (scope 1 and 2) per Terabyte data
- Tonnes of CO2e (scope 1 and 2) per RGU
- Tonnes of CO2e (scope 1 and 2)
- Electricity use (kWh) per Terabyte data
- Numbers of CPE (Set top boxes & modems) returned, re-used or re-cycled per annum
- Percentage of electric vehicles out of total owned and leased vehicle fleet at most recent year end

**External Review**
VMED O2 UK Financing I PLC has engaged an external verifier, Sustainalytics, to review this Framework. Sustainalytics has provided an independent Second Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles. This document will be available on VirginMediaO2’s website, along with the Framework.

On an annual basis, an external auditor (KPMG or any subsequent external auditor) will review the allocation of proceeds towards VM Eligible Green Projects, as provided in the annual allocation report.

**Sustainability in the Joint Venture with O2**

On May 7, 2020, Liberty Global and Telefónica, among others, entered into a Contribution Agreement and agreed to form a 50:50 joint venture combining Virgin Media’s operations in the UK with O2 Holdings’ operations in the UK. This Joint Venture was consummated on June 1, 2021. The O2 Group operations in the UK previously fell under Telefónica’s sustainability programme. Now the transactions to form the Joint Venture have closed, the Joint Venture will review the existing programmes and establish a single sustainability programme for the newly combined operations. Once the sustainability programme for the combined operations is in place, this Green Bond Framework will be reviewed and where necessary amended. We would expect the outcome of this review to be the identification of additional VM Eligible Green Projects as opposed to any material removal of VM Eligible Green Projects set out above, as well as revision to the governance committee arrangements.

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