

MGS 635: Digital Product Management

Prof. Priyanka Carella



Greenthink Analytics presents

# SUSTAINA™

Empowering businesses to measure and manage  
their carbon footprint for a greener future

*Dec 2023*





Pranav Jadhav



Smita Jagtap



Mayur Hole



Saalem Mirza



Swati Naik



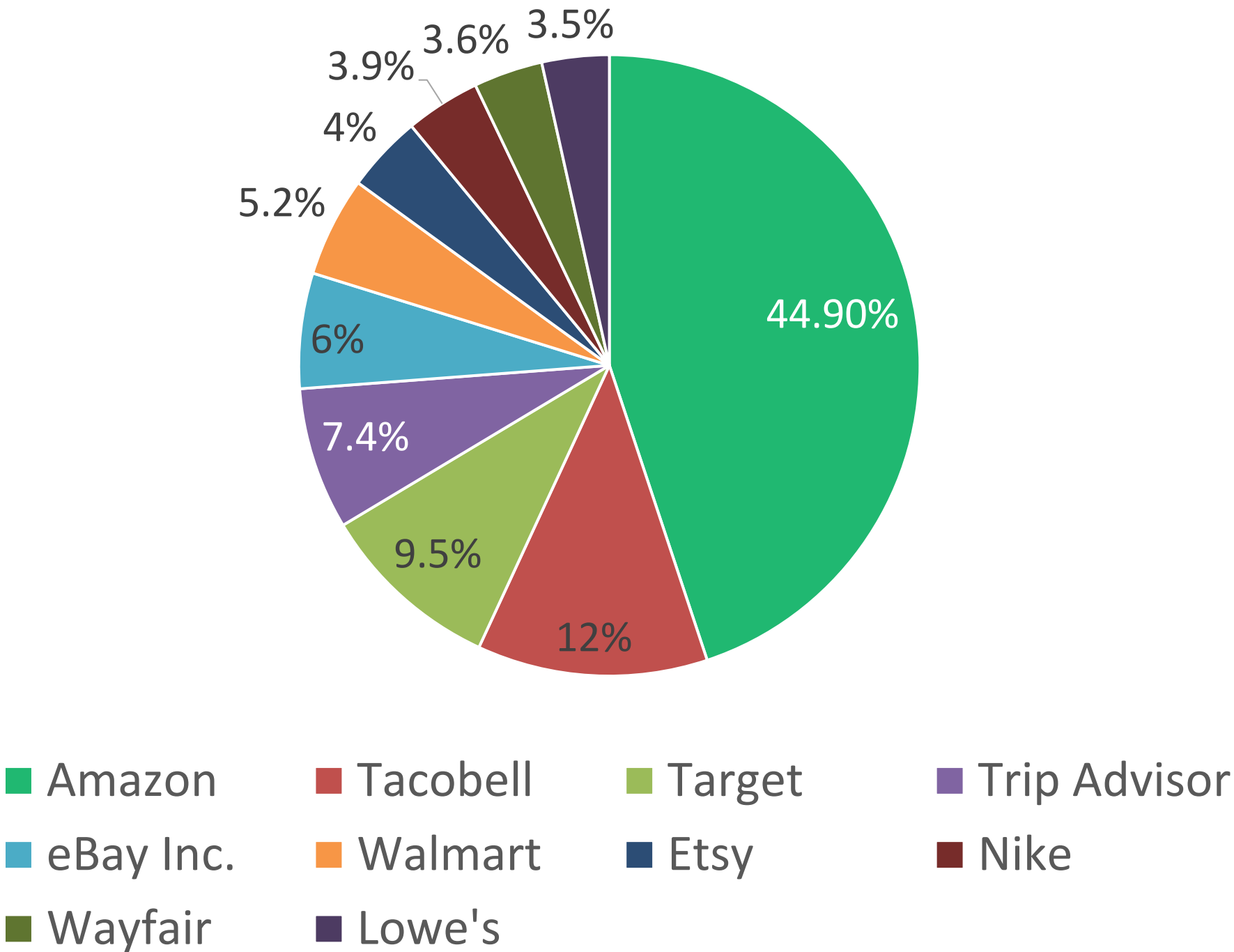
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## Charting Environmental Impact

Top 10 Companies with the Highest Monthly Carbon Footprints (in %)



## Key Insights



Amazon's 2022 Carbon Emissions Hit **71.27M Metric Tons** per Annual Sustainability Report



**69% of US Public Companies** Pledge Major Carbon Footprint Cuts by **2040**

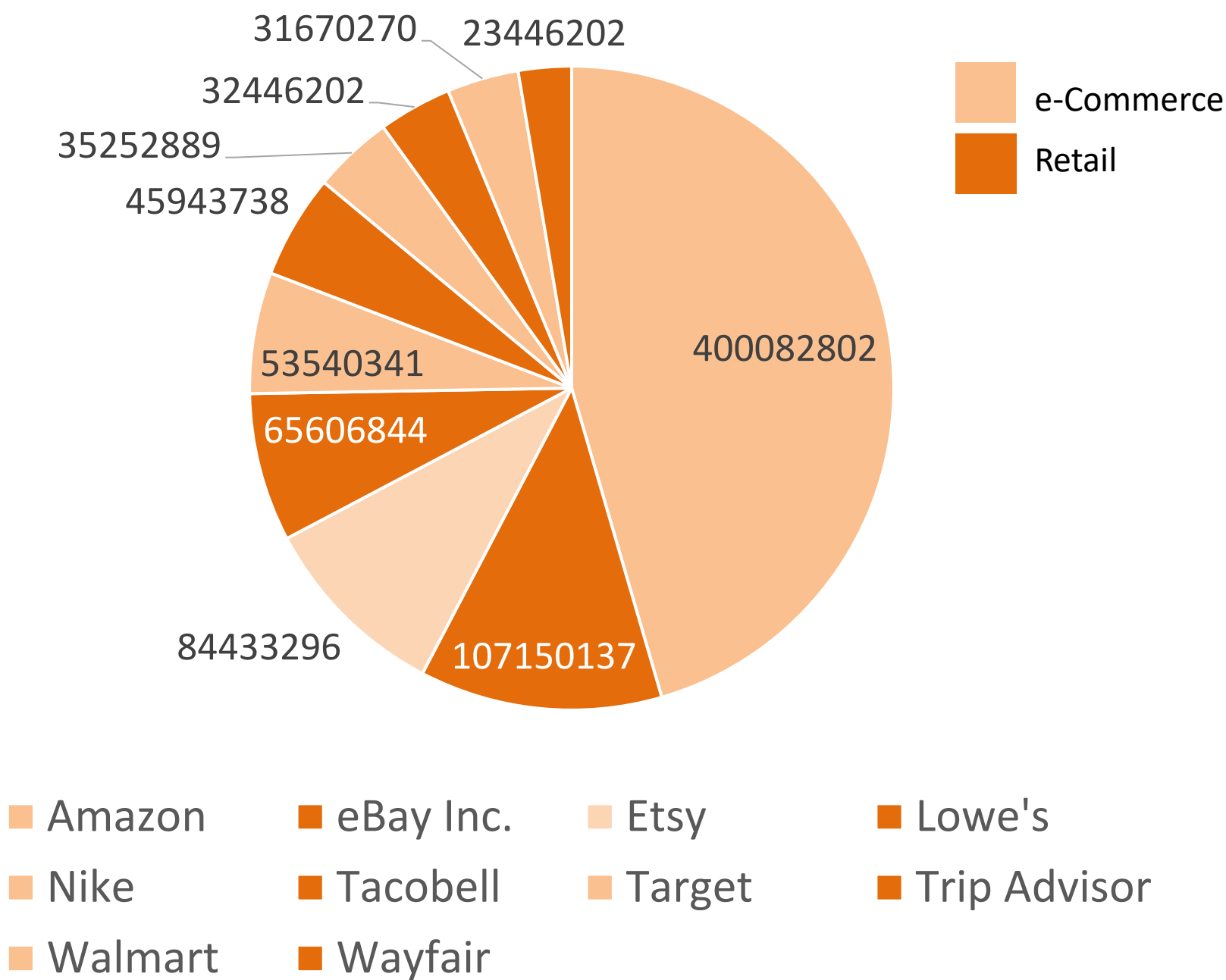


**Emissions Surge 40% Since 2019**, Fueled by Pandemic Business Boom in 2020



## Charting Environmental Impact

Top 10 Companies with the Highest Monthly Carbon Footprints (in g/m)



