

INNOVATING WITH ECO-FRIENDLY NEXT-GEN SET-TOP BOXES

A CASE STUDY BY



Summary

As the demand for environmentally friendly customer premises equipment (CPE) grows among end-users, Network Service Providers (NSPs) are prioritizing sustainability and seeking partners committed to an eco-conscious vision for product development.

Proximus and its long-time partner Vantiva began their joint eco-design and innovation journey in 2013 when Proximus launched its V3 set-top box (STB). The partnership has flourished across several device updates, including creating a new, eco-friendly Android TV STB, the V7, in 2020.

Proximus and Vantiva are rolling out the next-generation V7c Android TV STB, which boasts a significantly reduced environmental footprint, including a much lower power consumption and smaller size for reduced shipping costs, compared with its predecessor and other STBs in the market.

These and other environmentally conscious design elements are helping Proximus move closer to its ambitious corporate goal of achieving zero waste by 2030. **Innovating with Vantiva is helping Proximus continue to distinguish itself in the Belgian market through its commitment to environmental stewardship.**



Situation

For more than 20 years, Proximus has maintained a prominent market position and built a foundation for sustainable growth through investments in future-proof networks and technology innovations.



Proximus is a Belgian telecommunications leader serving residential, business, and governmental customers and one of the country's largest providers of television, broadband and mobile services. The company's broad range of products and services, such as its current V7 Android TV STB, give subscribers access to live broadcast programming and allows them to stream shows on their favorite apps and video-on-demand (VOD) content on their TVs.

In a fast-changing environment, Proximus continues to differentiate and stand out to Belgian consumers as an environmentally sustainable operator. Proximus does this through its environmental goals such as reaching net-zero greenhouse gas (GHG) emissions by 2040 and by helping its customers reduce its impact on the environment through products and programs, like the MyFootprint initiative on the MyProximus app. MyFootprint allows end-users to calculate their carbon emissions and show customers how to improve their carbon footprint.

Proximus cannot reach its sustainability goals on its own, as 94% of its emissions are indirect emissions from its value chain. To achieve its targets, Proximus needs support from its suppliers and has launched a supplier engagement program, which Vantiva is a part of, to help reduce Scope 3 emissions and to obtain transparent and objective reporting. The company has additionally renewed its Supplier Code of Conduct to include environmental considerations.

Situation



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The Proximus and Vantiva partnership began in 2013 with the development of the V3 STB and several subsequent versions. When the two companies started developing the V7 Android TV STB, their history of collaboration laid the ideal groundwork for successful eco-initiatives.

During this time, Proximus and Vantiva strategically planned to reduce plastic usage, streamline shipping requirements and lower the unit's power consumption. The outcome has been a STB with an improved eco-footprint across its lifecycle from manufacturing to reuse and recycling.









Drawing from a deep understanding of the specific requirements for Proximus, Vantiva reached out to them in November 2021 with the concept of a next-generation Android TV STB that would feature advanced eco-friendly technologies in addition to industry-first capabilities and innovations.

Based on a long history of successful collaboration plus the vision for a new design that was well-aligned with both market demands and sustainability requisites, Proximus once again chose to join forces with Vantiva to develop its next STB for the Belgian market.

Key Requirements

The top Proximus priority for the new STB was that it be sustainably built and environmentally friendly to bring Proximus closer to its overall sustainability goals.

These progressive aspirations include:

-  **Reach net-zero (GHG) emissions across the company's value chain by 2040**
 -  **Reduce absolute scope 1 and 2 GHG emissions by 95% by 2030***
 -  **Reduce absolute scope 3 GHG emissions by 90% by 2040***
 -  **Become a truly circular company by 2030**
 -  **Reduce absolute scope 3 GHG emissions by 60% by 2030***
 -  **Reuse or recycle up to 90% of waste by 2025 and reach zero waste by 2030**
 -  **Continue to source 100% renewable electricity annually**
 -  **Maintain a minimum of 95% absolute scope 1 and 2 GHG emission reductions from 2030 through 2040***
- *from a 2020 base year

To achieve these objectives, Proximus will not only have to reduce its own emissions, but its suppliers will also need to implement sustainability policies and emissions reductions in their own supply chain.

For its most carbon intensive suppliers, Proximus has set the following expectations, all of which Vantiva has met:

Reduce emissions in line with 1.5°C climate science by halving organizational CO2e emissions (scope 1, 2 & 3) before 2030 and to make this commitment public.

Transition to energy from renewable sources and continuously look for and implement energy efficiencies to reduce over-all energy consumption.

Annual measuring and public disclosure of organizational CO2e emissions (scope 1, 2 & 3) to allow transparency in your progress.

Engage in conversation with Proximus continuously on roadmaps to reduce the environmental footprint of one's organization and of the products & solutions provided.

Proximus also offers an equipment-as-a-service program, so devices are refurbished and repurposed to cut down on waste.

Solution

The Proximus V7c is an eco-friendly and sustainable STB exemplifying the latest in green practices and numerous technology enhancements, such as pioneering video over Wi-Fi 6, boosted memory, and seamless integration with the latest Google release, Android TV 12.

This STB incorporates the eco-initiatives the two companies have worked on together for the past several years and will help Proximus maintain its leadership position as a sustainable brand.



PROXIMUS V7C DECODER

The new, smaller 13cm by 13cm IPTV/OTT enabled V7c STB will be equipped with Wi-Fi 6. This new feature allows the device to be placed in more areas of the home as it is no longer tethered to an Ethernet cable.

This STB consumes between 20 and 40% less energy, allowing the use of a smaller power supply and uses 20% less plastics compared to its predecessor. Additionally, all the plastics used in the box will be 100% post-consumer recycled.

To further optimize the new device's physical footprint and reduce production costs, Vantiva suggested removing outmoded features from the current V7 STB, like the micro-SD card.

The smaller size also facilitates higher product shipping volume per package, contributing to a 46% increase in the number of products per container shipped, further reducing emissions.



+ 46%

PRODUCTS PER CONTAINER



20 to 40%

LESS ENERGY CONSUMPTION



-20%

PLASTICS VS. PREDECESSOR



100%

POST-CONSUMER RECYCLED

Solution

90%

To date, Proximus has been able to refurbish more than 90% of its gateways and set-top boxes. Using less plastics and refurbishing equipment will allow Proximus to close in on its ambition to reuse or recycle up to 90% of waste by 2025 and to reach zero waste by 2030.

The new STB's central processing unit utilizes a 16nm chip compared to a 28nm chip on the previous box—significantly **lowering power consumption while enabling faster operating speed**. The combination of the reduced power consumption and the smaller size of the device allows Proximus to lower its Scope 3 emissions (indirect emissions, such as the fuel used to ship products, the carbon impact from manufacturing of the device, or the electricity used by customers). This brings Proximus nearer to its goal of reaching net-zero emissions by 2040.

Proximus intends to include the V7c in its equipment-as-a-service program so that it can refurbish, reuse and finally recycle them. The V7c's recycled and reduced plastic composition will aid Proximus in its mission to become a circular company by 2030.

Vantiva and Proximus are united by a shared dedication to sustainability and minimizing their combined environmental footprint. The innovative STB exemplifies the remarkable results achievable when two partners unite with a long-term vision for sustainability and environmental stewardship.

