

THE EVOLUTION OF THE SUSTAINABLE CONSUMPTION MARKET TOWARD 2030 — THREE FACTORS ACCELERATING THE TRANSFORMATION OF CONSUMER BEHAVIOR —

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SUMMARY

- In addition to the sustainability-oriented efforts by public institutions and industries, there is a vital need for a change in consumer behavior toward 2030, which is also the target year to achieve the 17 goals (SDGs) set forth in the United Nations 2030 Agenda.
- Factors driving the acceleration in sustainability-conscious consumption behavior include (1) policy support, (2) the growing influence of emerging brands originating from the concept of sustainability along with the full-fledged efforts of major companies, and (3) the growing presence in the consumer market of Gen Z consumers and other generations, who are more responsive to social issues.
- Products and services that can promote changes in consumer behavior must have the quality of being fun, in addition to featuring simplicity, user-friendliness, etc. Moreover, it is expected that the perspective of sustainability that holistically incorporates both people's and the planet health, will become increasingly important in the future.

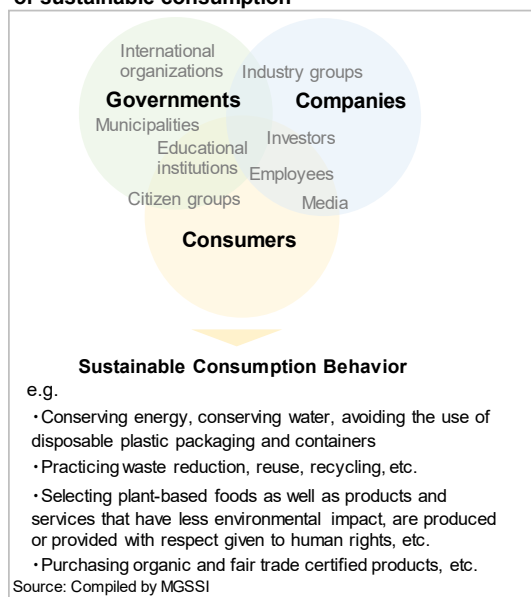
The United Nations set the year 2030 as the target year to achieve the 17 goals set forth in the 2030 Agenda for Sustainable Development (SDGs), and it is also an important transitional year for the international community's agreement to "decarbonize by 2050." In addition to the efforts of public institutions and private sector industries, changing consumer behavior is essential to solving social issues, such as climate change and human rights abuses. This report examines how sustainable consumption is likely to progress toward 2030, by identifying the factors that will change consumption behavior based on the trends of governments, companies, and consumers (Figure 1), which are considered the primary forces that will accelerate sustainability-conscious consumption behavior.

1. POLICY PUSH TO BEHAVIORAL CHANGE

Europe ahead of the curve

In Europe, which has been leading the way in policy-based efforts to encourage consumers to change their behavior, various countries have recently incorporated environmental perspectives into their dietary guidelines,

Figure 1: Main forces driving the acceleration of sustainable consumption



adding to the primary aim of the guidelines to promote healthy eating. They are recommending, for example, that consumers reduce the consumption of environmentally harmful foods, such as beef, and increase the consumption of plant-based foods. The European Commission's "Farm to Fork Strategy" also clearly states that, in addition to the promotion of agricultural products grown with reduced use of chemical pesticides and other chemicals, a plant-based diet that reduces environmental impact and disease risk is encouraged (Figure 2). To

Figure 2: Status of sustainability-related declarations in major countries and regions and examples of initiatives in the lifestyle sector