## Key Insights



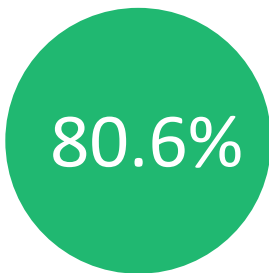
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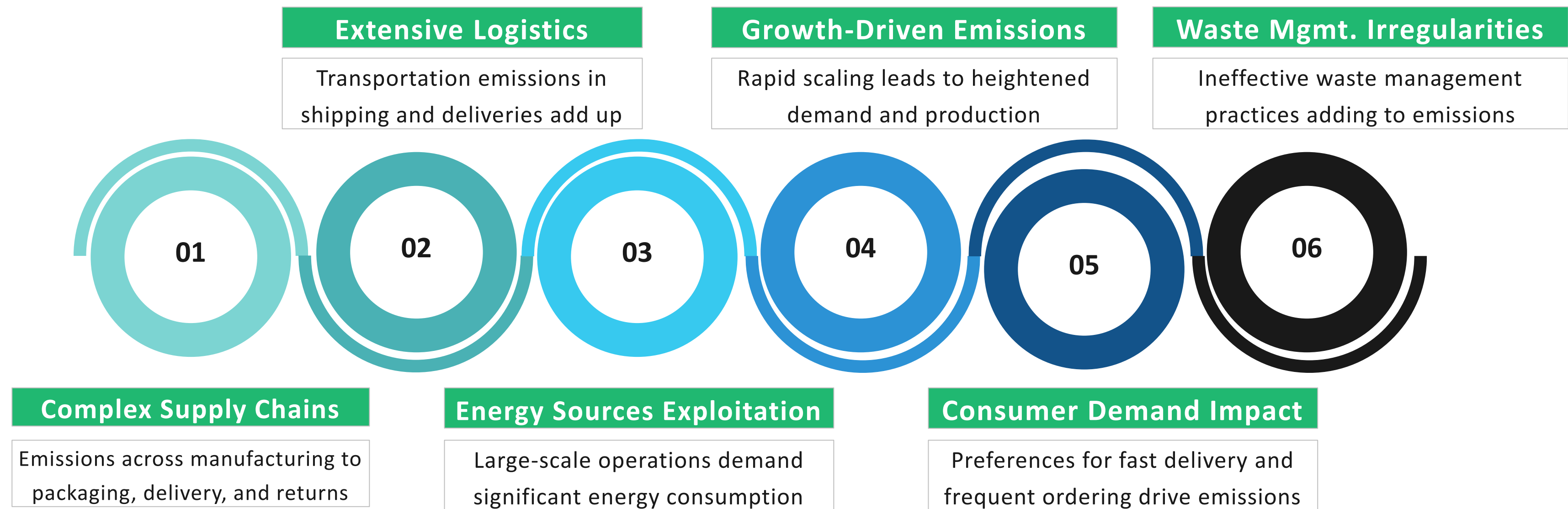


**Emissions Surge 40% Since 2019**, Fueled by Pandemic Business Boom in 2020



Out of the Top 10 companies, **4 are e-Commerce platforms** and **4 are Retail giants**

# Decoding the key drivers and challenges: Unraveling high carbon footprints in Retail & E-Commerce

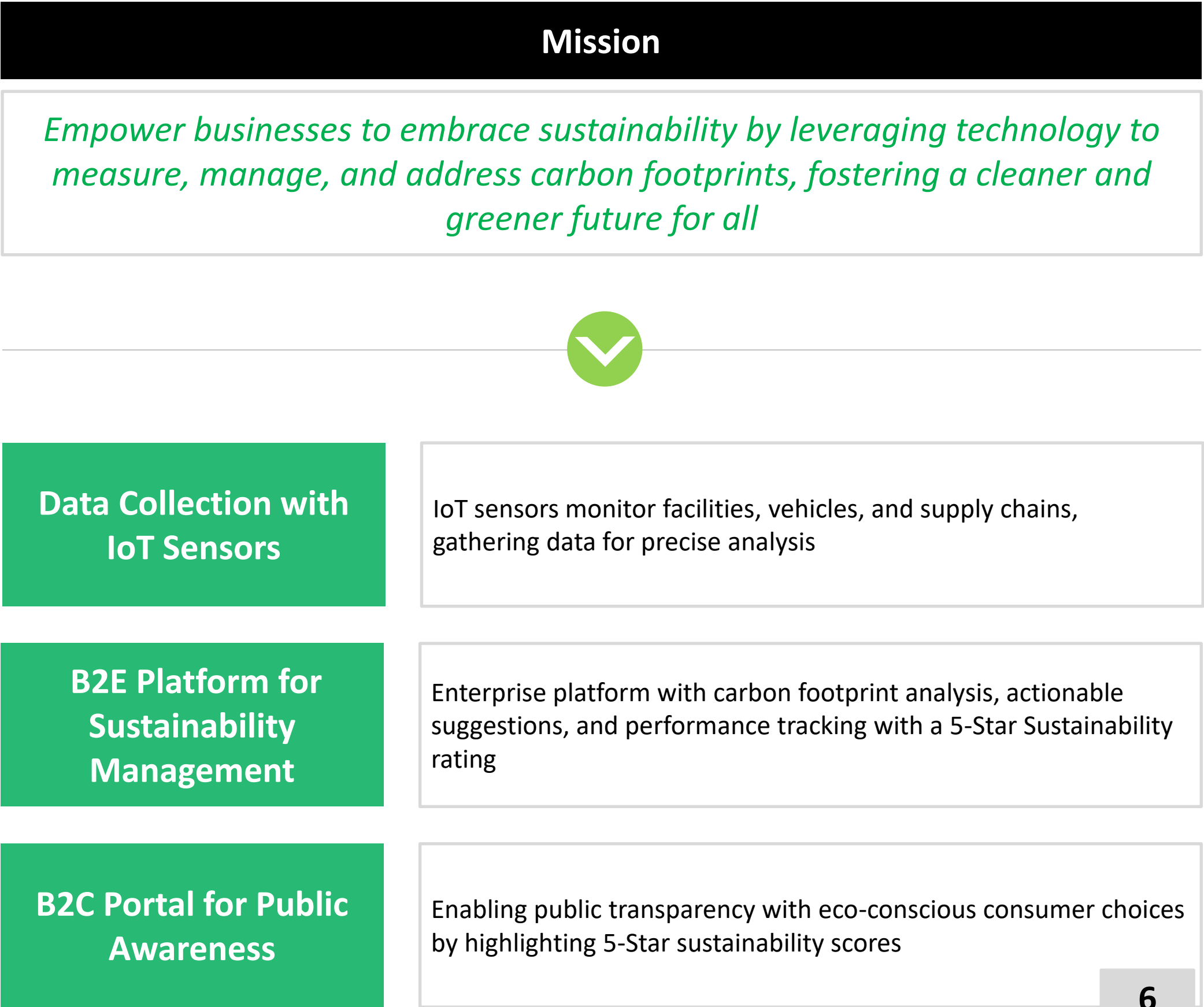


By acknowledging and addressing these drivers, we aim to pave the way for eco-friendly innovations and practices, forging a path towards a **'Greener Future' in the world of commerce**

