

# Green Bond Framework

## Cyfrowy Polsat S.A. Capital Group



Warsaw, 15 January 2020



N E T I A

## CONTENTS

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>Introduction</b> .....  | <b>3</b> |
| <b>2</b> | <b>Use of Proceeds</b> .....   | <b>5</b> |
| 2.1      | Energy efficiency.....   | 5        |
| 2.2      | Renewable energy .....   | 5        |
| 2.3      | Eco-efficient and/or circular economy adapted products, production technologies and processes..... | 6        |
| 2.4      | Pollution prevention and control.....  | 6        |
| 2.5      | Green buildings .....  | 6        |
| <b>3</b> | <b>Process for Project Selection and Evaluation</b> .....  | <b>7</b> |
| <b>4</b> | <b>Management of Proceeds</b> .....  | <b>8</b> |
| <b>5</b> | <b>Reporting</b> .....   | <b>8</b> |
| 5.1      | Allocation reporting .....   | 8        |
| 5.2      | Impact reporting .....   | 8        |
| <b>6</b> | <b>External review</b> .....   | <b>9</b> |
| 6.1      | Second Party opinion (pre-issuance).....   | 9        |

# 1 INTRODUCTION

Cyfrowy Polsat S.A. Capital Group (hereinafter “Cyfrowy Polsat Group”, the “Group”) is the largest provider of integrated media and telecommunication services in Poland. We are the leading pay TV provider and one of the leading telecommunications operators in the country. We are also one of Poland’s leading private broadcasters in terms of both audience and advertising market shares. We offer a complete package of multimedia services designed for the entire family: pay TV via satellite, terrestrial and online (IPTV and OTT) broadcasting, mobile and fixed-line telephony, data transfer services and broadband Internet access, mainly in LTE and LTE Advanced mobile technologies and also through the fixed-line network, incl. FTTH technology. We also provide a wide array of wholesale services to other telecommunication operators, television operators and TV broadcasters.

Our mission is to create and deliver the most attractive content, telecommunication products and other services for the home as well as for individual and business customers, using state-of-the-art technologies, to provide top quality multiplay services that match the changing needs of our customers while maintaining the highest possible level of their satisfaction.

As the largest TMT group in Poland we are aware of the impact that our operations and activities have on local communities, the society and the environment. We also recognize the potential we have to educate and promote a sustainable approach to production and consumption. We are therefore committed to offering our customers state-of-the-art connectivity and digital services, and technological solutions in a way that contributes to social and environmental sustainability.

Our strategy is centered around providing content, connectivity and digital services to everyone everywhere. We believe that a transition to more advanced, efficient and green technologies today will yield tangible social and environmental benefits tomorrow. As an example, we innovate our mobile and fixed networks using smart, state-of-the-art technologies and IT solutions, which leads to a substantial reduction of energy consumed per unit of data transmitted and lower demand for power. Going a step forward, improved connectivity helps bridge the digital divide and enhances access to information, development, education and employment opportunities for individuals and thus improves the lives of Polish individuals and benefits the society as a whole.

Given the specific nature of our activities, in our business as usual activities we follow a set of principles and best practices that focus on the following key issues:

- **rational and thrifty management of electrical energy**

In the wake of rapid technological advance and changing consumer preferences the telecommunication industry faces, and will continue to face in the future, exponential growth of demand for data traffic. It is predicted that by 2022 global mobile data traffic will be equivalent to 7 times the volume of traffic in 2017<sup>1</sup>.

In order to meet both present and future consumer demand, we modernize our mobile and fixed networks and systematically develop our IT systems and data storage solutions. We are committed to implementing such solutions that ensure increased energy efficiency and allow for tangible power consumption savings, thus contributing to a reduction of our GHG footprint. To that end we invest in optimizing (incl. periodical switch-offs) of our cooling systems of our mobile base transceiver stations and switch to more energy efficient electronic equipment and IT solutions. Moreover, we are in the process of replacing our still existing old copper-based fixed networks with fiber optic based technologies. In our Poland-based set-top box and router manufacturing plant we continuously seek to implement energy saving solutions in terms of building maintenance and production technology. We also consequently retrofit latency IT systems and equipment, which translates into greater productivity and efficiency, and ultimately energy savings.