		EU	UK	Japan	China	India
Status of declarations in key areas	Decarbonization (Carbon neutrality)	• Reduce emissions by at least 55% from 1990 levels by 2030	• Reduce emissions by at least 68% from 1990 levels by 2030	• Reduce emissions by 46% from 2013 levels by 2030, and strive further to achieve a 50% reduction	• Transition to a decrease in CO2 emissions by 2030	• Meet 50% of energy demand through renewable energy
		2050			2060	2070
	Reduction of plastic waste	• Work with industry to ensure that by 2030 all plastics are reusable, recyclable, or thermally recyclable if no alternative materials exist		• Shift to reusable and recyclable designs by 2025. Reduce one-way plastics waste by 25% by 2030	• Prohibit the use of single-use plastic shopping bags and containers by 2025	• Eliminate all single-use plastics by 2022
	Reduction of food waste	• Halve per-capita food waste at the retail and consumption levels by 2030	• Halve food waste by 2030	• Halve the volume of food loss and waste by 2030, compared to FYE 2000 levels	• Promulgated the Law of the People's Republic of China on Food Waste in April 2021	• Developing food processing complexes and building value chains to reduce agricultural product waste
Initiatives in the lifestyle sector (examples)		Food • The specific targets for 2030 of the "Farm to Fork Strategy," which is a cornerstone of the EU Green Deal policy, include reducing the use of chemical pesticides by 50%, fertilizers by 20%, and antimicrobials for livestock and aquaculture by 50%; increasing the percentage of organic farmland to 25%; and promoting a plant-based diet to reduce environmental impact and the risk of diseases, such as obesity. • Planning to propose by 2024 a framework for food labels showing five levels of environmental impact to make it easier for consumers to choose environmentally friendly products. Apparel (textiles) • Under the EU Strategy for Sustainable and Circular Textiles, which is part of the Circular Economy Action Plan that lies at the heart of the Green Deal, textile products sold within the EU are to be long-lasting, recyclable, produced in respect of workers' rights, etc. by 2030. • Planning to introduce labels that are easy for consumers to understand (EU Ecolabel) and a "Digital Product Passport" that will allow consumers to use the product ID to verify information on the entire value chain, including information on raw materials and recycling.	Food waste • The government is calling on major food-related companies to reduce food waste, make efforts to raise public awareness of food waste, etc., and to reduce not only food waste from their own business activities but also waste from suppliers and consumers. • More than 200 major companies, including Tesco, Costa, and Nestlé have endorsed the above, and the goal is for all 250 major food companies to participate by 2026. Food • The National Health Service (NHS) has set a long-term goal of achieving carbon neutrality throughout its supply chain by 2045. Among the areas targeted by this plan are healthy eating (centered on plant-based foods) and food waste reduction. Apparel • In the strategy "Our waste, our resources: a strategy for England" prepared in 2018, the fashion sector was identified as one of the priority industries needing to reduce waste by 2025, and the government is supporting activities to strengthen ethical and environmental measures in the industry and raise consumer awareness.	• In FY 2022, the Ministry of the Environment launched the "Green Life Point Promotion Project" (¥10.1 billion appropriated in the FY 2021 supplementary budget). < Lifestyle areas targeted by the project > Food • Use of locally produced and consumed foods and in-season food ingredients • Purchase foods close to the sell-by date • Take home leftovers Circulation • Decline disposable plastic spoons and straws • Select items sold separately and products sold in simple packaging • Purchase reusable items, use repair services Apparel • Contribute to reducing fashion loss • Make sustainability-conscious fashion choices • Use clothing subscription services Housing & Transportation • Switch to energy-efficient home appliances • Practice energy-saving • Switching to renewable energy sources • Use ride sharing services Etc.	• In January 2022, the government announced a master plan for boosting green transformation of consumption. The aim of the plan is to widely promote the concept of green consumption by 2025, and to have the public voluntarily choose green consumption behavior such that it becomes the prevailing trend by 2030. < Lifestyle areas targeted by the plan > Food • Promote market uptake of organic and other environmentally friendly foods • Reduce food waste • Recycle compostable food waste Apparel • Promote donations and recycling of used clothing • Use environmentally friendly textiles • Recycle waste fibers • Introduce energy-saving dyeing process Retail • Promote the consumption of green products in a comprehensive manner on e-commerce sites and shopping mall sales floors (Strengthening promotional activities for environmentally friendly products, limit excessive packaging, etc.) Housing & Transportation • Promote use of energy- and water-saving products • Promote new energy vehicles • Promote electrification of public sector vehicles Etc.	Reduction of plastic waste • Since July 2022, rules have been tightened to prohibit the illegal manufacture, sale, and use of certain disposable plastic bags, containers, straws, plastic bottles, etc., with the establishment of national and state-level control offices. A "waste generator" is defined as "every person or group of persons or institution, residences or commercial establishments that generate plastic waste" and the government is emphasizing that public participation is essential for the elimination of disposable plastics. General lifestyle • On World Environment Day in June 2022, Lifestyle for the Environment (LiFE) was launched with the aim of creating an India-led international movement for living an environmentally conscious lifestyle. • LiFE states that individual action is at the core of climate change action, and cites traditional Indian lifestyles, energy conservation, water conservation, de-plasticization, clothing reuse, bicycle use, etc., as examples of concrete actions to be taken.