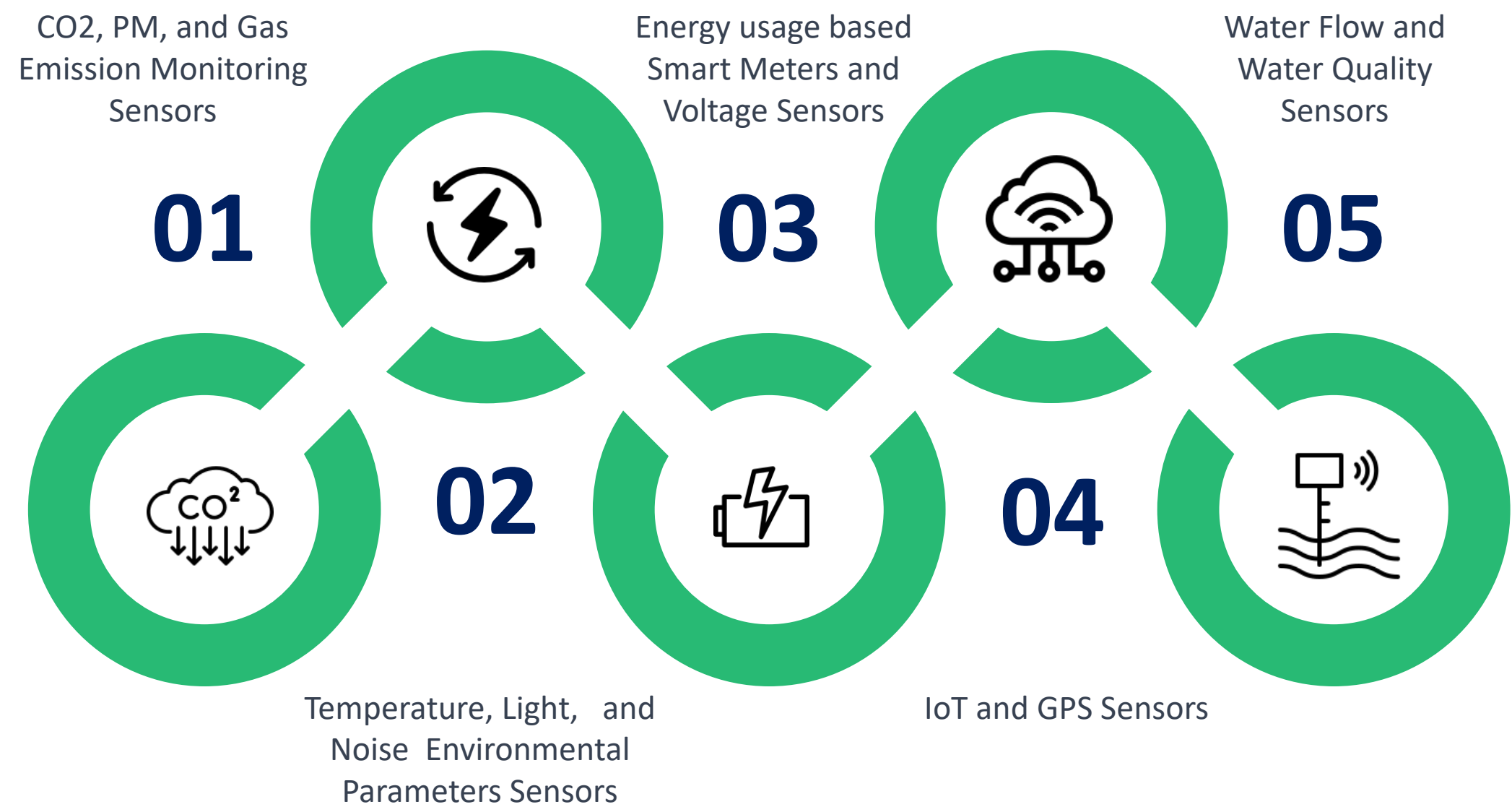




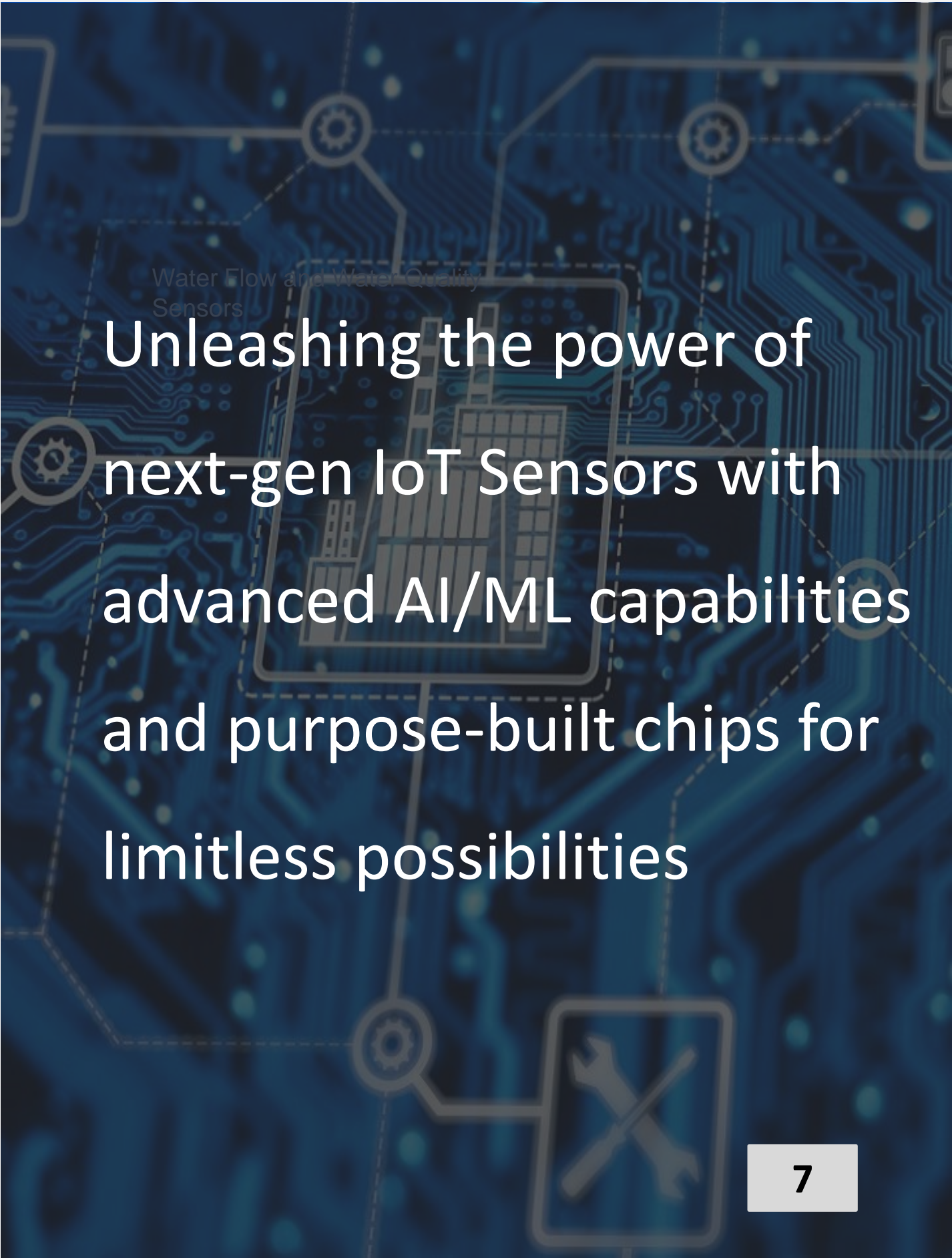
The planet is in a dire state; the time for climate action is now







Harnessing the capabilities of IoT sensors to enable effective sustainability monitoring, tracking, measurement, and the reduction of carbon footprint



Unleashing the power of next-gen IoT Sensors with advanced AI/ML capabilities and purpose-built chips for limitless possibilities





At the core of the Sustaina™ platform lies a dual commitment: not only to rigorously monitor sustainability metrics but also to deliver tangible financial benefits for our clients



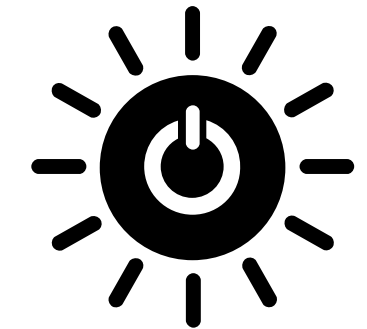
## Tax Benefits for Sustainable Practices

