



THE VOYAGERS



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Member 1- **Himanshu Srivastava**

Member 2- **Piyush Pranav**

Member 3- **Ayush Gupta**

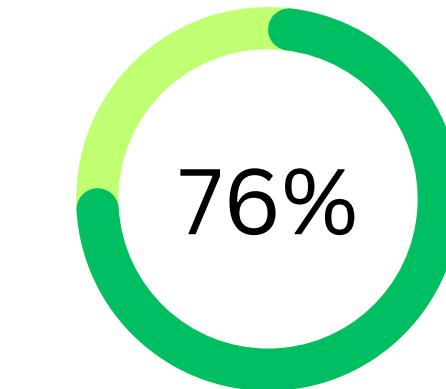
Member 4- **Pratush Gupta**

THEME: **GREEN COMMERCE**

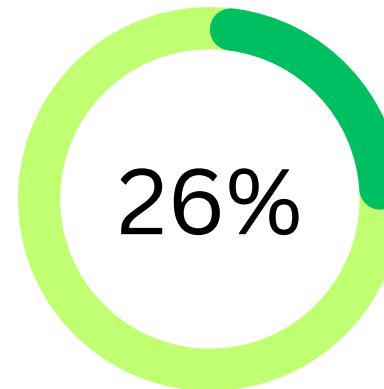


PROBLEM STATEMENT-1

- There is a **growing number of people who want to make responsible choices** in their purchases, supporting products and brands that align with their values of sustainability, ethical sourcing, and reduced environmental impact.



People Who Want To Make
Green Choices



Percentage Of Them
That Actually Do

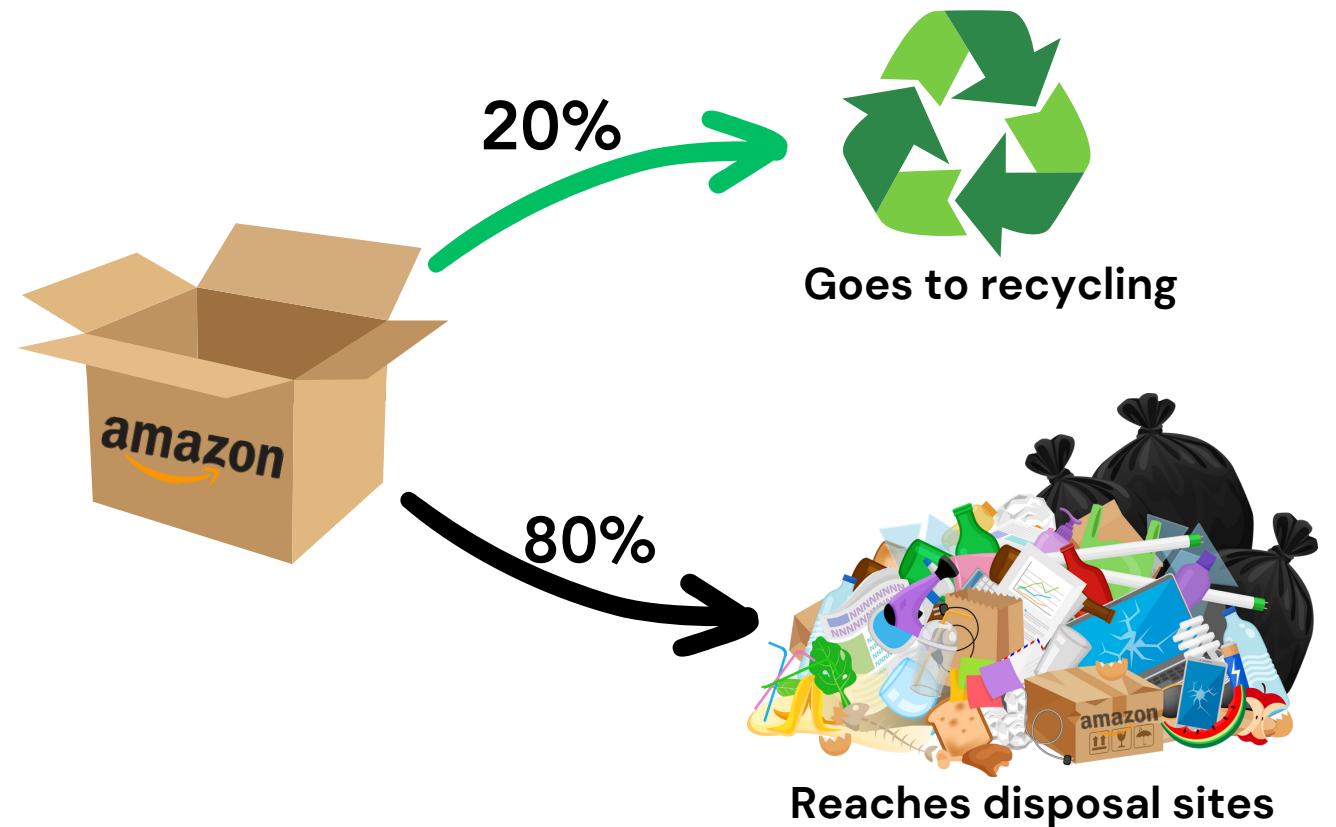
- But they are finding it **difficult to search for such products** as they are often scattered across various categories and difficult to identify on traditional e-commerce platforms.
- While there are some dedicated organizations like Amazon Aware that work towards the same, the **non-mainstream and singular nature of these sites** and hence the **subsequent high prices** of products has made it difficult to scale this gap.

*According to [Statista](#)



PROBLEM STATEMENT-2

- In an era marked by a heightened awareness of environmental issues, another major issue that needs addressing is a **way to optimize the company's supply chain, diminish its carbon footprint and recycle majority of the waste produced.**
- In the Indian market alone of all the waste that can be recycled, only 20% of it is actually recycled and a staggering 80% reaches disposal sites.
- While there is an active mechanism for recycling boxes of returned packages, there is still an **absence of a system that facilitates the collection and recycling of outer packaging of used products.**



*[Ministry of Environment, Forest and Climate Change](#). of India.



OUR SOLUTION

PART-1

- The first part of our solution proposes the **integration of sustainability and eco friendly options into the existing primary Amazon platform.**

A diagram illustrating the integration of a green products section into the Amazon homepage. On the left, a screenshot of the Amazon mobile website shows a green button labeled 'GREENOVATION' with a hand cursor pointing at it. A large green arrow points from this button to the right side of the slide, where a screenshot of the Amazon.in homepage is displayed. The homepage features a yellow header with various categories like 'Fashion & Accessories', 'Corporate gifting', etc. The main content area shows a grid of products including a 'Marketing Proposal' document, apparel sections for 'Women's Apparel', 'Men's Apparel', 'Kids Apparel', and 'Baby Apparel', and a section for 'Food for thought' featuring various healthy products. The 'Marketing Proposal' section includes a 'Project Overview' sub-section with the text: 'A marketing plan is a comprehensive document or blueprint that outlines a company's advertising and marketing efforts for the coming year.'

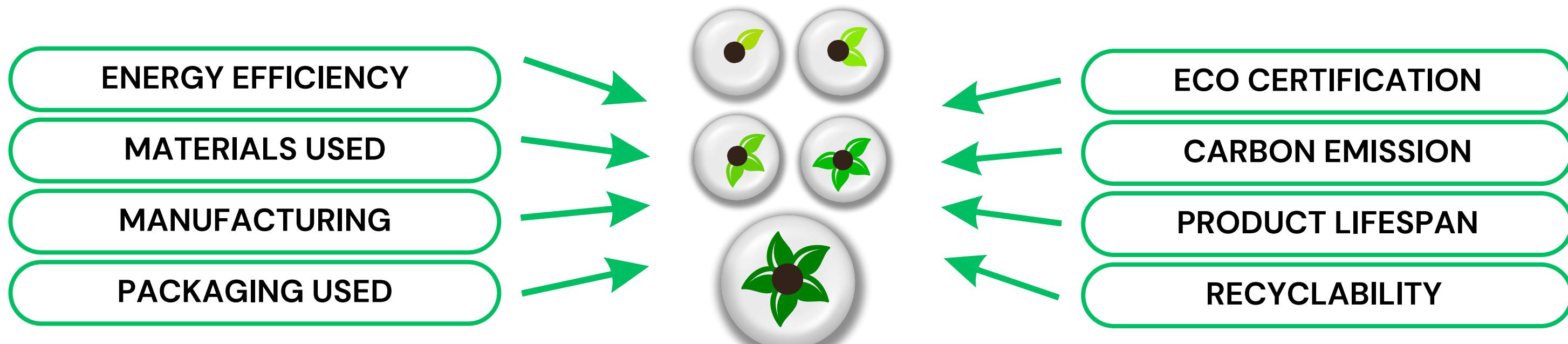
- This approach allows consumers to **find green products alongside conventional ones from a trustable source** and eliminates the need to visit separate eco-friendly marketplaces or websites.