Source: Compiled by MGSSI based on information disclosed by the European Commission and the government of each country

achieve this, a plan has been presented to introduce food labeling that will make it easier for consumers to choose environmentally friendly products (Figure 2-1). In the apparel field as well, the EU Strategy for Sustainable and Circular Textiles sets a goal of requiring that all textiles sold in the EU be long lived and recyclable by 2030. Plans also call for the introduction of a Digital Product Passport to help consumers better understand products and make it easier for them to choose sustainable products (Figure 2-2).

Figure 2-1: Example of a food product label

Example of an environmental label for food products being piloted in France, which is ahead of other countries in its plan to introduce the system



Source: Compiled by MGSSI based on information available on the developers' websites: (1) Open Food Facts, <https://world.openfoodfacts.org/eco-score-the-environmental-impact-of-food-products>, (2) Planet Score, <https://www.planet-score.org/> (Accessed August 17, 2022)

Figure 2-2: Overview of the Digital Product Passport

Example of the scope of information that can be registered to a product's Digital ID, which is being developed by a tool developing startup EON in the US, which is leading the related tool development



Source: World Economic Forum, "This start-up is making digital passports... for clothes. Here's what that means for the fashion industry," <https://www.weforum.org/agenda/2021/05/tracking-fashion-clothes-sustainable/> (Accessed August 17, 2022)

Trends in Japan, China, and India

Among the goals Japan has set to achieve by 2030 are a 46% reduction in greenhouse gas emissions, a 50% cut in food loss and waste, and a 25% decrease in single-use plastics waste from 2013 levels. The Green Life Point Promotion Program launched by the Ministry of the Environment in fiscal 2022 encourages a shift to a more environmentally conscious lifestyle, with companies and communities awarding points to consumers for choosing products and services that contribute to local production for local consumption, the reduction of food and clothing waste, etc. The program also aims to promote the expansion of the markets for related products and services.

In China, the plan on boosting the green transformation of consumption, announced in January 2022, calls for green consumption, which is represented by a thorough commitment to environmental protection and low-carbon principles, to become the prevailing behavior in the consumption market by 2030. For the food sector, the plan urges the reduction of food waste and promotion of environmentally friendly food products, while in the apparel sector, the plan encourages the recycling of used clothing and the use of environmentally friendly

textiles. Major Chinese companies are beginning to take action, ahead of the government's announcements. Alibaba Group, for example, has introduced a system that increases consumers' credit scores when their purchases of environmentally friendly products are registered and linked to their "carbon accounts" of the group's Alipay payment service. Furthermore, in August 2022, the company released a "carbon ledger" for awarding points to consumers for their low carbon consumption behavior practiced across the services under the group's umbrella¹.

In India, Prime Minister Narendra Modi announced Lifestyle for the Environment (LiFE), a climate crisis response initiative that focuses on the action of individuals, to coincide with World Environment Day in June 2022. LiFE aims to create an international movement for living an environmentally conscious lifestyle, and it is noteworthy that this is led by the country where carbon footprint per capita is 60% lower than the global average, and traditional lifestyles are still in place. In India, environmental pollution caused by plastics has become severe. While strict regulations have been initiated worldwide, including penalties for the manufacture, sale, and use of certain plastics, it is expected that India will continue to strengthen its efforts to reduce environmental pollution while accentuating traditional values.

