

canopy x CANYON

# PEDAL-DRIVEN PROGRESS: CANYON BICYCLES' PATH TO RESPONSIBLE PACKAGING

A case study on how Canyon Bicycles is innovating its packaging to protect Ancient and Endangered Forests, reduce CO2 emissions, and embrace responsibly sourced and recycled materials.



PRIMARY SECTOR  
Personal Care  
CANOPY INITIATIVES  
Pack4Good



## PACK4GOOD:

Through their partnership with Canopy's Pack4Good initiative, Canyon has joined a global network of over 400 forward-thinking brands committed to protecting Ancient and Endangered Forests. These are vital ecosystems that support biodiversity, store carbon, and sustain local communities. However, the demand for paper packaging drives 10 percent of global logging, resulting in the loss of 3.1 billion trees annually, many of them in these critical forests.

Pack4Good helps brands shift to low-impact alternatives like agricultural residues and recycled materials, reducing their environmental footprint while driving innovation and operational efficiency. By aligning with Pack4Good, Canyon is not only safeguarding the world's forests but also enhancing operational efficiency and driving innovation in their supply chains.

**3.1 B**

trees, many from the world's vital Ancient and Endangered Forests, are destroyed annually for paper packaging.

**400+**

companies have signed on to Pack4Good, representing over 200 billion USD of annual revenue.



## INTRO

Canyon has grown from a small garage start-up into a global leader in high-performance, direct-to-consumer bikes. Committed to promoting healthy, active lifestyles, Canyon also strives to drive positive change across their organization, ecosystems, and supply chains. As the company expands and thrives, they are actively working to minimize their environmental impact by taking responsibility for reducing and managing the use of forest-derived paper packaging.



## Environmental Sustainability Priorities and Approach:

Canyon's approach to environmental sustainability is anchored in protecting Ancient and Endangered Forests, reducing emissions through Science Based Targets (SBTi), and optimizing resource use. As a direct-to-consumer brand, packaging—especially the cardboard Bike Guards that protect their bikes during shipping—is a critical focus area. Canyon has made substantial progress in sourcing materials responsibly and reports environmental progress through the Carbon Disclosure Project (CDP).



## THE CANYON BIKE GUARD:

As a direct-to-consumer brand, Canyon developed the innovative Bike Guard to ensure bikes reach customers safely and securely. Crafted primarily from durable, reusable cardboard, the Bike Guard reflects Canyon's commitment to both protection and environmental sustainability.

In 2023, Canyon sourced 98% of the cardboard for its Bike Guard packaging—shipped from the Canyon factory in Koblenz, Germany—from responsibly managed, certified forests, an increase from 96% in 2022. Canyon prioritizes Forest Stewardship Council (FSC)-certified materials, ensuring that no fibers are sourced from plantations established after 1994. Canyon's broader strategy also includes ambitious targets to increase recycled content and implement smart packaging solutions.

\*FSC Mix is made with a mixture of materials from FSC-certified forests, recycled materials, and/or FSC 'controlled sources.' Controlled sources means the wood is of known origin with a minimum risk that it was harvested in an unacceptable way. The vast majority of FSC-certified pulp globally carries the designation of FSC Mix. Please see Canopy's FSC labels briefer for more: [canopyplanet.org/news/fsc-label-briefer](https://canopyplanet.org/news/fsc-label-briefer)

## KEY INITIATIVES:

Throughout the development and implementation of key initiatives for the Bike Guard, Canyon encountered and overcame various challenges. This process not only deepened understanding of what is achievable but also highlighted areas where technical limitations must still be addressed to further reduce environmental impact.

Canyon's primary goals included reducing the amount of packaging material, redesigning and optimizing the Bike Guard, and selecting more sustainable materials. A central challenge was finding ways to fit a bike into a more compact, optimized Bike Guard—an ambitious task with limited room for downsizing. Following a successful proof of concept for the redesign, it was also essential to assess and measure operational efficiency to ensure feasibility in production.