PART-1 (Continued)

The major highlight of this integrated platform, the '**AMAZON GREENOVATION ZONE**', is the rating system that it provides to all the products listed on it.

- Suppliers that wish to register their products in this mode will need to provide data metrics related to the manufacturing of the products. These metrics can be verified by a third party and will be used to assign badges to each product.



- This ensures credibility and also makes it easier for the consumer to identify the level of sustainability of the product that they are buying.



PART-1 (Continued)

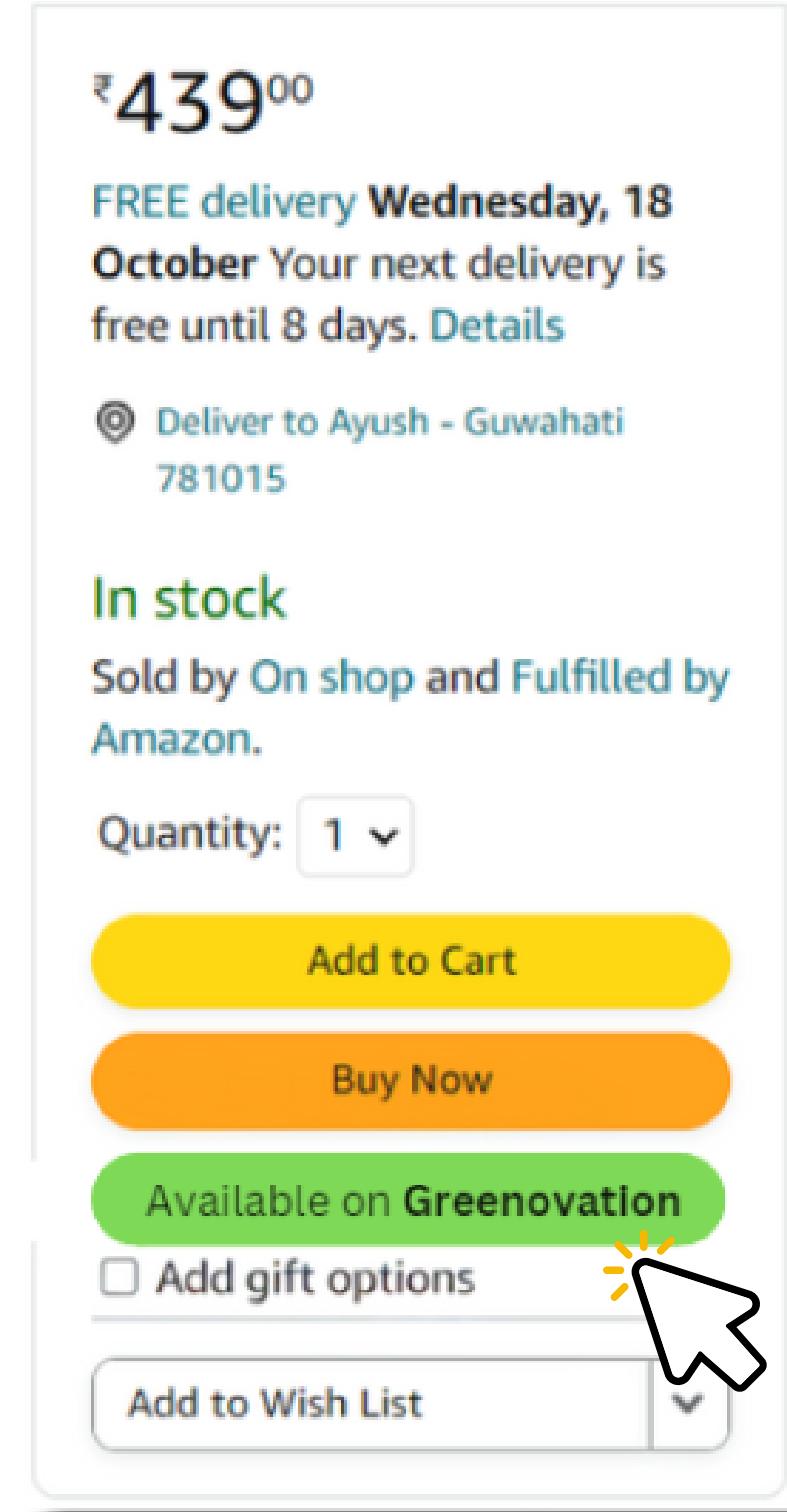
- We also intend to **provide the CO₂ emission percentage alongside the badge** to provide more transparency.
- When the customer **clicks on the badge** it provides **an explanation as to why the product received its eco-friendly rating** and what makes it a sustainable choice.
- This platform will also utilize an already **existing recommendation engine** that suggests other eco-friendly products based on the customer's browsing and purchase history.





PART-1 (Continued)

- Apart from this, if a customer searches for regular products there will be a notification as well as a separate **button informing them of similar products in the Greenovation zone** .
- In order to increase awareness among people and educate them about further steps that they can take to contribute towards global sustainability, this mode also includes an **EDUCATIONAL SECTION** which will include informative articles, videos, or infographics about sustainability, environmental impact, and responsible consumption.
- This will also include **AMAZON'S SUSTAINABILITY REPORTS** and initiatives to demonstrate the company's commitment to environmental responsibility.