2. COMPANIES SHARE THE VALUES WITH CONSUMERS

Emerging brands stimulating sustainable consumption

Emerging companies that develop businesses originating from the idea of solving social issues are also driving changes in consumer behavior. Related consumer goods and services companies can be broadly classified into two groups: those that focus on the development of environmentally friendly materials and products; and those that provide services that encourage changes in the existing pattern of mass consumption, mass production, and mass disposal, such as resale and rentals. A number of such startups, including those marketing alternative milk products and engaged in resale services, launched IPOs in 2021 (Figure 3). In addition, among the companies that raised significant funds in 2022 are a coffee alternative maker and a developer of a food-sharing app used to connect consumers with still-edible discarded food. Many of these emerging companies are attracting mainly younger generation customers for their products and services by appealing to the values of young people via social media, etc., and are stimulating consumption trends. Growth in related markets has also been conspicuous. For example, in many countries the market for products considered as meat substitutes has grown much faster than that for regular products, and Ernst & Young forecasts the market for alternative proteins will grow to US\$153 billion by 2030, 10% of the size of the meat market². There are also differences by country, and estimates based on the market forecasts by the research firm Euromonitor suggest substitutes will account for over 30% of the market for processed meat products by 2026 in the Netherlands, where the market uptake of alternative meat products is more advanced than in any other Western country (Figure 4). In the apparel industry, the market related to resale and rental³ accounted for approximately 3.5% of the global apparel market in 2019, but the Ellen MacArthur Foundation, a proponent of the circular economy, has indicated that it could grow to 23% (approximately US\$700 billion) by 2030 if its proposed circular economy model is implemented⁴.

¹ The 88 Carbon Account (carbon ledger) visualizes low-carbon behavior as a carbon footprint and converts it into points, which can be accumulated and used toward payments for products and services across the Alibaba Group's platforms, including its main e-commerce site (TMall) as well as food delivery service (Ele.me) and flea market app (Xianyu). The points are awarded for purchases of low-carbon products as well as for conscious behavior, such as recycling cardboard boxes generated through the use of e-commerce by bringing them to a collection and delivery center and declining to use disposable spoons.

² Protein reimaged: challenges and opportunities in the alternative meat industry (Apr. 1, 2021) https://www.ey.com/en_us/food-system-reimagined/protein-reimagined-challenges-and-opportunities-in-the-alternative-meat-industry (Figure 1)

³ Including repair and remaking

⁴ Ellen MacArthur Foundation, Circular business models: Redefining growth for a thriving fashion industry (2021) p15-16

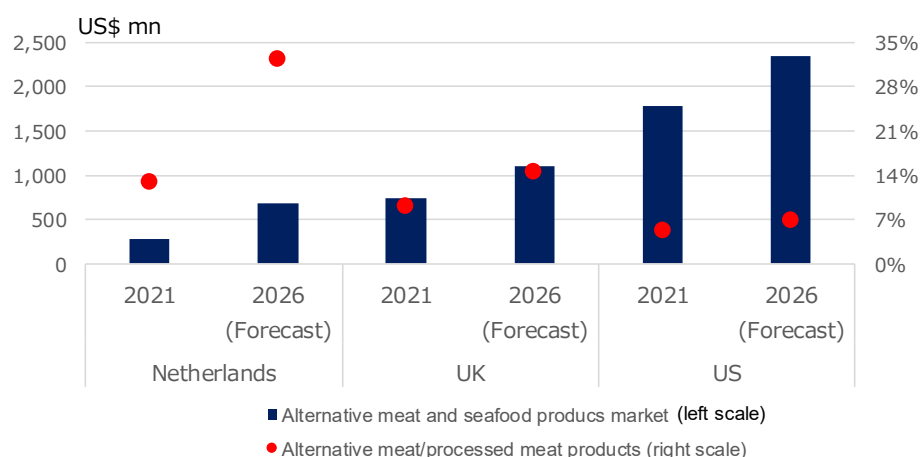
Figure 3: Examples of emerging companies**Consumer goods and services companies that launched IPOs in 2021**

Segment	Company (HQ location)	Year established	Business summary	Valuation at time of IPO
Food	Oatly (Sweden)	1990	<ul style="list-style-type: none"> Manufactures and sells alternative dairy products Instead of using milk, soybeans, etc. as raw materials, the products are made from oats, which have less impact on the environment. The company promotes environmental sustainability by displaying a product's carbon footprint on the packaging. 	US\$10 bn
Apparel	Allbirds (US)	2014	<ul style="list-style-type: none"> Manufactures and sells shoes made from environmentally and animal welfare friendly materials, such as merino wool, recycled pet bottles, and castor oil The company measures CO² emissions for all processes from factory operations to office lighting. 	US\$2.2 bn
Services	Poshmark (US)	2011	<ul style="list-style-type: none"> App for an online fashion flea market (sharing service) The service has 80 million registered users in the US, Canada, and Australia, and handles over 200 million products. 	US\$3 bn
	Rent the Runway (US)	2009	<ul style="list-style-type: none"> Rental service for upscale brand products The company claims the service reduces the environmental impact of apparel mass production, and that 83% of its customers who have used its services have cut back on their fast fashion purchases. 	US\$1.7 bn
	ThredUp (US)	2009	<ul style="list-style-type: none"> Resale platform for fashion products The company carries a wide range of 35,000 brands, from fast fashion to luxury brands, with 2.4 million items available on a regular basis. The company claims that purchasing one used product can reduce CO² emissions, waste, and water use associated with that product by 82%. 	US\$1.3 bn

