VodafoneZiggo

Green Bond Framework

Introduction

VodafoneZiggo is a leading Dutch company that provides fixed, mobile and integrated communication and entertainment services to consumers and businesses. As of September 30, 2020, we have over 5 million mobile, nearly 4 million video, over 3 million fixed broadband internet and approximately 2.5 million fixed telephony subscribers.

Following the formation of the joint venture VodafoneZiggo, we are adding value to our customers through each and every connection related to our video, broadband internet, fixed-line telephony and mobile services. We enable our customers to connect with their loved ones and build new meaningful relationships and enjoy fantastic content and entertainment in familiar and refreshing ways, thereby creating more satisfying experiences for our customers.

The formation of VodafoneZiggo, created a national, fully converged organization in the Netherlands and, as such, we believe we are able to better serve our customers and compete with our key competitors. As a converged company, we are able to create growth opportunities, including quad-play, and cross-selling and upselling opportunities. We are improving customer satisfaction and loyalty to our company and the services we provide. Furthermore, we are leveraging the knowledge and expertise of our ultimate parent companies, Liberty Global and Vodafone, and have made good progress in integrating and operating as one converged company.

From a strategic perspective, we are building broadband communications and mobile business that have strong prospects for future growth. We strive to achieve organic revenue and customer growth in our operations by developing and marketing bundled entertainment and information and communications services, and extending and upgrading the quality of our networks where appropriate. With specific bundling of communication with relevant cloud services in workplace and IOT, we support our B2B customers' transition to the cloud. While we seek to obtain new customers, we also seek to optimize the customers' satisfaction and revenue from each household by increasing the penetration of our digital cable, broadband internet, fixed-line telephony and mobile services with existing customers through product bundling and upselling.

In March 2020, the World Health Organization declared the outbreak of COVID-19 to be a global pandemic. In this new reality connection is paramount. Observed in the changing consumer, where the home is now central to our work and personal life, but also connectivity being essential for economic prosperity and physical wellbeing. Our networks often play a key role in this regard, leading to redefined forces. With a core focus on keeping our clients connected, alongside strengthening networks VodafoneZiggo is also looking at what more we can do. For example, helping customers with working from home and online teaching as well as the elderly. The digital acceleration resulting from the current situation will contribute to a sustainable transition.

Sustainability Strategy

VodafoneZiggo plays a positive role in the day-to-day lives of millions of people. While we're very proud of this, our ambitions even go beyond providing valuable services. We also want to do this in the most social and sustainable way possible, so we can have a positive impact on Dutch society. That's why we're helping clients, colleagues and suppliers to make conscious choices. It's a responsibility that we're happy to take on, and it's also what our customers and civil society organisations expect from us as a supplier of critical services. Under the title People, Planet, Progress, we're launching VodafoneZiggo's new CSR ambition for 2025, which is defined as: to halve our impact on the environment and help two million people move forward in society. We're focusing on urgent issues such as the climate crisis, pollution and social inequality. VodafoneZiggo views CSR (Corporate Social Responsibility) as a colourful spectrum of responsibilities, geared towards our consumption, our behavior, our people, and our social contribution and CSR forms an integral part of our strategy. As a Company we will focus our efforts on the following five areas:

1. Everything for a healthy environment

If you would like to be sustainable, every detail is important. We're therefore pursuing 3 goals: to further increase our sustainability as an organisation, enable customers to be more environmentally friendly, and inspire our staff

to work and live in an environmentally- conscious way. We're working on these key objectives in more than 50 ways. For example, we're constantly reducing our waste across the organisation, and using energy more efficiently every year. We only use wind energy and our carbon footprint is fixed at net zero. We encourage customers to return their phones for recycling and we like to give our Ziggo Mediaboxes a second life. We're also constantly studying ways of making our products and services more sustainable. And our employees? They all have a public transport chip card, for example. Together with them, we're becoming more and more sustainable every day.

2. Equal opportunities in the digital society

The digital society offers people endless possibilities. If you have digital skills, in any case. Those not up to speed with digital technology quickly fall behind and miss crucial opportunities. We want the whole of the Netherlands to have access to the digital society and reap the benefits of it, which is why we teach schoolchildren how use the internet skillfully, safely, and carefully. We also make elderly people digitally literate and self-reliant. In order to reach as many people as possible, we're happy to share this knowledge – both personally and via our partners. That is why there are programs organized where colleagues are teaching as volunteers or personally help elderly people to use the internet. In this way, we can all benefit from the digital transformation.