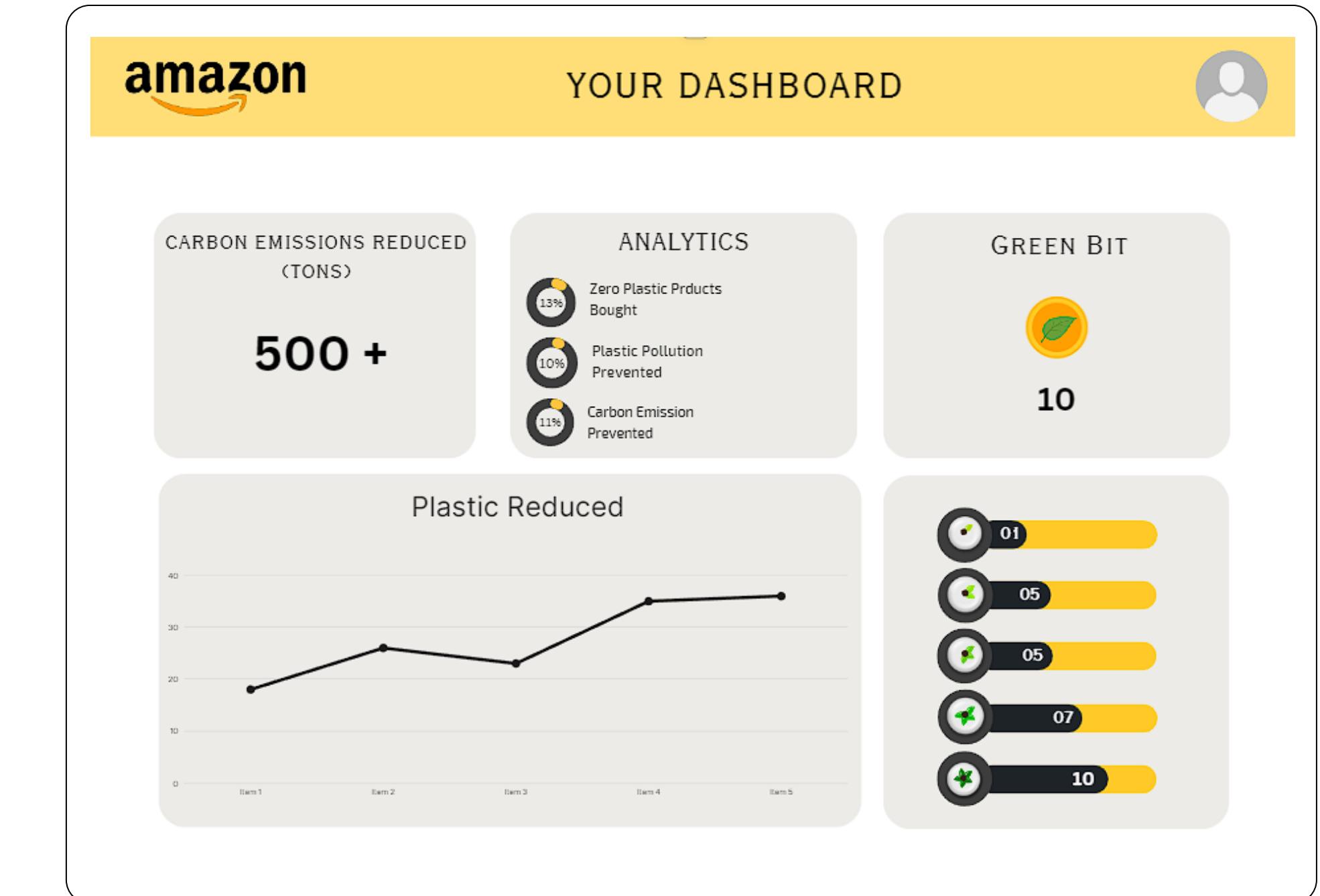


A screenshot of an Amazon product listing. The price is ₹439⁰⁰. It shows 'FREE delivery Wednesday, 18 October' and 'Your next delivery is free until 8 days. Details'. The delivery address is 'Deliver to Ayush - Guwahati 781015'. The item is 'In stock'. It's sold by 'On shop' and fulfilled by 'Amazon'. The quantity dropdown is set to '1'. There are three main buttons: 'Add to Cart' (yellow), 'Buy Now' (orange), and 'Available on Greenovation' (green). A checkbox for 'Add gift options' is present. A 'Add to Wish List' button is at the bottom. A large black cursor icon with a yellow outline is pointing at the 'Available on Greenovation' button.



PART-1 (Continued)

- Another important part of this platform is its **USER DASHBOARD** where customers can track their eco-friendly shopping habits, such as the number of eco-friendly products purchased, carbon footprint reduction, or savings in energy consumption.



- Inclusion of **GREEN DEALS AND DISCOUNTS** that offer special deals and discounts exclusively in this platform will incentivize eco-friendly shopping.



PART-1 (Continued)

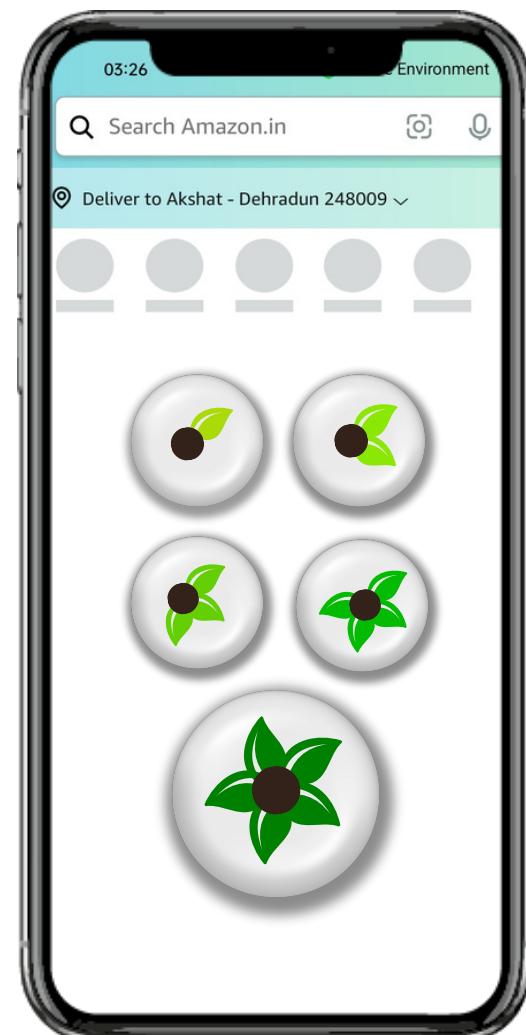
- To improve the customer experience, a system of **FEEDBACK** and **REPORTING** will be implemented which allows customers to report products that are inaccurately labelled as eco-friendly, and encourage them to **provide feedback on how to improve the Greenovation Zone experience.**



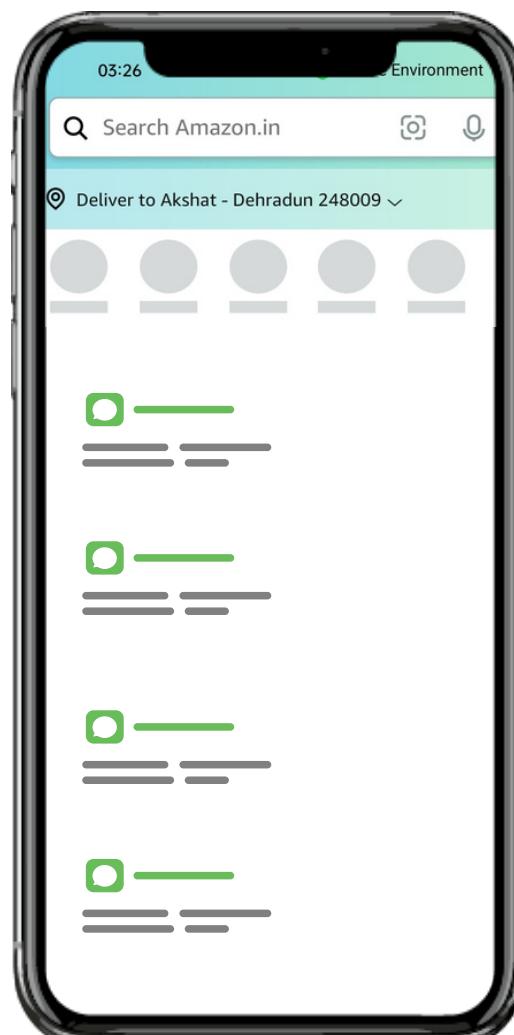


PART-1 (Continued)

GREENOVATION ZONE



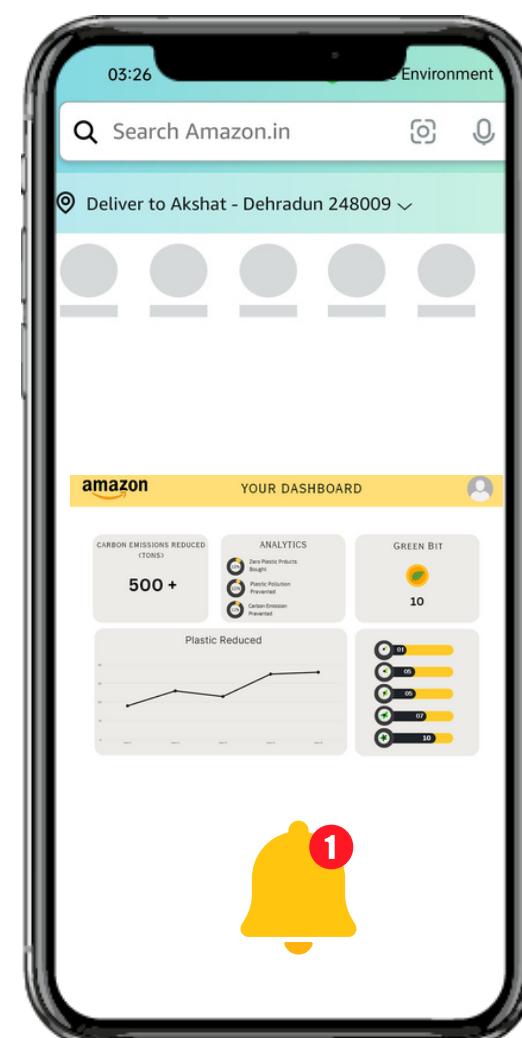
**BADGE RATING
SYSTEM**



FEEDBACK



**EDUCATIONAL SECTION
&
SUSTAINABILITY REPORT**



**USER DASHBOARD
&
NOTIFICATIONS**



OUR SOLUTION

PART-2

- The second part of the solution focuses on achieving **ZERO WASTE PRODUCTION** by using the existing mechanism that Amazon implements to **recycle boxes of returned products**.
- After successful delivery of each product, the customer will have an **option to return the packaging box**.