Companies that raised funds in the first half of 2022

Segment	Company (HQ location)	Year established	Business summary	Total funds raised (latest funding round)
Food	Motif (US)	2019	<ul style="list-style-type: none"> Develops food ingredients to make plant-based foods more authentic, such as melt-and-stretch vegetable cheese and plant-based marbled meat 	US\$340 mn (N/A)
	Finless Foods (US)	2017	<ul style="list-style-type: none"> Develops alternative seafood products. Manufactures and sells cell-cultured tuna and plant-based tuna 	US\$37.5 mn (Series B)
	Atomo Molecular Coffee (US)	2019	<ul style="list-style-type: none"> Developer of biotech coffee that does not use coffee beans. Created by combining plant stems, roots, seed husks, and other discarded plant material 	US\$51.6 mn (Series A)
	Starfield (China)	2019	<ul style="list-style-type: none"> Produces and sells plant meat made from soybeans, chickpeas, quinoa, and microalgae 	US\$120 mn (Series B)
Services	Co-cooking (Japan)	2015	<ul style="list-style-type: none"> Developer of the "TABETE" app designed to reduce food loss and waste. The app connects buyers (consumers) with restaurants, retailers, etc. who display unsold or soon-to-be discarded food products that are still fit for consumption. 	¥380 mn (Series A)
Other	Bambrew Plant Fiber Technology (India)	2018	<ul style="list-style-type: none"> Uses environmentally friendly materials, such as bamboo, sugar cane, and seaweed, to manufacture alternatives to disposable plastics (e.g., take-out food containers, consumer goods packaging, and shipping packaging). 	US\$2.35 mn (Seed)

Source: Compiled by MGSSI based on data from Crunchbase and QUID

Figure 4: Alternative meat products market and share of processed meat products market

Source: Compiled by MGSSI based on Euromonitor data
 Note: Forecasts at 2021 constant prices

Leading companies stepping up efforts

The growth of these markets is also being driven by the strengthening of related businesses by companies that have traditionally operated in this area, and by the market entry of major companies. Companies are stepping up their efforts through enhanced sustainability-driven product development as well as M&As and other means, which are also contributing to achieving decarbonization-related goals (Figure 5). For example, following is a look at the related product development trends at three companies⁵ with even more ambitious targets than the EU (Figure 5*). Nestlé has strengthened its plant-based products through acquisitions of plant-based meat companies, etc., and its sales in related areas reached CHF 800 million in 2021. L'Oréal has developed its own product label⁶ to help consumers make more sustainable choices and has introduced it first to Garnier, the world's fourth largest hair care brand by market share⁷. The solid shampoo developed by the brand is 94% vegetable-based and, compared to liquid shampoo, reduces container use by 80%, GHG emissions by 30%, and fossil fuel consumption during transportation by 70%. H&M, meanwhile, asserts that more than 70% of the environmental impact of clothing is determined at the design stage and has developed a tool to promote "circular fashion," which means designing clothing to be used or reused more often, while also using safe, recycled or recyclable materials. It plans to offer this tool to other companies going forward.

⁵ Nestlé: The EU has not yet stated an overall target figure for regenerative agriculture, which contributes to increasing land restoration and biodiversity conservation. L'Oréal: The EU has committed to carbon neutrality by 2050. H&M: The EU has stated that textile products sold in the EU must be long-lasting and recyclable by 2030.

⁶ Product Environmental & Social Impact Labelling, which indicates the degree of environmental and social impact of a product on a five-point scale from A to E. The labelling system has been approved by scientific experts and verified by an independent auditing firm, and it will be introduced in stages to all brands.

⁷ According to Euromonitor data, the Garnier brand ranked fourth with a 4.7% share of the global hair care products market in 2021. The largest market share is held by L'Oréal Paris, also part of the L'Oréal Group, ranked second is Pantene (P&G), and third is Head & Shoulders (P&G).