3. A diverse and inclusive culture

A Dutch company with international allure – thanks to our two parent companies Liberty Global and Vodafone, VodafoneZiggo is part of a global organization as we are leveraging the knowledge and expertise of our parent companies. This is reflected in the workplace, where colleagues from all kinds of backgrounds work together. Our people are just as diverse as our customers and our work. All these different talents, perspectives and backgrounds stimulate valuable discussions, which in turn lead to innovation and better results. We're building an inclusive culture with equal opportunities for men and women. There's plenty of space for people of any origin and LGTB+, and suitable work for people with an occupational disability. VodafoneZiggo is literally and figuratively a workplace without barriers. Whoever you are, and wherever you come from, you're welcome here.

4. Technology for society

Connectivity is a vital part of everyday life. It contributes to health, safety, quality of life and entertainment. That's why we're fully committed to technology that serves our society. By continuously improving our networks. And by contributing to countless innovations in the field of the Internet of Things. These include wearables with which a patient can rehabilitate safely at home. And the smart monitoring system that watches over the Dutch dikes day and night. We also have an eye for social applications, such as the robot that helps a sick child stay in contact with his or her class, and our programme that provides disaster areas with a mobile network. Impressed? This is just the beginning. We're constantly introducing new applications. It's a challenge and a privilege.

5. Sustainable purchasing of services and products

Our products and services have already come a long way before they reach the customer. Take, for example, the raw materials and infrastructure, such as the media boxes and transmission towers. The energy that we use is also part of the chain. The end point of the chain is when our customers can make calls, watch TV and use the internet through us. We want this entire journey to be responsible and sustainable. What does this entail? That everyone works safely and earns a fair wage. That we save the environment as much as possible. And that we handle the personal data of our customers very carefully. We scrutinise all our suppliers for this. And that's not all. We also help them to keep improving their social performance. This is how we're keeping our footprint small worldwide, no matter how big we are.

In short, VodafoneZiggo is committed to its Corporate Sustainability, focusing on their Environmental, Social and Governance ("ESG") policies to ensure a more sustainable business performance. We believe that ESG driven decision making drives a more sustainable business performance. On the below chart we clarify specific targets to highlight our commitment. The following examples can be identified for the Environmental impact of our decision making:

Within our Energy Management Program we maximize energy efficiency, savings and innovations by effectively managing all energy related topics, including: processes, projects, tools and contracts.

- We are committed to achieve a 2% energy efficiency improvement every year
- We are focused on reducing greenhouse gas emissions and we use 100% wind energy
- We offer an unlimited public transport card for all employees to encourage and promote the use of public transport
- As mentioned before, E-waste management is seen as a shared responsibility and as a result we refurbish set-up boxes and modems and use eco-friendly packaging. We also offer a financial incentive to customers for selling their old smart phones back to us

Green Bond Framework

To support its sustainability strategy, VodafoneZiggo has established this Green Bond Framework ("the Framework"), under which VodafoneZiggo can issue Green Bonds to finance or refinance projects, enabling the company to meet its environmental objectives. The Framework is aligned with the ICMA Green Bond Principles (GBP, 2018)[1], 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 VodafoneZiggo's commitments with respect to any green bonds that will be issued.

Use of Proceeds

VodafoneZiggo will finance Eligible Green Projects that support the transition towards low-carbon climate resilient growth with lower environmental impact. Refinancing of 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 Eligible Green Projects as defined in this Framework.

A list of Eligible Green Projects that may be considered by VodafoneZiggo is shown below:

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[1] https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/