In the United States, there are various federal and state-level tax incentives and credits available for businesses that invest in environmentally friendly practices through Investment Tax Credits and Carbon Capture Tax Credits



## Enhanced Stock Performance and Investor Attraction

Companies with strong ESG performance tend to attract more investors, leading to increased demand for their shares



## Green Bonds and Sustainable Investments

Green bonds, issued by companies focusing on sustainability, attract socially responsible investors and increase demand for shares in the market



## Driving an effective Marketing strategy: Ensuring maximum awareness and amplifying reach



Start with mid-tier e-Commerce & Retail businesses



Build Credibility in the form of Testimonials and Reviews



Content Marketing with white papers and case studies



Attend Industry Conferences and educate via Tradeshows



Email marketing pushing promotional content



Paid Marketing on LinkedIn, run ads on FB, Insta and Google Ads



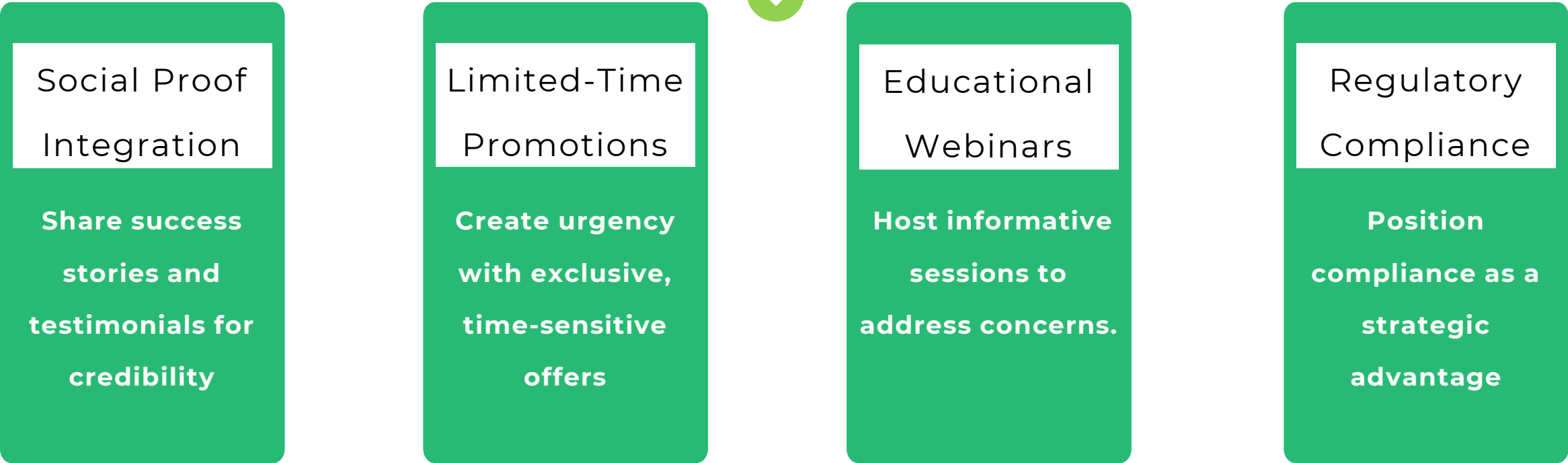
Highlight Regulatory Compliance

- Targeted Approach: Precision in market focus
- Innovative Engagement: Foster meaningful customer relationships
- Adaptability: Evolve with market dynamics for scalable growth

# Architecting success: An overview of Sales strategy for sustainable growth and market expansion



## Actionable Tactics



Our commitment to drive a focused Sales strategy is the cornerstone of achieving targeted goals by

- Honing in on specific target segments with purpose
- Ensuring every effort propels us towards heightened brand recognition and engagement
- Collaboration with strategic stakeholders in the industry through a long-term approach





## B2E Metrics



- Revenue and Sales Metrics
- Customer Relationship and Retention Metrics
- Contract and Subscription Metrics
- Customer Engagement and Satisfaction Metrics
- Operational efficiency and support Metrics



In B2E initiatives, tracking vital metrics like Revenue, Customer Relationships, Contracts, Customer Engagement, and Operational Efficiency along with monitoring these metrics ensures alignment with business goals and enhances both employee well-being and overall success

## B2C Metrics



- Bounce-Rate
- Click-through Rate
- Average Session Duration
- Sustainability Scores index
- Average Customer Rating




In B2C metrics, Bounce Rate measures engagement, Click-through Rate assesses the effectiveness of calls to action, and Average Session Duration reflects user engagement. Sustainability Scores Index gauges environmental responsibility, while Average Customer Rating indicates overall satisfaction

# Transforming Data Insights: A seamless and interactive Dashboard experience




English

**SUSTAINA**

Empowering Businesses to Measure, Manage, and Mitigate Their Carbon Footprint Like Never Before

Create Account


 Sign up with Amazon

OR

Full Name


Email ID

Password






English

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Create Account

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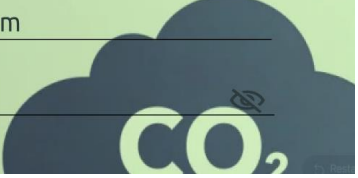
OR

+1 716-876-6743

Pranav Jadhav


pranavj@amazon.com

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English

**SUSTAINA**

Empowering Businesses to Measure, Manage, and Mitigate Their Carbon Footprint Like Never Before


SIGN IN

Email

OR


Mobile phone number

Continue





English

**SUSTAINA**

Empowering Businesses to Measure, Manage, and Mitigate Their Carbon Footprint Like Never Before


SIGN IN

pranavj@amazon.com

OR

+1 716-876-6743

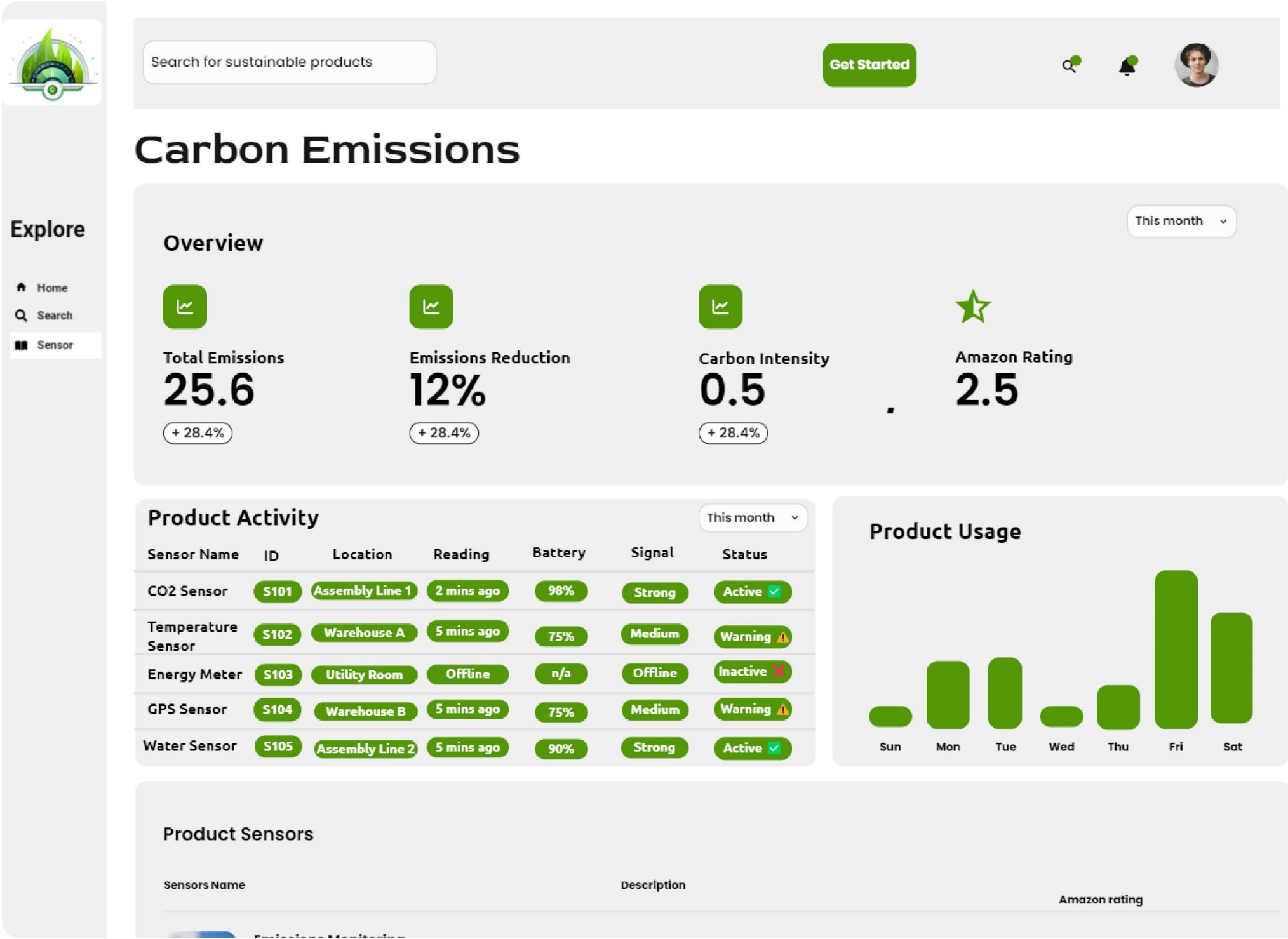
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Elevate your user experience with a seamless login process, ensuring quick and secure access to your data anytime, anywhere