ORDER PLACED TOTAL ₹1,149.00 SHIP TO

Arriving tomorrow, 9AM - 1PM

fresh 8 items in this order

ORDER # [View order details](#) | [Invoice](#)

[Track or view your order](#)

[Return empty packaging box](#) +1

ORDER PLACED TOTAL ₹68.40 SHIP TO

Arriving Fri, 3 Nov

Preparing for Dispatch

KBS Door Bottom Sealing Strip Guard Stopper Sealer for Sound and Dust Proof Home Office Kitchen Accessories Item Smart Gadgets Products (Size-39 inch) (Pack of 1) (Brown/Black)

[Archive order](#)

ORDER # [View order details](#) | [Invoice](#)

[Track package](#)

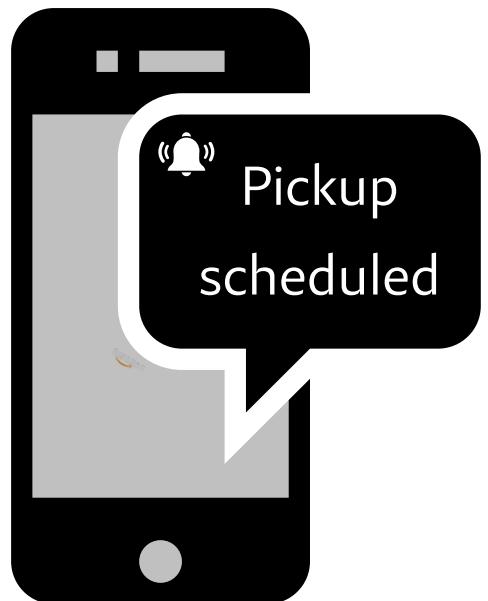
[Cancel this delivery](#)

[View or edit order](#)

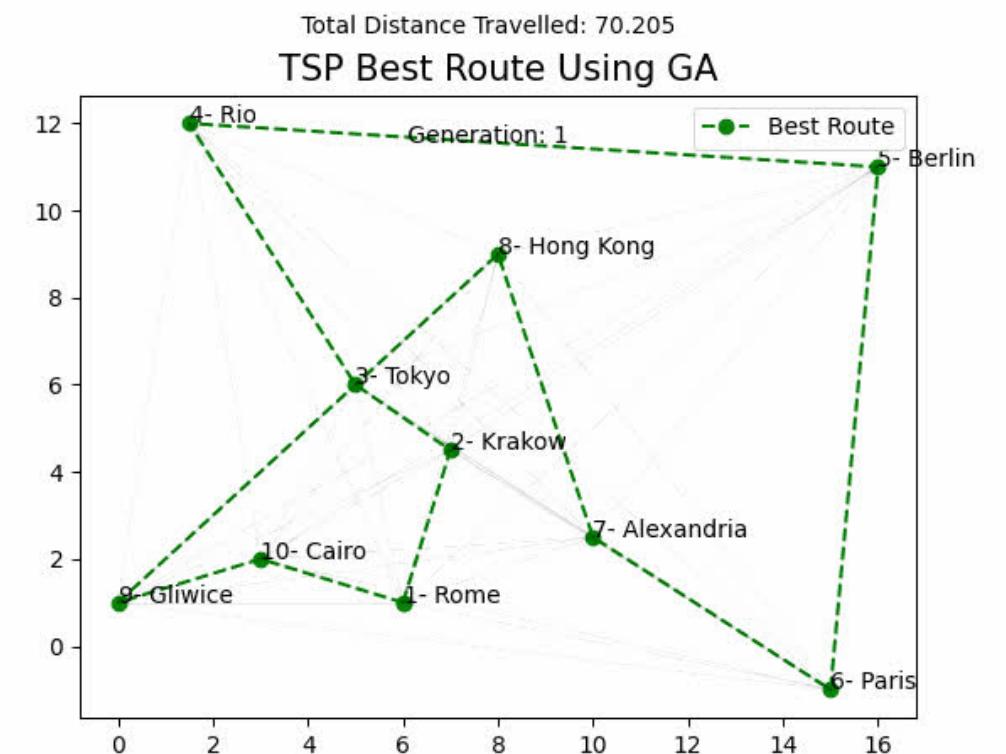
[Return empty packaging box](#) +1



PART-2 (Continued)



- When enough number of customers select the "return box" option and the number of boxes from a specific area **crosses a pre-decided threshold, pickup can be scheduled for that area** and customers can be informed of the date and time on the app/website or via SMS/e-mail. These pickups can be **varied from area to area** based on the number of customers that have enlisted to return the boxes.
- Areas that have **more order frequency** and hence **more returned boxes** can have a **higher number of pickups** scheduled thus making the solution more effective.
- To make this process more efficient, **shortest path algorithms** that Amazon already uses can be implemented, and each delivery man can be assigned a specific area as it occurs in the case of regular pickups. The **delivery personnel will be trained to check the condition of the returned boxes and see if they are fit for recycling**.





PART-2 (Continued)

- With each returned box customers will get a coin (**GreenBit**) and after collecting a certain amount of such coins they will be able to **redeem coupons**. This will help encourage more **customer-engagement**.



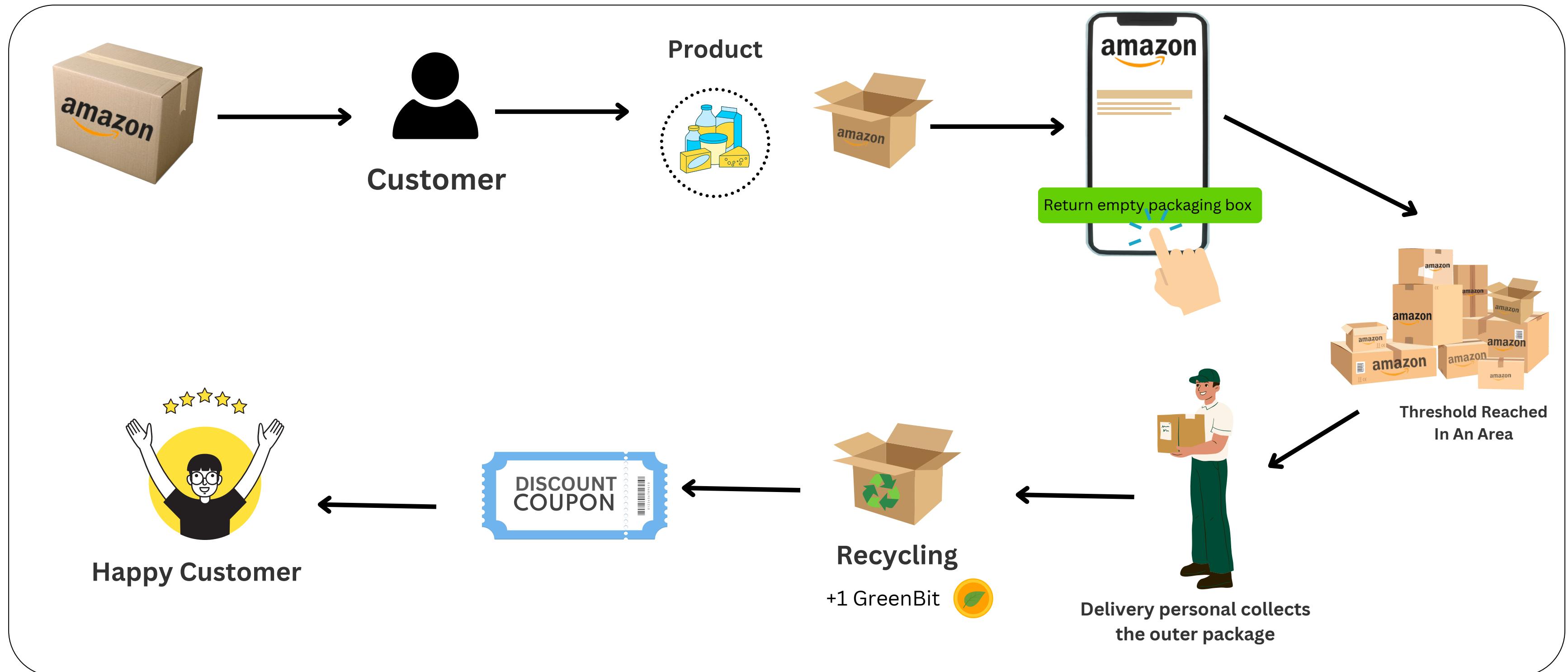
A GreenBit Coin



- This **zero-waste proposal** allows **more room for recyclization** than production as Amazon can use the recycled boxes instead of increasing the manufacturing demand. Although it is a massive shift, this initiative aligns with the **sustainability goals of an e-commerce giant like Amazon**.
- Recycled cardboard is less expensive** than newly manufactured cardboard because creating recycled cardboard requires less energy and resources than producing virgin cardboard thus making it **cost effective**.