Figure 5: Examples of major companies' initiatives

Segment	Company (HQ location)	Examples of products and services that originated from the concept of sustainability	Status of goal declaration in key areas		
			Decarbonization	Circular economy (reduction of plastic waste, recycling, etc.)	Raw material production and procurement
Food and other consumer goods	Nestlé (Switzerland)	<ul style="list-style-type: none"> Garden Gourmet (plant-based products; acquired in 2017), Sweet Earth (alternative meat, acquired in 2017), WUNDA (alternative dairy products, and other plant-based brands. Sales of plant-based food products in 2021 reached CHF800 million (approximately ¥100 billion at the average exchange rate for 2021). 	<ul style="list-style-type: none"> Reduce GHG emissions by 50% from 2018 levels by 2030 and achieve net zero emissions by 2050 at the latest 	<ul style="list-style-type: none"> Make 100% of packaging recyclable or reusable by 2050 	<ul style="list-style-type: none"> By 2025, all Nescafé brand coffees must be verified or certified by an independent organization. By 2030, procure 50% of main raw materials from regenerative agriculture*.
	PepsiCo (US)	<ul style="list-style-type: none"> Formed the PLANeT Partnership with alternative meat company Beyond Meat to develop plant-based protein snacks and beverages, and launched the first product, plant-based jerky. 	<ul style="list-style-type: none"> Achieve net-zero emissions in the company's value chains by 2040 	<ul style="list-style-type: none"> Make all packaging recyclable, compostable, or biodegradable by 2025 	<ul style="list-style-type: none"> Sustainably source 100% of primary raw materials by 2030. Expand regenerative agriculture to approximately 28,000 square kilometers.
	Unilever (UK)	<ul style="list-style-type: none"> Plant-based food brands such as The Vegetarian Butcher (plant-based meat/acquired in 2018) and processed foods utilizing algae protein, which is being developed in partnership with the UK biotech company Algenuity. 	<ul style="list-style-type: none"> Transition to renewable energy for all energy needs by 2030. Achieve net-zero status for all products by 2039. 	<ul style="list-style-type: none"> Make all packaging recyclable, reusable, or compostable by 2025. 	<ul style="list-style-type: none"> By 2023, achieve deforestation-free production throughout the supply chain for key raw materials, such as palm oil, paper, tea, soybeans, and cocoa.
	L'Oréal (France)	<ul style="list-style-type: none"> Solid shampoo bar from hair care brand Garnier (requires 80% less packaging, generates 30% less GHG emissions, and uses 70% less transportation fuel compared to liquid shampoos). Showerheads that can reduce water use by up to 60% (in partnership with a startup). 	<ul style="list-style-type: none"> Achieve carbon neutrality at all sites worldwide by 2025*. Reduce per-product GHG emissions from product transportation by 50% by 2030, compared to 2016 levels. 	<ul style="list-style-type: none"> All plastic containers will be recyclable or made from bio-based sources by 2030. By 2030, all water used in the company's factories will be recycled and reused in a closed-loop process. 	<ul style="list-style-type: none"> By 2030, all bio-based raw materials and container materials shall be sourced from traceable and sustainable sources and shall not be associated with deforestation.
Apparel	H&M (Sweden)	<ul style="list-style-type: none"> COS, a brand that is not tethered to trends Partnered with the Ellen MacArthur Foundation to introduce Circulator, a design tool to promote circular fashion. 	<ul style="list-style-type: none"> Achieve climate positivity throughout the value chain by 2040. Reduce carbon emissions by 56% by 2030, compared to 2019 levels. 	<ul style="list-style-type: none"> By 2030, use only recyclable or sustainability-related certified raw materials in all products. By 2025, all products will be designed based on circular fashion* (with the design tool "Circulator", using safe recycled materials and recyclable materials, design products for increased use and reuse). 	
	Fast Retailing (Japan)	<ul style="list-style-type: none"> Jeans manufactured using BlueCycle, a technology that reduces water usage during the jeans processing procedure by up to 99%. Clothing made of recycled polyester produced by reusing pet bottles. 	<ul style="list-style-type: none"> By FY 2030, reduce GHG emissions from energy use at company-operated facilities by 90% from FY 2019 levels. 	<ul style="list-style-type: none"> Under the RE.UNIQLO program, the company has revamped the recycling activities it has been pursuing since 2006 and is not only reusing clothing, but also recycling garments into new clothing and repairing clothing. 	<ul style="list-style-type: none"> By March 2022, disclose a list of all garment factories with which the company has ongoing transactions. Also plans to introduce "work environment monitoring" to be conducted by a third-party entity at textiles factories.
Services (retail, food..)	Walmart (US)	<ul style="list-style-type: none"> Private brand products, including organic foods as well as clothing and other goods made from environmentally friendly materials. Sells used clothing through a partnership with resale e-commerce company ThredUp. 	<ul style="list-style-type: none"> Achieve zero emissions in all operations by 2040. 	<ul style="list-style-type: none"> Achieve zero operational waste at company-owned operations in the US and Canada by 2025. 	<ul style="list-style-type: none"> Source more sustainably for at least 20 major commodities by 2025.
	Tesco (UK)	<ul style="list-style-type: none"> Private brand plant-based foods (e.g., "Tesco Plant Chef") Equipped stores with a "Better Baskets" corner to display healthier products, such as plant-based foods and low-calorie products. 	<ul style="list-style-type: none"> Achieve carbon neutrality by 2030. 	<ul style="list-style-type: none"> Eliminate plastic from 5 billion products sold each year by 2025 while making use of reuse mechanisms. 	<ul style="list-style-type: none"> Introduce the Linking Environment and Farming (LEAF) Marque environmental certification system to the global supply chains for produce by 2025.
	Aeon (Japan)	<ul style="list-style-type: none"> Sustainability-conscious private brand products, including environmentally friendly kitchen supplies and organic, fair trade, and plant-based foods. 	<ul style="list-style-type: none"> Transition to renewable energy sources to meet 50% of the electricity used in stores in Japan by 2030. 	<ul style="list-style-type: none"> Reduce food waste by half by 2025 compared to 2015 levels. In addition, establish a food resources-recycling model to enable use of food waste as a resource. 	<ul style="list-style-type: none"> Obtain sustainability-related certifications for private brand products in major product categories.
	Starbucks (US)	<ul style="list-style-type: none"> Menu items made using plant-based milk and plant-based meat. Discount service for customers who bring their own cup. 	<ul style="list-style-type: none"> Halve the company's footprint in terms of CO₂, water usage, and waste by 2030. 	<ul style="list-style-type: none"> Reduce waste generated by stores by 50% by 2030. 	<ul style="list-style-type: none"> Achieve carbon neutral green coffee by 2030, thereby saving 50% of water consumption in green coffee processing.