# Transforming Data Insights: A seamless and interactive Dashboard experience

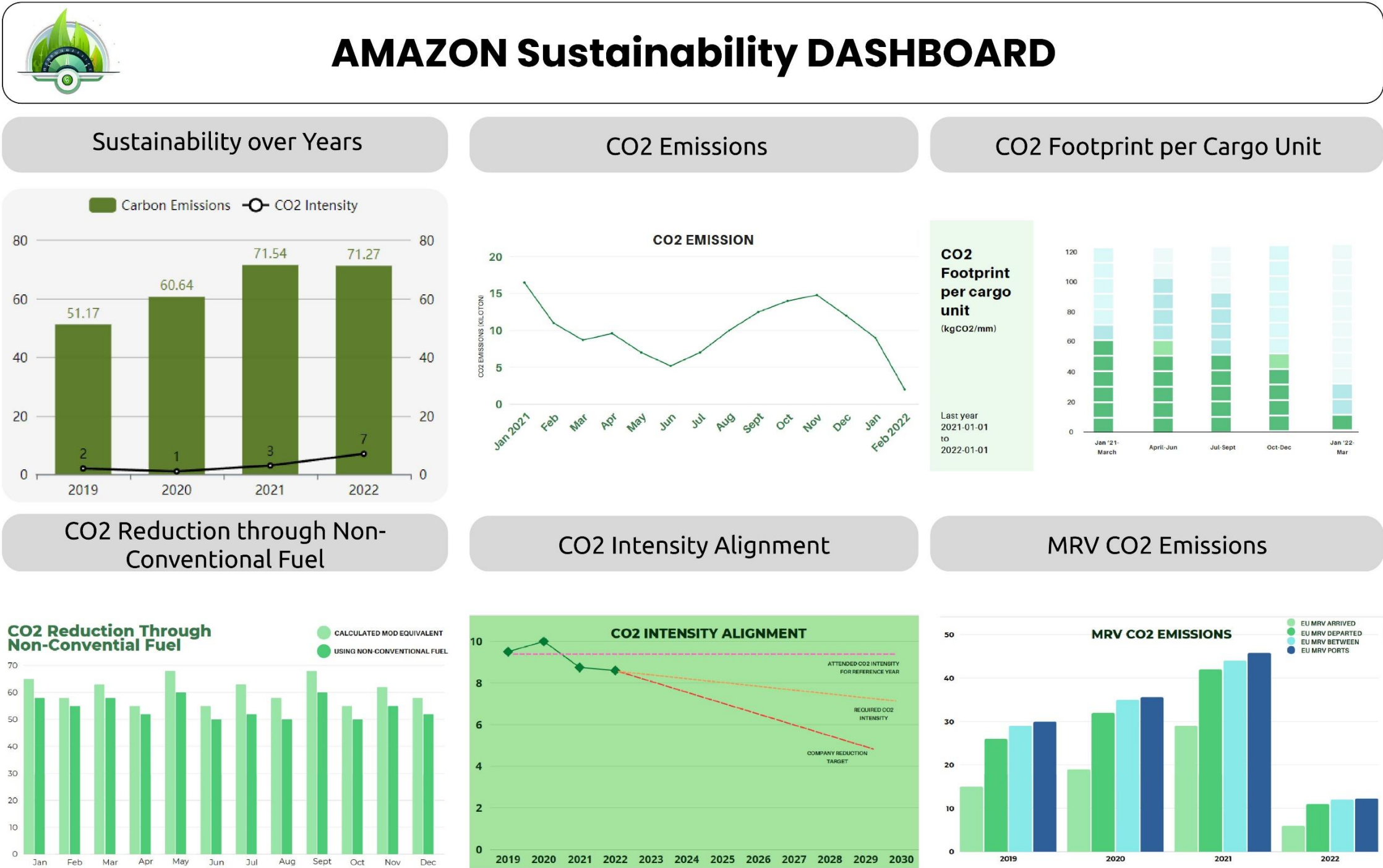


Manage and monitor your company’s key metrics at one glance

# Transforming Data Insights: A seamless and interactive Dashboard experience



Back



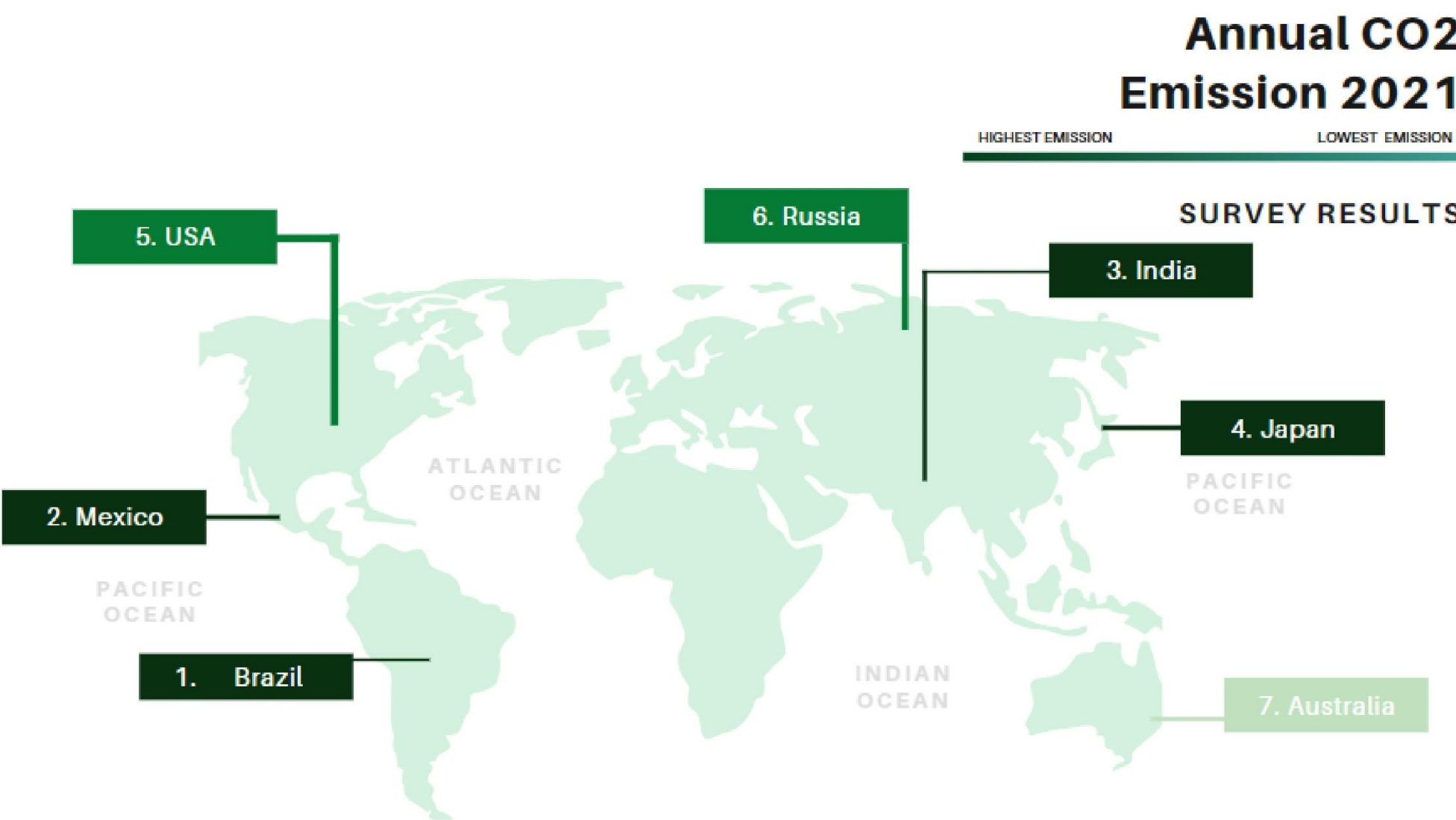
Next Page

Manage and monitor your company's key trends with a holistic dashboard



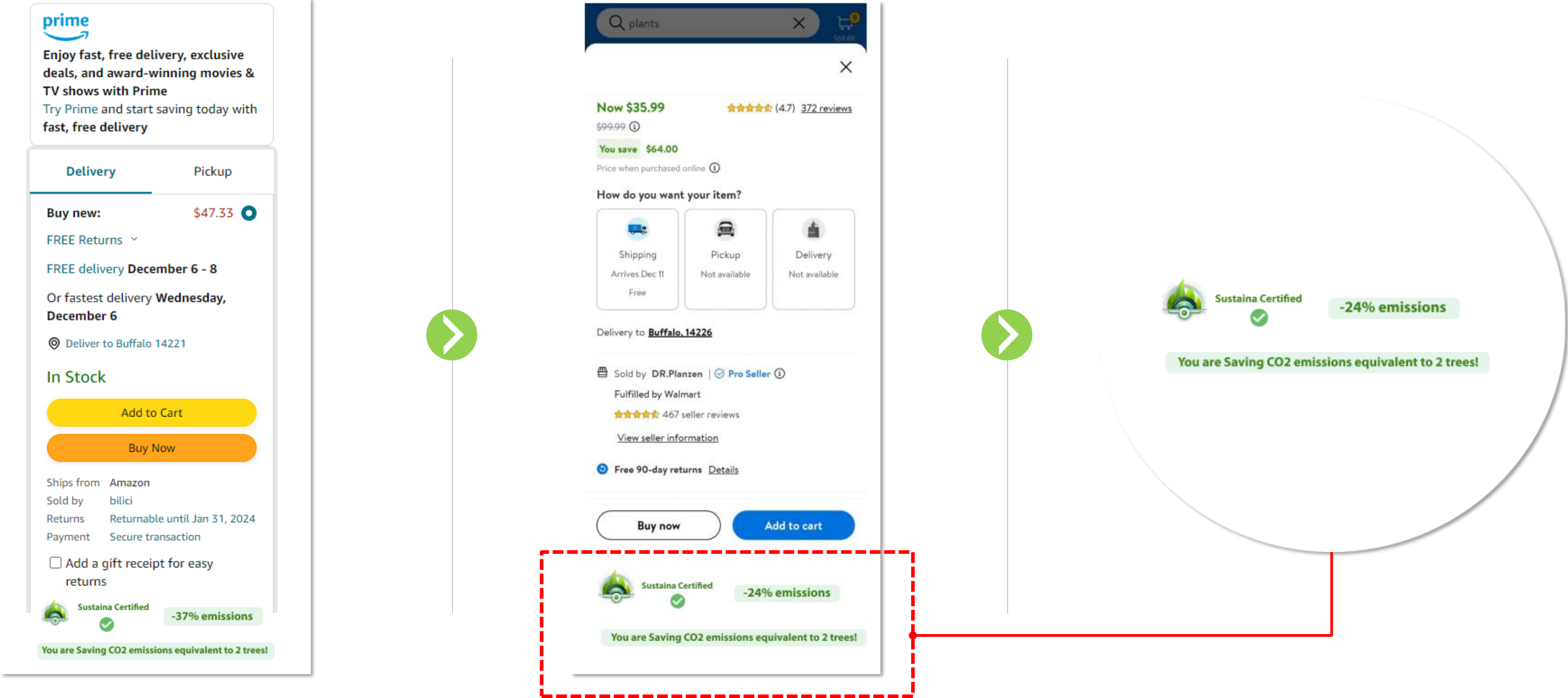


## Worldwide CO2 Emissions



Enhance your decision making across different geo-graphical regions with a carbon emission snapshot

# Charting our course and defining the destination: Where we envision ourselves next?



Our goal is to establish a prominent footprint across major e-Commerce platforms, with the **Sustaina™ Certified tag**, which would serve as a spotlight of our expertise and our client’s commitment to sustainability