Flowchart



Customers returning products' packaging



Effectiveness

- A separate platform within the main website provides consumers with a **place to compare and choose from certified products from different sellers**, an option that is unavailable with every other organization that works solely for the same. Upon searching for a product the customer will get a list of Greenovation products and their ratings, which will help them to choose a product that fits with both their monetary bracket and their sustainable choice.
- The **main reason** to keep a separate section for sustainable products is to **prevent customers from getting distracted by lower priced products that are not environment friendly**.



BECO BAMBOO KITCHEN TOWELS, 20 SHEETS REUSABLE UPTO 2000 TIMES, 100% NATURAL AND ECOFRIENDLY

★★★★★
70% less carbon emissions
ECO FRIENDLY BADGE

₹3,160.00 ₹4,520.00 30% off



RED BUTLER BAMBOO FIBRE TUMBLERS FOR DAILY USE - 380 ML

★★★★★
70% less carbon emissions
ECO FRIENDLY BADGE

₹250.00



SET OF 6 VEGAN GIFTS AND SUSTAINABLE PRODUCTS | REUSABLE COTTON ROUNDS, BAMBOO TOOTHBRUSHES, AND MORE

★★★★★
70% less carbon emissions
ECO FRIENDLY BADGE

₹1,200.00



TAAL MELL COCONUT BOWL ECO-FRIENDLY (HANDCRAFTED FROM ORIGINAL COCONUT)

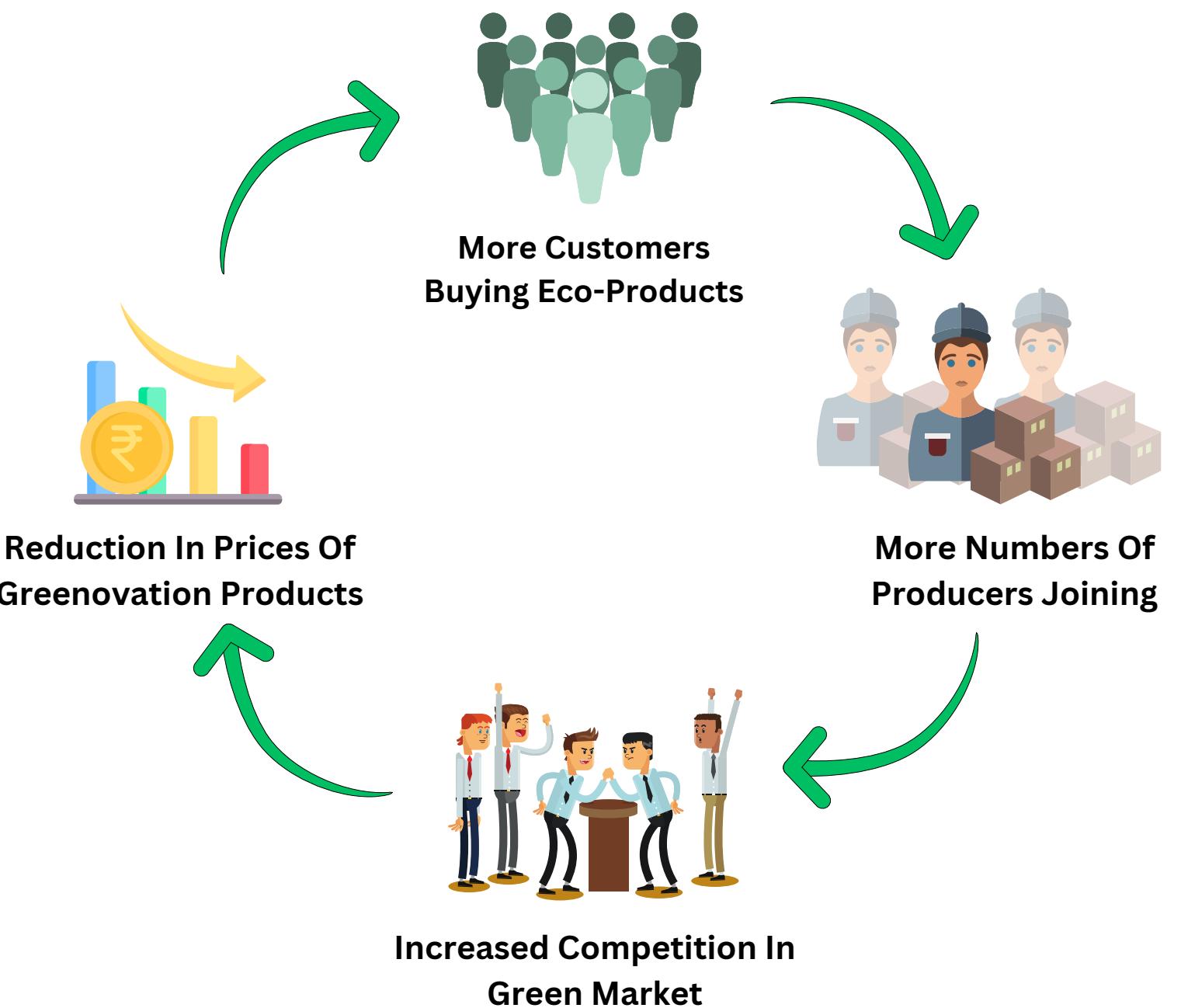
★★★★★
70% less carbon emissions
ECO FRIENDLY BADGE

₹450.00



Effectiveness

- This will also **increase the visibility and reach of the said platform** as consumers who are not yet aware of making sustainable choices will get to browse this section and get motivated to do the same.
- As more consumers move towards these choices and their **sales increase**, more and **more suppliers** will reach out to get enlisted in the Greenovation Zone, thus also increasing the **chances of visibility of small businesses**. As the number of suppliers increases, it will lead to an **increasing competition** and hence comparatively **lower prices**, consequently attracting **even more consumers**.





Effectiveness



- As of now, when Amazon ships out to customers, it has no control over what happens to the boxes used for packaging. Many of these **customers do not recycle or reuse or even compost these boxes.**
- While there are different bins for recyclable and non-recyclable products, this does not solve the problem discussed at hand because once the cardboard boxes get contaminated with other biodegradable waste like food, worms etc, **they do not remain fit for recycling.**