Source: Compiled by MGSSI based on materials of each company

3. CONSUMERS IN 2030

Generation Z driving new consumer markets

By 2030, it is estimated that members of the Millennial and Generation Z (Gen Z) will account for more than 60% of the world's working-age population (Figure 6). Both generations have grown up with the rise of IT platformers, but Gen Zers in particular, being digital natives, learning about the SDGs at school, and influenced by activists who have been vocal among their generation such as Greta Thunberg, have shared values and formed communities through social media. Some studies⁸ have found that compared to Millennials, Gen Zers are more concerned about climate change, more conscious about social inclusiveness, and more easily swayed by friends and influencers. According to a survey conducted by Randstad⁹, one of the largest human resource services firms, half of Gen Z workers said they would not want to work for a company that does not align with their values on social and environmental issues. For companies, if they do not address the issue of sustainability, not only will their products and services attract criticism online and be shunned by consumers, but they will also face an increased risk of difficulties on the recruitment front, which could affect new business creation and their sustainable growth.

Figure 6: Population data for the world, Millennials, and Generation Z

	Percentage of Millennial and Gen Z members ^{Note 1} in the working-age population ^{Note 2}			Total population (mn)			Percentage of those 65 years old and over	
	2020	2030	Gen Z	2020	2030	vs 2020 (%Change)	2020	2030
World	54%	64%	33%	7,841	8,546	9%	9%	12%
North America	51%	63%	31%	374	393	5%	16%	21%
Latin America	59%	65%	33%	652	698	7%	9%	12%
Western Europe	47%	59%	27%	195	197	1%	21%	25%
Africa	71%	67%	41%	1,361	1,711	26%	3%	4%
East Asia	Japan	43%	55%	125	119	-5%	30%	31%
	South Korea	45%	57%	52	51	-1%	16%	25%
	China	49%	58%	25%	1,425	1,416	-1%	13%
Southeast Asia	58%	64%	33%	670	725	8%	7%	10%
South Asia	64%	67%	36%	1,970	2,173	10%	6%	8%

Note 1: The range of birth years for Millennial and Generation Z members varies, but for the purposes of this report, Millennials are defined as those born between 1980 and 1995, and Gen Z as those born between 1996 and 2010.