GBP category	Eligible Green Projects	SDG mapping
Renewable Energy	– Investment to improve energy mix through energy agreements focussed on European windfarms, and investment in electricity from renewable sources such as solar and wind	7 AFFORDABLE AND CLEAN ENERGY
Energy Efficiency	**Internet of Things ("IoT") – development and operation of networks, services and products that are specific to enabling IoT:** – Narrowband Internet of Things (NB-IoT) and enhanced Machine-Type Communication (eMTC) for low-power, low-cost IoT supporting: smart metering, smart lighting, smart parking and the sharing economy – High-performance IoT or ultra-reliable, low-latency communication (URLLC) to drive efficiency gains through industry automation – Low-complexity IoT or massive Machine-Type Communication (mMTC) as enablers for smart cities **Deployment or Research and Innovation in IoT solutions and products such as, but not limited to:** – Investments in smart logistics, mobility, and fleet management to maximise efficiency – Smart metering solutions **Invest and operate energy saving software to improve energy efficiency of everyday operations. Examples include, but are not limited to:** – Remote management and data management applications – Machine learning and artificial intelligence (AI) applications to reduce energy consumption – Evaluation of SON including AI dynamic power management (active network demand pattern recognition to dynamically switch between power modes) – Servers virtualization, radio access network (RAN) sharing and further power saving features **Network transformation (fixed + mobile) that result in energy efficiency, including but not limited to modernisation of network related to broadband, video and telephony services. Examples include, but are not limited to:** – Modernisation of Customer Premise Equipment including cooling optimization, efficient power amplifier, modernization of active antenna and projects related to digital process transformations – Retrofitting of legacy networks for fixed and mobile, including placement of legacy radio equipment and investments in 'PowerCube' hybrid technology, which integrates energy supply with onsite battery storage, lithium-ion, lead carbon, flow batteries, fuel cells and large scale energy storage	7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES

	− Giganet: Shutting down old analogue technology, improving our spectrum efficiency by expanding fixed spectrum bandwidth to 1.2Ghz and acquiring new mobile spectrum licenses enabling 5G and replacing EuroDocsis 3.0 while implementing Docsis 3.1	
Clean transportation	− Provision of business public transport cards to employees, paid for by the company, to encourage public transport usage − Electric vans and bikes for technicians − Green lease policy to encourage cleaner and electric vehicle cars	11 SUSTAINABLE CITIES AND COMMUNITIES
Eco-efficient and/or circular economy adapted products, production technologies and processes	− Refinance any costs related to recycling of packaging − Implement measures to reduce E-waste (e.g. refurbishing and recycling of set up boxes and mobile phones) − Implement changes to reduce plastic usage and/ or wastage in the value chain	11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Green Buildings	− Ensure that buildings are certified in accordance with "recognised energy saving measures" at a minimum C rating by 2023 − Energy Efficient Measures including, not limited to: upgrade properties to improve PUE with a targeted PUE of <1.5 by 2025, power & cooling optimisation, use of base station free air cooling (e.g. adiabatic), smart metering, smart management, LED lighting, Infrastructure optimization, reduction overall location footprint − Invest in New Build Office buildings that have an energy label of A+ − Increasing energy efficiency & reducing energy consumption through the decommissioning & consolidation of fixed and mobile network sites, and reduction in floor space	11 SUSTAINABLE CITIES AND COMMUNITIES 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.

VodafoneZiggo has established an inter-departmental Green Bond Committee (the "Committee) which will oversee the selection of Eligible Green Projects in accordance with the eligibility criteria described above. The Committee is comprised of representatives from VodafoneZiggo's Treasury and Corporate Social Responsibility Teams, including the Head of Treasury, Treasury manager, Head of CSR and CSR manager.

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 VodafoneZiggo to finance or refinance Eligible Green Projects, as per the eligibility criteria and project selection process outlined above. Such allocation will be reflected in VodafoneZiggo's internal records by the use of a Green Bond Register. VodafoneZiggo intends to allocate the net proceeds or an amount equal to the net proceeds of a Green Bond to finance or refinance 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 Eligible Green Projects will be managed in accordance with VodafoneZiggo's standard liquidity management practices.

Reporting

VodafoneZiggo will make available reports covering allocation of the net proceeds or an amount equal to the net proceeds to the Eligible Green Projects and reports on the impact of the 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 VodafoneZiggo's webpage (www.vodafoneziggo.com) and will include:

Allocation reporting

- Total amount allocated to the 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

VodafoneZiggo intends to request an auditor's report to confirm the allocation of proceeds towards Eligible Green Projects.

Impact reporting

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

- Tons of CO_2 equivalent emission /Terabyte (mobile network)

- Tons of CO_2 equivalent emission / RGU[2] (fixed network)

- Energy use per Terabyte/ annum (in MWh)

- Square meter of green buildings, by certification type and level

External Review

VodafoneZiggo has engaged an external verifier to review the Green Bond Framework. The independent Second Party Opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles has been received by Sustainalytics. The document is available on VodafoneZiggo's webpage, along with the Green Bond Framework.

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

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[2] Revenue Generating Units (RGU) are separately a Basic Video Subscriber, Enhanced Video Subscriber, Internet Subscriber or Telephony Subscriber. A home, residential multiple dwelling unit, or commercial unit may contain one or more RGUs.

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