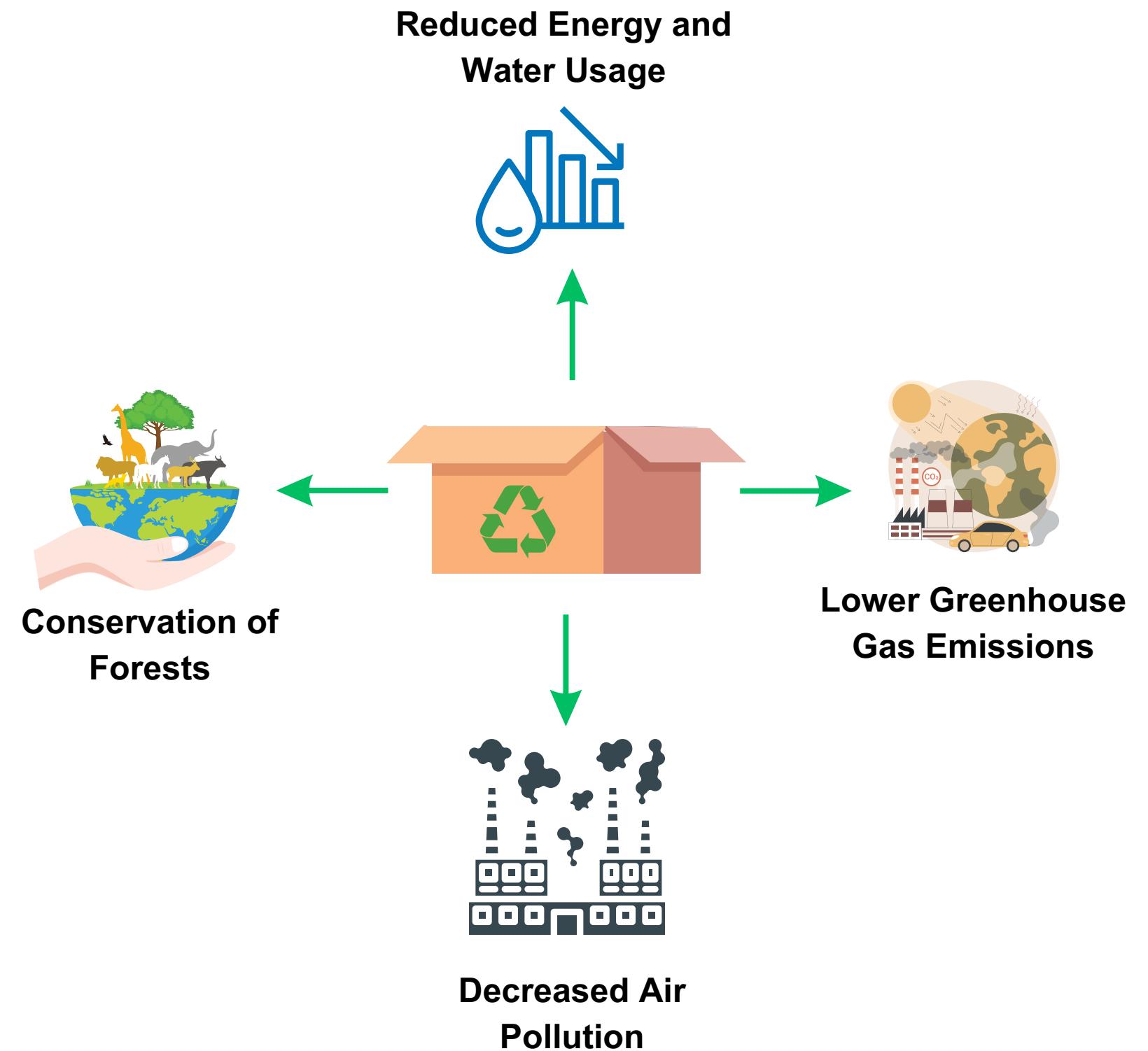


- Even when the company takes initiatives for the same, most of the people are not aware of it. Inclusion of the **option to return boxes in the main website or app** increases chances of visibility which **followed by a separate pickup by trained personnel** is a more effective solution.



Effectiveness

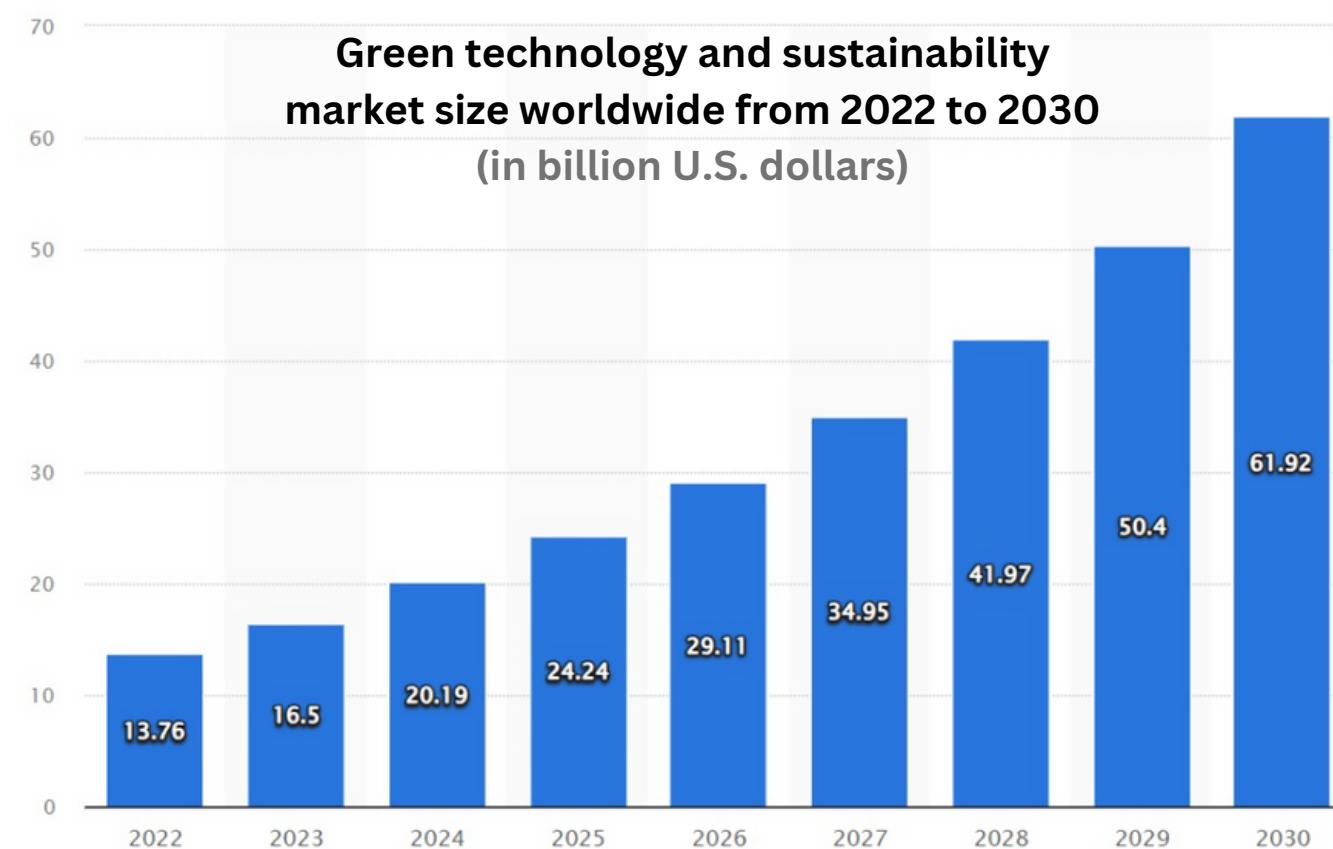
- **Environment friendly:** Recycling cardboard **reduces energy and water usage**, while **cutting the production of greenhouse gas** and certain air pollutants like **total reduced sulfur (TRS)**, **volatile organic chemicals (VOCs)**, and hazardous air pollutants (HAP). The recycling cardboard also **reduces demand for virgin timber**. It takes approximately three tons of trees to manufacture just one ton of virgin cardboard and recycling helps solve this problem as well . The recycling of one ton of cardboard saves more than nine cubic yards of landfill space, thus making it very environment friendly.



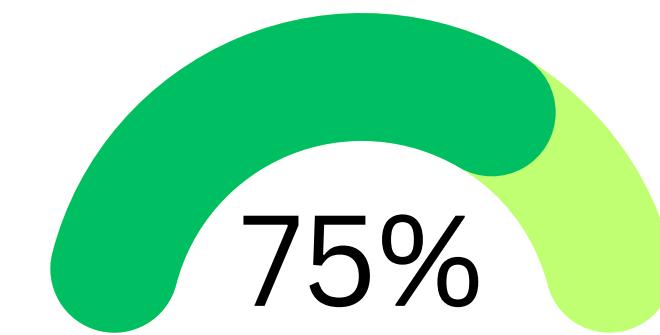


Graphical Representation

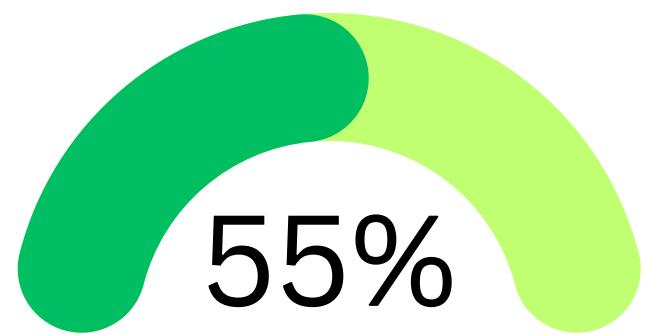
*According to [Statista](#)



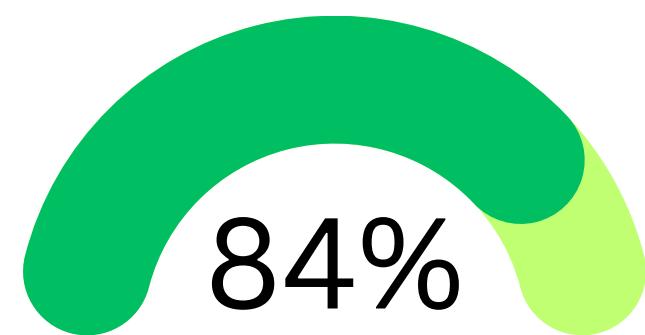
*According to [TheRoundup.org](#)



of sustainable goods sell better online than in-store.



of consumers are willing to pay more for eco-friendly brands.



of customers don't prefer companies with poor environmental practices.