---

<sup>1</sup> 2019 Cisco Visual Networking Index Global Mobile Data Traffic Forecast

- **restriction of the environmental impact of base stations and transmitters**

We participate and listen carefully to the opinions that appear in public discussions regarding the alleged potentially harmful influence of mobile base transceiver stations. Relevant permits, required by Polish law, are secured for each of our base stations before it is put on-air. These include permits related to environmental impact. We also pay close attention to the location of newly constructed base stations and conform with any environment-related restrictions that are in force.

- **waste management and recycling**

Due to the technology-related nature of our operations, e-waste is an important issue for Cyfrowy Polsat Group. We introduce significant numbers of end-user electronic devices to the market every year and consequently we make every effort to ensure that as much of that obsolete equipment as possible is recycled. We also recycle latency hardware and other electronic equipment within the organization. It is not only a way of reducing the volume of e-waste but above all a method of reducing the negative impact that old devices have on the environment, thus contributing to reduced GHG emissions. At the same time recycling enables recovery of many valuable and rare metals for the industry.

- **products launched to the market meet the requirements of relevant norms and regulations**

As a producer and distributor of electronic devices, we strive to minimize the negative impact on the environment that the equipment designed and produced by us in our set-top box and router manufacturing plant, in particular by using environment-friendly materials, recycled packaging, as well as optimal loading of distribution vehicle in order to reduce GHG emissions. Our set-top box manufacturing plant has certificates of quality management systems: PN-EN ISO 9001:2015, PN-EN ISO 14001:2015 and PN-EN PN-N-18001:2004.

- **consumption of raw materials**

We act to promote resource efficiency through sustainable consumption and production. In our daily operations we aim to use resources and energy efficiently by implementing sustainable production technologies and processes.

The Group is dedicated to promoting sustainability in general, environmental awareness and protection in particular. We believe that operating in a sustainable way as an organization and encouraging our customers to do likewise not only enhances the efficiency and resilience of our business but also helps to raise social awareness and mitigate some of the most pressing problems the world faces today, including rapid environmental degradation. To underscore this commitment Cyfrowy Polsat Group engaged in the society *Program Czysta Polska* (Clean Poland Program), established in 2019 by Mr. Zygmunt Solorz, our founder and major shareholder. This initiative is dedicated to the protection of natural environment and improvement of air quality.

As part of this commitment to sustainability, Cyfrowy Polsat Group has developed this Green Bond Framework under which it is considering the issuance of green bonds and use of the proceeds to finance and/or refinance, in whole or in part, existing and past projects that promote energy efficiency. In our view such an approach directly links financing to business-relevant projects that enable us to meet our environmental objectives. This document acts as a framework for the selection and evaluation of eligibility of projects to be financed or refinanced using the proceeds, the management of proceeds and reporting. This framework meets the requirements of the International Capital Market Association (ICMA) Green Bond Principles 2018. Sustainalytics has provided a Second Party Opinion on Cyfrowy Polsat Group's Green Bond Framework.

We plan to continue investments that will help to improve the energy efficiency of our organization, telecommunication infrastructure and IT hardware and systems in particular. Sustainable production processes and circular economy related to the manufacturing of our set-top boxes and other end-user devices, as well as waste and e-waste management in a sustainable manner remain important for Cyfrowy Polsat Group, we will continue investments into these fields. We also plan to consistently increase the share of renewable energy, including green energy, in our energy mix.

## 2 USE OF PROCEEDS

Cyfrowy Polsat Group intends to use the proceeds from the Green Bonds issued under this Framework to refinance past and existing projects and assets. Cyfrowy Polsat Group intends to allocate the proceeds to a portfolio of Eligible Green Projects within the following eligible categories. The eligibility criteria set out below will be applicable to existing and past projects, i.e. projects or assets financed up to three reported financial years before the issuance of Green Bonds. This list may be further updated as technologies and other circumstances evolve.