# Brand Pyramid of Sustaina™ : Building a resilient foundation

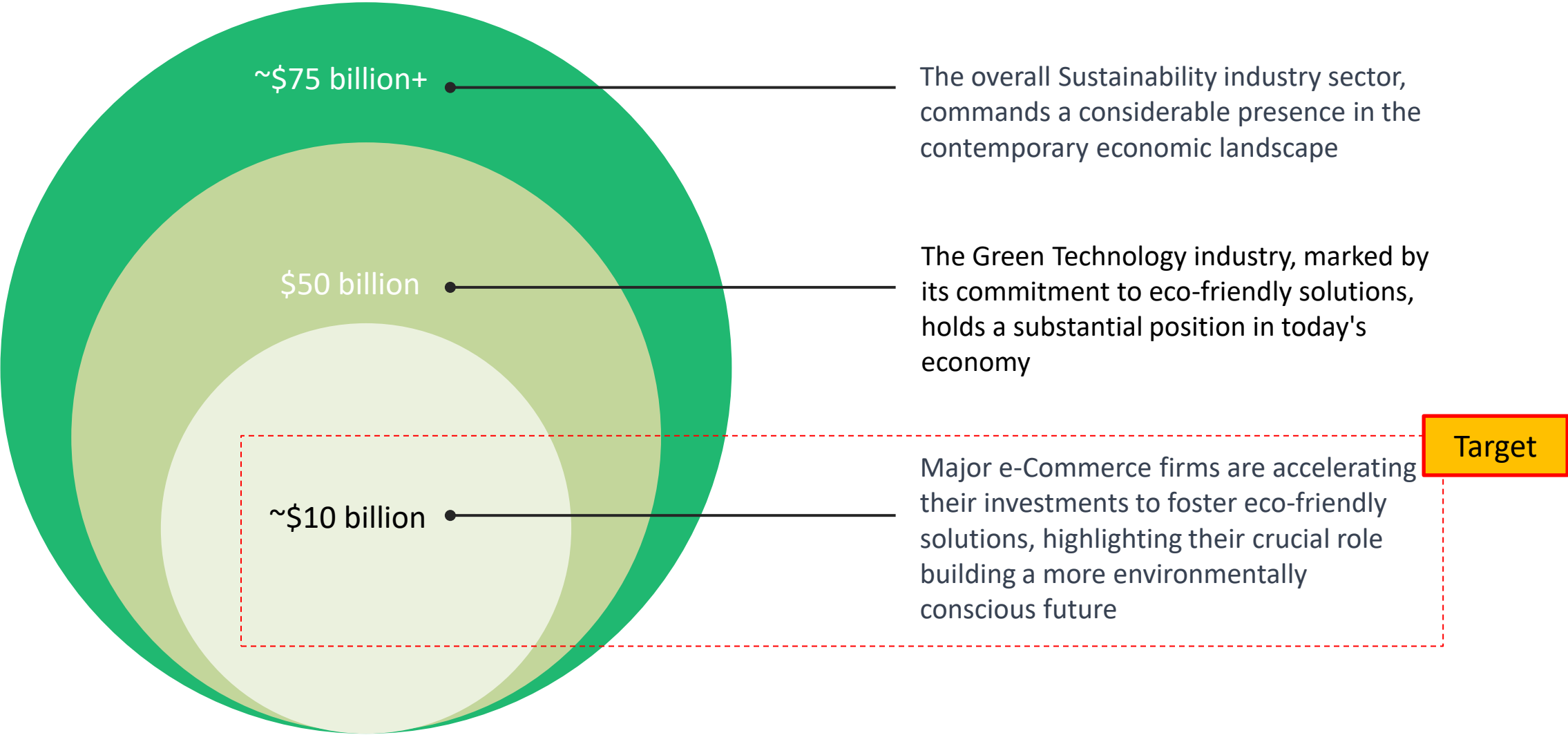


# Unveiling the Expansive Landscape: The Total Market Size of the Sustainability Industry



## Overall Sustainability Market to Green-tech in e-Commerce sector

Top 3 major addressable markets: Focusing on the integration of e-Commerce Green Technology within the Overall Sustainability Market (in \$ billions)



As **major e-Commerce and venture capital firms pour money into green tech**, prioritizing sustainability is crucial. Companies embracing eco-friendly practices can expect steep growth in the coming decades.

- Amazon Announces \$2 Billion Climate Pledge Fund to Invest in Companies Building Products, Services, and Technologies
- Amazon commits \$53 million to fast-track innovations by female climate tech entrepreneurs
- Walmart Announces Closing of Inaugural \$2 Billion Green Bond Issuance
- Target's goal is to achieve \$2 billion to \$3 billion in cost savings over the next few years




Sustaina™ aims to grab a slice of the 10% of the e-Commerce green tech market of around \$1

Source:  
1. <https://www.bcg.com/press/13april2022-green-tech-50-billion-opportunity-for-tech-firms>  
2. <https://sustainability.aboutamazon.com/climate-solutions#:~:text=The%20Climate%20Pledge%20Fund%20is,our%20net%2Dzero%20carbon%20goal>  
3. <https://corporate.walmart.com/news/2021/09/23/walmart-announces-closing-of-inaugural-2-billion-green-bond-issuance>  
3. <https://corporate.target.com/press/release/2023/02/target-unveils-2023-strategic-investments-to-fuel>





Seizing the scarcity in Sustainability industry, by being a first-mover

Competition	Brands	Action
Existing competitors	<div><div>WIX</div><div>CARBON ANALYTICS</div><div>Magento<sup>®</sup> An Adobe Company</div></div>	<ul style="list-style-type: none"><li>• <b>Continuous Innovation:</b> Stay ahead through ongoing enhancements and R&amp;D</li><li>• <b>Customer Focus:</b> Strengthen relationships with tailored solutions</li><li>• <b>Strategic Partnerships:</b> Collaborate for mutual growth</li></ul>
Potential Entrants	<div><div>Microsoft</div><div>SIEMENS</div><div>IBM</div><div>Google</div></div>	<ul style="list-style-type: none"><li>• <b>Agility:</b> Maintain a flexible model for quick adaptation</li><li>• <b>Market Education:</b> Proactively communicate your unique value</li><li>• <b>Innovation Leadership:</b> Position as an innovation leader in sustainability sphere</li></ul>
Adjacent Substitutes	<div><div>Palantir</div><div>SolarCity</div><div>ECOLAB<sup>®</sup></div><div>Schneider Electric</div></div>	<ul style="list-style-type: none"><li>• <b>Diversification:</b> Expand into adjacent areas in sustainability</li><li>• <b>Collaborations:</b> Partner for new opportunities in related industries</li><li>• <b>Clear Positioning:</b> Communicate unique expertise via Rating score</li></ul>

# Setting the standard: Exploring our unique differentiators that set us apart



## Vertical Integration

Unlike many competitors that offer either carbon emissions monitoring or server management solutions separately, we provide an all-in-one platform that seamlessly integrates both functionalities



## AI/ML Driven Analytics

Our state-of-the-art advanced AI and ML technologies offer predictive analytics, enabling our clients to not only monitor current carbon emissions and server performance but also anticipate future trends and areas of optimization



## Sustainability Rating Score

Sustainability scores assess a company's commitment to ethical practices, covering areas like environmental impact and social responsibility. A high score reflects dedication to minimizing footprints and maintaining ethical conduct

Sustaina™ will focus on building an all-encompassing platform that seamlessly merges hardware and software elements, ensuring sustained growth over the long term



# Ensuring long-term growth: Identifying and focusing on our target segments



## Corporate entities



Large corporations with intricate supply chains across retail, manufacturing, and logistics, dedicated to achieving sustainability goals through comprehensive carbon footprint management tools and large-scale technology infrastructure



## Mid-sized enterprises



Growing e-Commerce and Retail firms with scalable infrastructure seeking reliable data-driven solutions to monitor and reduce their carbon footprint



## Activist groups and NGOs



Non-profit organizations and advocacy groups seeking reliable data to educate and influence responsible consumer behavior and promote sustainable practices

Focusing on these **3 strategic buckets of our identified target segments** is crucial for achieving sustained long-term growth and success

# Transformative moves: Advancing Business Model and Strategic Pricing



Business Model	Pricing Strategy
Long-term Contract Deals	<ul style="list-style-type: none"><li>• <b>Steady Revenue Stream:</b> Secure a consistent income with 3–5-year contracts, starting from a base qualification of ~\$5 million/year.</li><li>• <b>Business Stability:</b> Enhance stability for effective resource planning and allocation.</li></ul>
Subscription Based Model	<ul style="list-style-type: none"><li>• <b>Recurring Revenue:</b> Foster customer loyalty with continuous value delivery and generate recurring revenue.</li><li>• <b>Flexible Tiers:</b> Offer flexibility with various subscription tiers and features to cater to diverse customer needs.</li></ul>
Consulting Services	<ul style="list-style-type: none"><li>• <b>Custom Solutions:</b> Provide personalized consulting services to address specific client needs.</li><li>• <b>Advisory Partnership:</b> Establish an advisory partnership for ongoing support and strategic guidance.</li></ul>



Adopting diverse blend of business models, from **long-term contracts for stability to subscription models for recurring revenue and consultancy services** for tailored solutions, ensures adaptability and sustained growth in a dynamic market

- **Customized Partnership Agreements:** Develop bespoke contract deals ranging from \$5 million to \$50+ million/yr
- **Strategic Long-Term Commitments:** Foster lasting relationships through 3-5 year long-term yearly deals, offering stability and strategic collaboration

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- **Tailored Offerings:** Subscription-based tiers ranging from \$100,000 to \$500,000 per month, each designed to meet specific client needs and preferences
- **Scalable Value:** Ensure scalability within each tier, providing incremental value with higher subscription levels