Another key consideration was the balance between using recycled or reduced materials and ensuring full protection for the bike during shipping. Canyon learned that switching to recycled content does not necessarily always result in lower emissions per se, since there are other factors to consider. For example, replacing plastic components with cardboard required the cardboard to be thick enough to securely hold the bike's cockpit and other parts. This necessary increase in material thickness led to a significant rise in weight, which offset some of the emission savings achieved by reducing plastic use. Extensive testing and multiple prototype iterations were required to achieve the ideal combination of recycled and virgin fibers, along with the appropriate material thickness, to ensure a sturdy, reliable Bike Guard.



# RESULTS OF INITIATIVES

PROJECT	BIKE GUARD OPTIMIZATION	SWITCH TO RECYCLED PLASTICS FOR BAYONET LOCKS	GRAIL 2ND GEN PACKAGING INNOVATION	HANDLE REINFORCEMENT REDESIGN
IMPACT	CANYON REDUCED THE SIZE AND MATERIAL OF THEIR E-MOUNTAIN BIKE (EMTB) GUARDS, DECREASING OVERALL CARDBOARD WEIGHT BY 350G PER UNIT.	CANYON TRANSITIONED FROM VIRGIN POLYSTYRENE TO 100% RECYCLED POLYPROPYLENE (RPP) FOR THEIR BAYONET LOCKS.	BY REDESIGNING THE GRAIL PACKAGING, CANYON INCREASED RECYCLED PLASTIC CONTENT FROM 50% TO 97%.	THE REMOVAL OF A SMALL PLASTIC COMPONENT IN THE HANDLE REINFORCEMENT SAVED 20G OF PLASTIC PER BIKE GUARD.
PROJECT TIMELINE	DEC 2022 - MARCH 2023	AUG 2022 - DEC 2022	OCT 2021 - JUNE 2023	MARCH 2022 - JUNE 2023
ANNUAL CO2 EMISSIONS	-16,744 KG	-44,627 KG	+5,135 KG	-9,257 KG
(-) REDUCED (+) INCREASED				

OVERALL COST SAVINGS

€ 297,900



## Benefits and Impact

Canyon's packaging improvements have led to measurable environmental and cost benefits. In total, these initiatives saved €297,900 and reduced CO2 emissions by 65,000 kg.

These gains align with Canyon's broader sustainability goals, including increasing recycled content and reducing the use of virgin materials, in line with their Pack4Good commitments.

## Lessons Learned

Optimizing packaging for different bike models — such as road bikes, gravel bikes, and e-bikes— proved challenging. Each bike type requires unique adjustments to ensure protection during shipping, requiring close collaboration with suppliers and careful feasibility assessments. Ultimately, these efforts proved worthwhile, resulting in robust packaging that upholds Canyon's high standards for product protection while significantly reducing its environmental footprint.

## Positioning in the Industry

In an industry full of passion and enthusiasm, Canyon uses that positive energy to actively drive change towards more responsible business practices. By embedding environmental, social, and governance (ESG) principles within the company and their eco systems, Canyon demonstrates that success as a company is only possible when we protect Planet Earth. Canyon's focus on People, Planet, and Product ensures that sustainability is not just a goal—it's a guiding principle shared by the entire company.



## Future Goals and Innovations

Canyon has established an eco-design plan for packaging with goals set for 2025 and beyond. These goals reflect their commitment to continuous improvement in sustainability and innovation, including exploring innovative packaging solutions like Next Generation fibres and increasing recycled content.



## CONCLUSION

Canyon Bicycles exemplifies how small changes can create a big impact. From optimizing Bike Guards to incorporating recycled materials across their packaging, Canyon's journey demonstrates that even incremental improvements can drive meaningful progress toward global sustainability goals. Through their partnership with Canopy's Pack4Good initiative, Canyon is setting a new standard for responsible packaging in the cycling industry, proving that innovation can be both high-performance and sustainable.





# PARTNER WITH US TO TRANSFORM YOUR SUPPLY CHAIN AND PROTECT THE WORLD'S FORESTS

CANOPYPLANET.ORG

Through the Pack4Good initiative, we help brands to transform supply chains, reduce waste, and take the pressure off of forests, all while meeting growing consumer demand for packaging that respects the Earth. To date, 400+ companies have signed on to Pack4Good, representing over 200 billion USD in market share, and more companies are signing on every day.

FOR MORE INFORMATION AND TO EXPLORE A CANOPY  
PACK4GOOD PARTNERSHIP, PLEASE CONTACT  
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