### 2.1 Energy efficiency

- Investments into mobile network transformation aimed at disconnecting data traffic growth from environmental degradation with a view to making it more energy efficient. Deployment and upgrade of mobile networks based on new technologies such as 4G LTE, LTE Advanced and potentially 5G has potential to reduce network energy intensity per unit of data traffic. Despite the fact that network roll-out and increased network capacity lead to higher overall demand for energy, studies demonstrate that mobile communications technology today enables carbon emissions abatement five-fold greater than the carbon emissions from mobile networks and has significant potential to further increase carbon emissions abatement going forward<sup>2</sup>. Investments into mobile network eligible in this category include but are not limited to:
  - the refarming of the 900 MHz frequency band from 2/3G to 4G LTE Advanced;
  - roll-out where necessary, modernization and upgrade of the mobile network based on latest communication technologies, which will ultimately lead to the switch-off of old, energy-intensive technologies, such as 2G and/or 3G;
  - consolidation and/or optimization of technical sites or other network infrastructure with the view to further reducing our overall physical network footprint;
  - investments aimed at increasing transmission network throughput hence contributing to increase network efficiency;
  - implementation of free cooling systems, cooling optimization, power modernization, smart management, intelligent lighting or optimization of power storage;
  - implementation of automatization of network maintenance processes.
- Investments into fixed network transformation including but not limited to the replacement of conventional copper-based technology by fiber optic technology and retrofitting legacy networks;
- Investments into hardware and software aimed at reducing power consumption, including but not limited to, purchase and/or replacement of old, energy-consuming equipment and devices, optimization of cooling systems, smart management, intelligent lighting or optimization of power storage, automatization, servers virtualisation, remote and data management applications, machine learning and artificial intelligence applications.

### 2.2 Renewable energy

Investments or research and development to improve Cyfrowy Polsat Group's energy mix, including but not limited to the purchase of renewable energy, including but not limited to biomass, for electricity consumption under medium and long term power purchase agreements (over 5 years), that will be project-specific to the extent possible.

Cyfrowy Polsat Group uses third party providers for securing its energy needs. We pay close attention to the sources from which energy purchased by us is produced, in particular biomass is the source that has been selected for the next contractual delivery. We can contractually ensure (1) the right to

---

<sup>2</sup> GeSI Mobile Carbon Impact (<https://www.carbontrust.com/media/672238/mobile-carbon-impact-ctc856.pdf>)

perform periodic examination or audit of the energy production sourcing, and/or obtain Guarantees of Origin (GoO) from our energy suppliers, and (2) the source of feedstock as not in competition with food production.

### 2.3 Eco-efficient and/or circular economy adapted products, production technologies and processes

Investments into Cyfrowy Polsat Group’s set-top box manufacturing plant aimed at the optimization and increase of energy efficiency of the production process, improving patterns of resource use related but not limited to environmental friendly packaging and logistics, improving the energy characteristics of the premises, including but not limited to the implementation of cooling systems and other energy efficiency oriented projects.

### 2.4 Pollution prevention and control


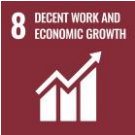


Investments or research and development related to improving waste, in particular e-waste, management within the organization, related to the retrofitting of legacy IT equipment, as well as with regard to end-user devices sold to our customers.

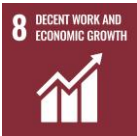



### 2.5 Green buildings

Development, acquisition, leasing and/or renovation of properties that have or will receive a design stage certification, post-construction certification and/or in-use certification in any of the following building certification schemes at the defined level or better:

- BREEAM "Excellent"
- LEED "Gold"
- recognized national and/or international standards of an equivalent scope and level.

In our opinion the eligible criteria outlined above advance the following UN Sustainable Development Goals and targets:

| Eligible Projects Category | SDG Goal  | SDG Target description   |
|----------------------------|---|--|
| Energy efficiency          |  | 7.3 By 2030, double the global rate of improvement in energy efficiency  |
|                            |  | 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead |
|                            |  | 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities          |
| Renewable energy           |  | 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix   |

| Eligible Projects Category   | SDG Goal   | SDG Target description  |
|--|--|---|
| <b>Eco-efficient and/or circular economy adapted products, production technologies and processes</b> |   | <b>8.4</b> Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead |
|  |   | <ul style="list-style-type: none"> <li>• <b>12.2</b> By 2030, achieve the sustainable management and efficient use of natural resources</li> <li>• <b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</li> </ul>   |
| <b>Pollution control and prevention</b>  |   | <b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse   |
| <b>Green buildings</b>   |  | <b>11.10</b> Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilising local materials   |

### 3 PROCESS FOR PROJECT SELECTION AND EVALUATION

Projects financed and/or refinanced using proceeds from Green Bonds shall be evaluated and selected by a dedicated Green Bond Committee in accordance with the Use of Proceeds criteria outlined above.

The Green Bond Committee is composed of 6 members, who hold senior managerial positions in the Technical, Administration, Production, Controlling, Treasury and Investor Relations departments, one from each department. The Committee reports directly to the management board of Cyfrowy Polsat S.A. Meetings of the Committee are called on an as-needed basis, but not less than twice a year. The Committee votes unanimously.