*According to [TheRoundup.org](#)



Bamboo bottle



Global Google searches for topics related to sustainable products **increased** by around **130%** between 2017 and 2022.



Assumptions And Constraints

Supplier Participation

According to the data in the previous slide we assume sufficient number of Amazon's suppliers will be willing to participate in the Greenovation Zone by providing sustainability data for their products.

Customer Engagement

Based on statistics, we assume that customers will actively use the feature and consider sustainability ratings when making purchasing decisions.

Supplier Resistance

Some suppliers may be resistant to sharing sustainability data or may lack the capability to provide the required metrics.

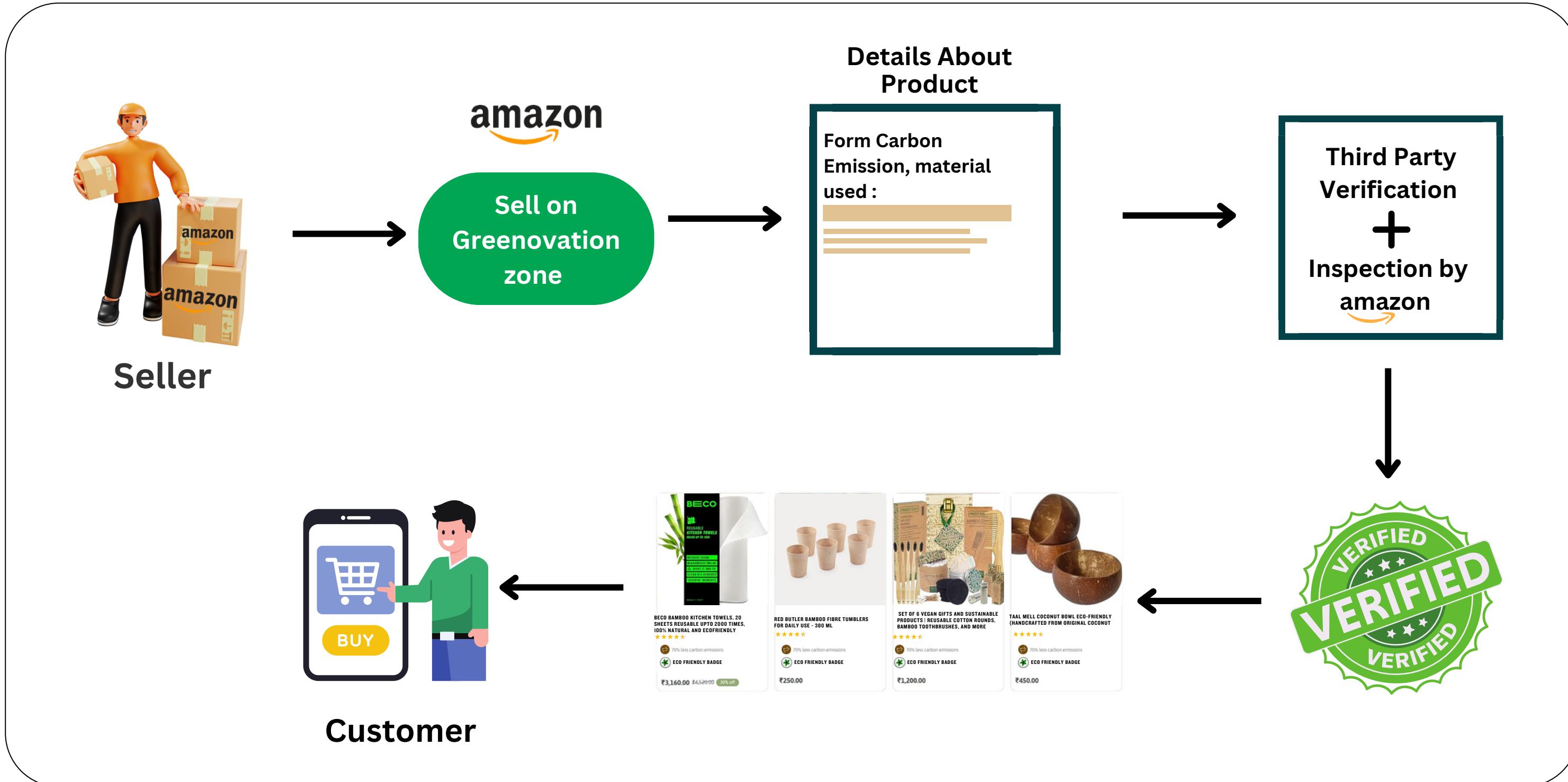


Ease of Implementation

- The proposed solution is very easy to implement due to the presence of all the required basic mechanisms. The Greenovation Zone will have the **same basic layout** as the main Amazon website with only some minor changes and the **inclusion of a separate educational section and a customer dashboard** which are both **very easy to implement**.
- Third party verification on the metrics provided by the supplier is done for all the products on Amazon and the same can be used for Greenovation products with the additional work being only the **integration of all these parameters to assign a badge**. There is already a recommendation system which can be used to recommend products in this mode as well.
- The second half requires the delivery personnel to be additionally trained to check if the boxes are in recyclable condition. The main website requires only the **addition of a "return box" option and a notification service system which will inform the customers of the date of pickup** (after the number of boxes in that area cross the set threshold). **Implementing a reward system (green bit)** can also be done very easily.



Flowchart



Seller registering products in Greenovation Zone



Impact metrics

Customer Engagement	<ul style="list-style-type: none">◦ Time spent on the eco section◦ Number of pages viewed per visit◦ Bounce rate
Sustainability Metrics	<ul style="list-style-type: none">◦ Number of eco-friendly products sold◦ Reduction in carbon emissions (environmental impact)◦ Increase in sustainable sourcing
Partnership Impact	<ul style="list-style-type: none">◦ Number of eco-friendly organizations or brands interested in partnerships◦ Increase in visibility and positive associations
Competitor Benchmarking	<ul style="list-style-type: none">◦ Market share changes◦ Comparison with other e-commerce companies



Frameworks / Technologies

- Web Development Framework:



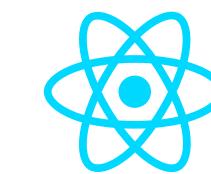
HTML



CSS



JavaScript



React

- Database Management:



AWS RDS



MySQL



AWS DynamoDB

- APIs and Integration:



NodeJS



ExpressJS

- DevOps and Deployment:



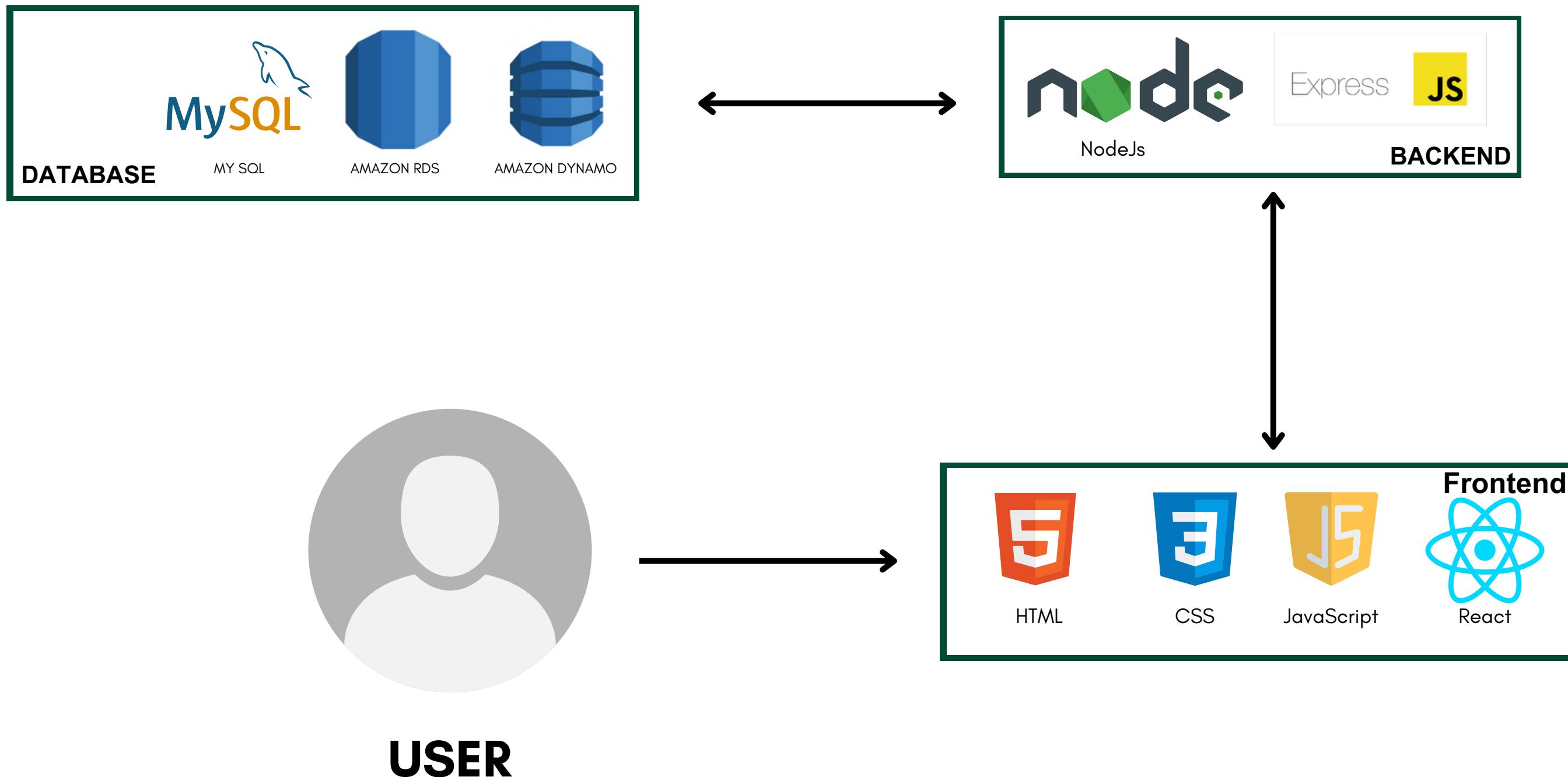
AWS

- UX and UI Design



METHODOLOGIES

Architecture Diagrams





amazon

WireFrames

The screenshot shows a wireframe of a product listing page. At the top, there's a header with 'Browser' and standard navigation buttons (back, forward, search). Below the header is a search bar and a user profile for 'Peter'. A 'Departments' button is visible on the left. The main content area features a large placeholder image of a mountain landscape. To the right of the image, there's a title (partially redacted), a rating section ('by [redacted] \${rating} # reviews'), and a price section ('Price: [redacted] FREE Shipping available!'). Below these are dropdown menus for 'Color' (with four options) and 'Size' (with three options). At the bottom, there's a 'Quantity' input field. On the right side, there's a sidebar with a 'Share:' section containing social media icons and a 'Greenovation' button.

The image shows a wireframe of a web browser window. At the top, there's a header bar with a 'Browser' title, back and forward navigation buttons, a refresh button, and a search bar labeled 'search bar'. Below the search bar is a menu icon represented by three horizontal lines. The main content area has a large image placeholder containing a house icon. To its right are three horizontal bars. Below this are two rows of eight smaller image placeholders each, also containing house icons. The bottom section features three horizontal bars and a single large image placeholder.

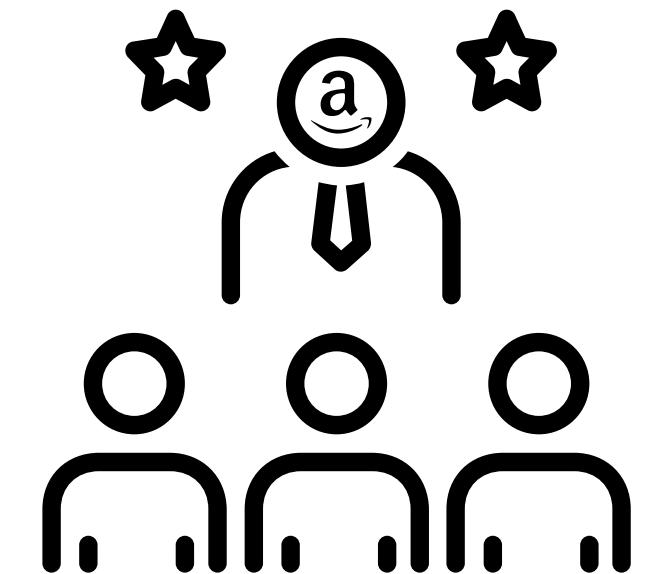


Business Relevance

- **Leveraging Amazon's e-commerce dominance:** Given Amazon's established position as a colossal force in e-commerce, the implementation of a Greenovation Zone serves to reinforce its leadership. This initiative further **cements the company's reputation as a trailblazer in sustainability**, drawing the attention of environmentally conscious consumers who actively seek out eco-friendly products and sustainable practices.



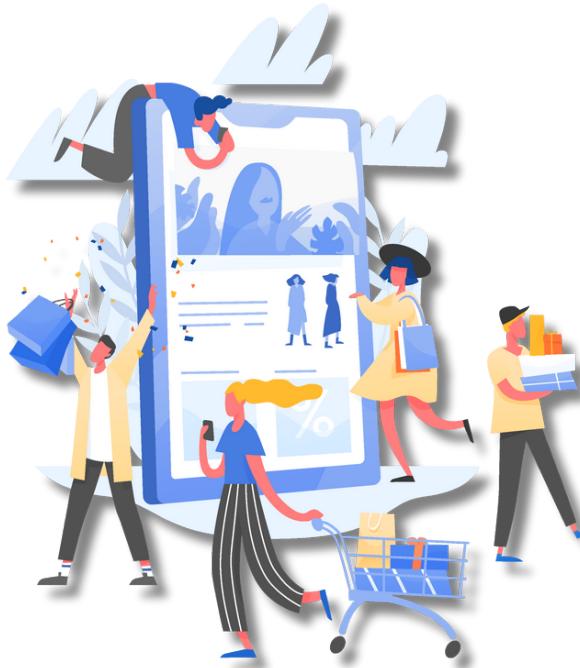
- **Increased Customer Loyalty:** By offering a curated selection of sustainable products and providing transparency through environmental metrics, Amazon can foster customer loyalty among those who value sustainable shopping.





Business Relevance

- **Increased prime members:** As new conscious customers will join Amazon, the **chances of them taking a prime membership will increase** given the perks of early deliveries and discounts. This will be of utmost business importance to Amazon.



- **Market Responsiveness:** Addressing the growing consumer demand for sustainable products **can ensure Amazon remains relevant and competitive in the market**, safeguarding its revenue stream.



FUTURE SCOPE

Optimisation

- **Green Packaging Options:** Allow customers to select eco-friendly packaging options (e.g., minimal packaging, recyclable materials) during checkout.
- **Sustainable Delivery Options:** Offer eco-friendly delivery options, such as consolidated shipping to reduce emissions and electric vehicles to lower fuel consumption, or promote local pickup points to minimize transportation impact.
- **Supply Chain Integration:** Integrate the zero-waste initiative into the supply chain at a deeper level, optimizing packaging at source and reducing waste generation throughout the entire process.



Scope For Modification

- **Collaborative Sustainability Projects:** Partner with environmental organizations on joint projects, such as tree planting initiatives, and involve customers in these efforts.
- **Global Certification Standards:** Establish partnerships with recognized global environmental certification organizations to ensure consistency and trustworthiness in eco-certifications for products listed in the Greenovation Zone.
- **Supplier Sustainability Initiatives:** Support and promote sustainability initiatives such as eco-packaging, renewable energy use, and waste reduction programs among sellers and manufacturers.



Credits/References:

- <https://www.loopify.world/>
- <https://www.statista.com/statistics/1319996/green-technology-and-sustainability-market-size-worldwide/>
- <https://pib.gov.in/newsite/PrintRelease.aspx?relid=181230#:~:text=Approximately%2090%25>
- <https://frontiergroup.org/articles/crisis-convenience-why-your-amazon-box-going-straight-trash/>
- <https://www.mdpi.com/2079-9276/12/2/22>
- <https://www.amazon.com/stores/AmazonAware/Homepage/page/6811A99F-3CED-41CC-923B-EDD5CCA93141>
- <https://frontiergroup.org/articles/crisis-convenience-why-your-amazon-box-going-straight-trash/>



amazon

THANK YOU!