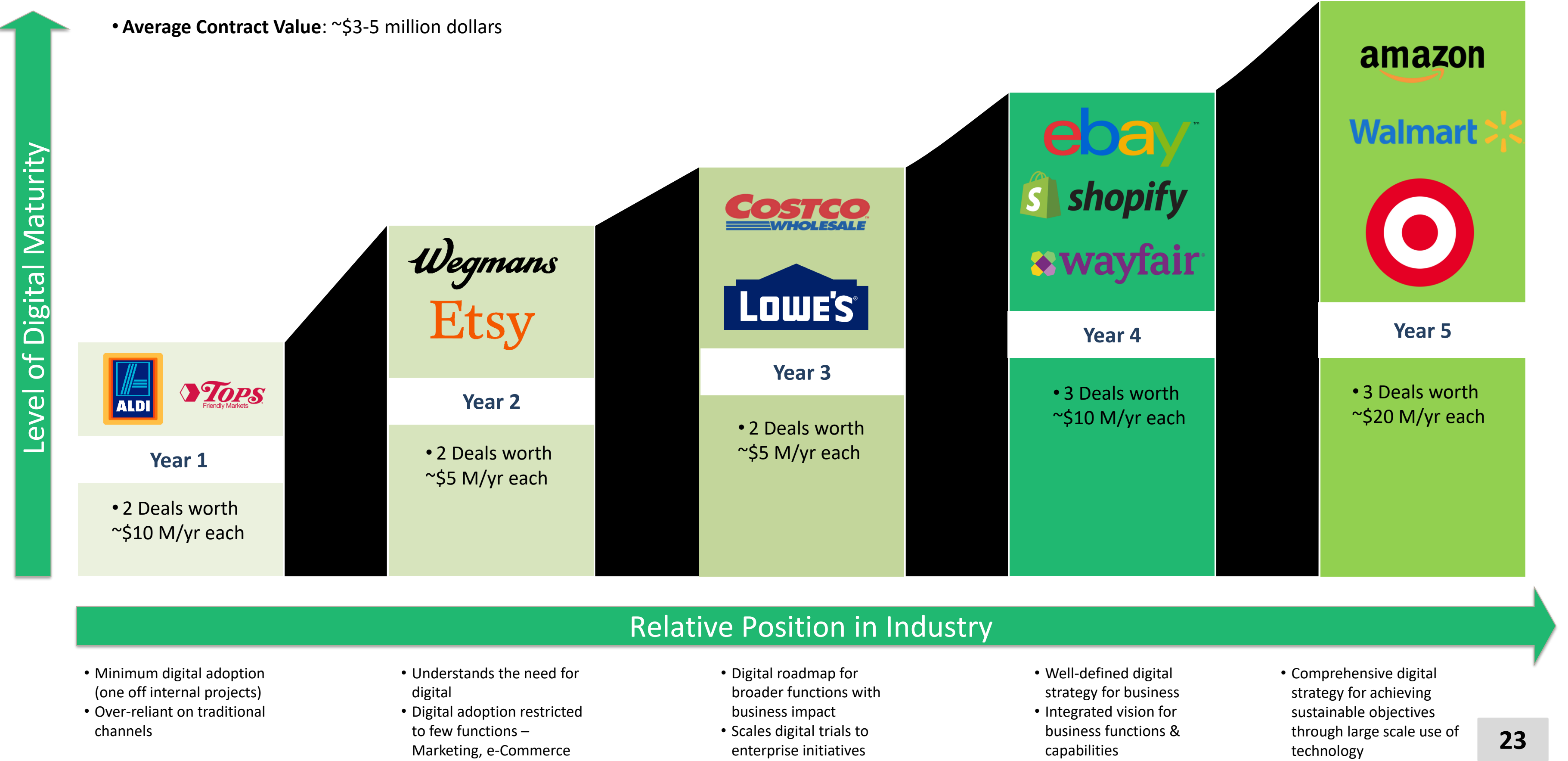
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- **Specialized Consultation:** Provide targeted consulting services tailored to specific client needs
- **Results-Driven Guidance:** Deliver impactful consulting through showcasing tangible outcomes.

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# Strategic Roadmap: Acquiring target customers based on their Digital Maturity and Business Positioning relative to industry peers



# Unlocking Value: Major Expenses levers for Year-1



## Hardware Costs



\$3.75 Million dollars



Hardware costs covering the breadth of data servers, routers, networking tools, IOT sensors, and security firewalls



## Software Costs



\$4.8 Million dollars



Software costs covering licenses for API integrations, web development tools, cloud hosting, ML/AI algorithms, databases, and security tools



## R&D Costs



\$6 Million dollars



Ongoing R&D focuses on developing intelligent systems for technology development across scalable IOT sensors, AI/ML algorithms, chips infrastructure, and data security systems



## Salary Expenses



\$5.5 Million dollars



A lean team of ~50 people with C-suite executives, HW/SW engineers, data scientists, Product Managers, Business Analysts, Data Analysts, and Sales team



# Unlocking Value: Key Financials of Sustaina™



Annual Income Statement for Sustaina (in \$)					
Revenue	Year 1 (2023-2024)	Year 2 (2024-2025)	Year 3 (2025-2026)	Year 4 (2026-2027)	Year 5 (2027-2028)
Software Sales	\$2,10,00,000.00	\$3,10,00,000.00	\$4,10,00,000.00	\$7,10,00,000.00	\$13,00,00,000.00
Consulting Services	\$50,00,000.00	\$60,00,000.00	\$70,00,000.00	\$80,00,000.00	\$90,00,000.00
Total Revenue	\$2,60,00,000.00	\$3,70,00,000.00	\$4,80,00,000.00	\$7,90,00,000.00	\$13,90,00,000.00
Cost of Goods Sold					
Cost of Software	\$48,40,000.00	\$48,40,000.00	\$48,40,000.00	\$48,40,000.00	\$48,40,000.00
Cost of Hardware	\$37,50,000.00	\$37,50,000.00	\$37,50,000.00	\$37,50,000.00	\$37,50,000.00
Total Cost of Goods Sold	\$85,90,000.00	\$85,90,000.00	\$85,90,000.00	\$85,90,000.00	\$85,90,000.00
Gross Profit	\$1,74,10,000.00	\$2,84,10,000.00	\$3,94,10,000.00	\$7,04,10,000.00	\$13,04,10,000.00
Operating Expenses					
R&D Cost	\$60,00,000.00	\$60,00,000.00	\$1,00,00,000.00	\$1,20,00,000.00	\$3,00,00,000.00
Sales and Marketing	\$20,00,000.00	\$20,00,000.00	\$60,00,000.00	\$80,00,000.00	\$1,00,00,000.00
General and Administrative	\$55,20,000.00	\$55,20,000.00	\$70,00,000.00	\$80,00,000.00	\$1,00,00,000.00
Other Operating Expenses	\$2,00,000.00	\$2,00,000.00	\$2,00,000.00	\$2,00,000.00	\$2,00,000.00
Total Operating Expenses	\$1,37,20,000.00	\$1,37,20,000.00	\$2,32,00,000.00	\$2,82,00,000.00	\$5,02,00,000.00
Operating Income	\$36,90,000.00	\$1,46,90,000.00	\$1,62,10,000.00	\$4,22,10,000.00	\$8,02,10,000.00
Non-Operating Income	\$20,00,000.00	\$20,00,000.00	\$20,00,000.00	\$20,00,000.00	\$20,00,000.00
Interest Expenses	\$10,00,000.00	\$10,00,000.00	\$10,00,000.00	\$10,00,000.00	\$10,00,000.00
Income Before Taxes	\$6,90,000.00	\$1,16,90,000.00	\$1,32,10,000.00	\$3,92,10,000.00	\$7,72,10,000.00
Income Tax Expense	\$2,07,000.00	\$35,07,000.00	\$39,63,000.00	\$1,17,63,000.00	\$2,31,63,000.00
Net Income (in \$)	\$4,83,000.00	\$81,83,000.00	\$92,47,000.00	\$2,74,47,000.00	\$5,40,47,000.00
Net Income (in \$ Millions)	\$0.48	\$8.18	\$9.25	\$27.45	\$54.05
ROI	2.16%	36.68%	41.45%	123.03%	242.25%



Sustaina™ would require a total investment of ~\$170 million dollars for the first 5 years to build and succeed for the long term

Investments	Year-1	Year-2	Year-3	Year-4	Year-5
Investment Required (in \$)	\$2,23,10,000.00	\$2,23,10,000.00	\$3,17,90,000.00	\$3,67,90,000.00	\$5,87,90,000.00
Investment Required (in \$ millions)	\$22.31	\$22.31	\$31.79	\$36.79	\$58.79

A pair of hands is shown from the wrist up, cupping a glowing, translucent Earth. The Earth is positioned in the center of the frame, with its continents and oceans visible. The background is a dark, starry space with a warm, orange glow emanating from the right side, suggesting a distant star or nebula. The hands are positioned at the bottom of the frame, with fingers slightly curled around the base of the Earth. The overall composition is centered and balanced, with the text 'Thank You' overlaid on the Earth.

**Thank You**