The Green Bond Committee will be responsible for:

- the review and validation of the Eligible Green Projects portfolio based on the defined Eligible Categories listed in the Use of Proceeds section above;
- monitoring the Eligible Green Projects portfolio, during the life of the transaction. Specifically, during the life of each Bond, the committee can decide to replace some Eligible Projects if an Eligible Project no longer meets the eligibility criteria;
- any future updates of the Framework.

For the purpose of this Green Bond issue the selection process of eligible projects is as follows:

- internal brainstorming (with the participation of experts from departments responsible for a given project) on which activities of the Group are consistent with the green bond principles, selection of areas for further analysis,
- internal analyses of the list of projects from selected areas and review process on every project (acceptation or rejection based on expert assessment of environmental impact),
- reporting expenditures related to selected projects from the financial system.

## 4 MANAGEMENT OF PROCEEDS

Any Green Bond funding raised is reflected and tracked in Cyfrowy Polsat Group's accounting and treasury management systems, managed by the finance department of Cyfrowy Polsat Group, for use towards financing or refinancing eligible projects. Internal budgeting, controlling and/or accounting systems are or have been used to identify costs of Eligible Green Projects, which are then marked against funds raised from the Green Bonds issuance. So long as the Green Bonds remain outstanding our internal records will show, at any time, an amount equal to the net proceeds from the issuance of those bonds as allocated to eligible green projects.

## 5 REPORTING

It is Cyfrowy Polsat Group's intention to publish on its corporate website at <https://grupapolsat.pl/en/investor-relations/bonds>, upon full allocation of the Green Bond net proceeds, an executive report covering the allocation of net proceeds to the Eligible Green Project portfolio and, wherever feasible, the impact of these projects, at least at the category level.

### 5.1 Allocation reporting

The allocation report will provide:

- a list of aggregated Eligible Projects financed through Cyfrowy Polsat Group's Green Bonds, including amounts allocated to each group of projects;
- bond proceeds allocated per eligibility category.

### 5.2 Impact reporting

Cyfrowy Polsat Group will, on a best effort basis, provide environmental impact reporting at the level of each eligibility category to support the allocation reporting described above. To the extent possible, impact reporting will also reference impacts on material UN Sustainable Development Goals. When quantitative information is not available or considered sufficiently reliable, contextual information such as case studies that highlight environmental impacts will be provided.

Below is a list of potential Impact Reporting Metrics which Cyfrowy Polsat Group believes serves as meaningful guidance on impact reporting; however, the final reporting could differ from these proposed metrics.

| Eligible green project category  | Proposed Impact Reporting Metrics   |
|--|---|
| <b>Energy efficiency</b>   | <ul style="list-style-type: none"> <li>• Operational energy intensity per relevant unit (eg. per GB of data traffic)</li> <li>• Expected energy savings (GWh)</li> <li>• Estimated avoided/reduced GHG emissions (tCO<sub>2</sub>e)</li> <li>• Service-related relevant indicators</li> </ul> |
| <b>Renewable energy</b>  | <ul style="list-style-type: none"> <li>• Renewable energy generated or purchased (GWh)</li> <li>• Share of electricity consumption from renewable sources</li> <li>• Estimated avoided/reduced GHG emissions (tCO<sub>2</sub>e)</li> </ul>  |
| <b>Eco-efficient and/or circular economy adapted products, production technologies and processes</b> | <ul style="list-style-type: none"> <li>• Estimated avoided/reduced GHG emissions (tCO<sub>2</sub>e)</li> <li>• Expected energy savings (GWh)</li> <li>• Pro-environmental certification in force</li> </ul>   |



---

|   |  |
|---|--|
| <b>Pollution prevention and control</b> | <ul style="list-style-type: none"><li>• Amount of recycled e-waste and other waste (kton)</li></ul>  |
| <b>Green buildings</b>                  | <ul style="list-style-type: none"><li>• Type and levels of certification of properties</li><li>• Expected energy savings (GWh)</li><li>• Estimated avoided/reduced GHG emissions (tCO<sub>2</sub>e)</li><li>• Energy and/or carbon footprint of properties (kWh/m<sup>2</sup>, kg CO<sub>2</sub>e/m<sup>2</sup> or other relevant units)</li></ul> |

---

## 6 EXTERNAL REVIEW

### 6.1 Second Party opinion (pre-issuance)

This Green Bond Framework has been reviewed by Sustainalytics, who has issued a Second Party Opinion. Both the Second Party Opinion and the Green Bond Framework will be made available to the Green Bond investors on Cyfrowy Polsat Group's corporate website.