Note 2: The total population of those 15-64 years old

Source: Compiled by MGSSI based on the World Population Prospects 2022 report by the United Nations (median of estimates)

Attention should also be given to seniors

That said, the demographic structure and characteristics of each generation are not uniform. In Japan, where the population is aging, with 30% of the population 65 years of age or older, seniors, in addition to young people, tend to be highly interested in social issues and actively engage in related activities and gather information (Figure 7). As such, the population of seniors may also become a driver of growth for the sustainability-related

⁸ PEW RESEARCH CENTER, Gen Z, Millennials more active than older generations addressing climate change on- and offline, (May 24, 2021) https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-stand-out-for-climate-change-activism-social-media-engagement-with-issue/ps_2021-05-26_climate-and-generations_00-01/; Learn In, The War For Talent: Why Growth Companies Need To Focus On Gen Z Workers, (July 2022) <https://www.learnin.com/the-latest/war-for-talent-growth-companies/>, etc.

⁹ Randstad, workmonitor 2022, p23-25 (Survey of 35,000 workers 18 to 67 years old in 34 countries; the survey was conducted from February 21 to March 13, 2022)

consumption market in Japan in the future. Careful consumer analyses will need to be conducted according to the actual situation in each country.

Figure 7: Awareness and behaviors in response to social and environmental issues

Q. To what extent do you engage in the following behaviors in your daily life? For each behavior, please select the answer that best describes your behavior.

(Please select one answer: Always, Often, Sometimes, Not Very Often, Hardly Ever, or Not At All)

	Use your own bag when shopping at supermarkets and convenience stores	Separate trash and recycle	Make efforts to reduce disposable plastic waste volume	Stay informed and learn more about social issues through TV, newspapers, magazines, books, etc.	Discuss social issues with family members and other people close to you	Research the Internet for more information and other people's opinions on social issues	Interact and communicate with friends and peers through social activities	Learn about social issues in classes at school or in training programs at the company where you work	Share articles and posts that address social issues on social networking sites
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(Sum of scores for Always, Often, and Sometimes)

			85.2	83.8	60.3	58.8	40.9	39.0	26.3	24.0	19.7
Overall across genders and ages (n=4125)			85.2	83.8	60.3	58.8	40.9	39.0	26.3	24.0	19.7
By gender and age	Ages 16-19	Male	68.6	65.3	52.9	60.3	47.1	52.9	43.0	50.4	40.5
		Female	74.8	80.0	60.9	53.9	45.2	47.0	40.9	39.1	30.4
	Ages 20-29	Male	72.2	67.0	48.4	54.2	42.8	43.8	39.5	36.9	31.0
		Female	84.6	75.0	54.7	51.4	36.1	38.9	28.7	28.0	23.0
	Ages 30-39	Male	75.5	72.1	46.4	55.7	38.3	41.9	32.8	32.0	27.3
		Female	88.3	85.9	55.2	52.8	34.7	34.4	22.4	16.0	16.8
	Ages 40-49	Male	79.3	83.0	53.1	56.0	35.6	38.1	23.9	27.0	17.9
		Female	92.1	89.9	65.1	57.0	40.1	32.7	20.5	17.1	17.6
	Ages 50-59	Male	83.7	86.9	55.9	60.4	39.6	41.4	21.1	23.0	15.0
		Female	95.5	95.0	71.9	62.6	46.7	34.7	26.5	16.4	15.4
Ages 60-69	Male	87.4	87.9	64.3	67.6	40.6	42.0	21.4	23.1	18.4	
	Female	96.7	93.8	82.3	66.8	50.4	37.2	21.9	13.5	10.2	

Source: Compiled by MGSSI based on "2021 Survey of Consumer's Sustainable Purchasing Behavior" [in Japanese], published by Hakuho-do; top three scores from (2) and survey results for six items from (3) of the section entitled "Awareness of and behaviors in response to social and environmental issues," p5,6. Note: Shaded cells indicate values that are greater than the overall value (the darker the color, the greater the value).

4. FOR FUTURE BUSINESS ACTIVITIES

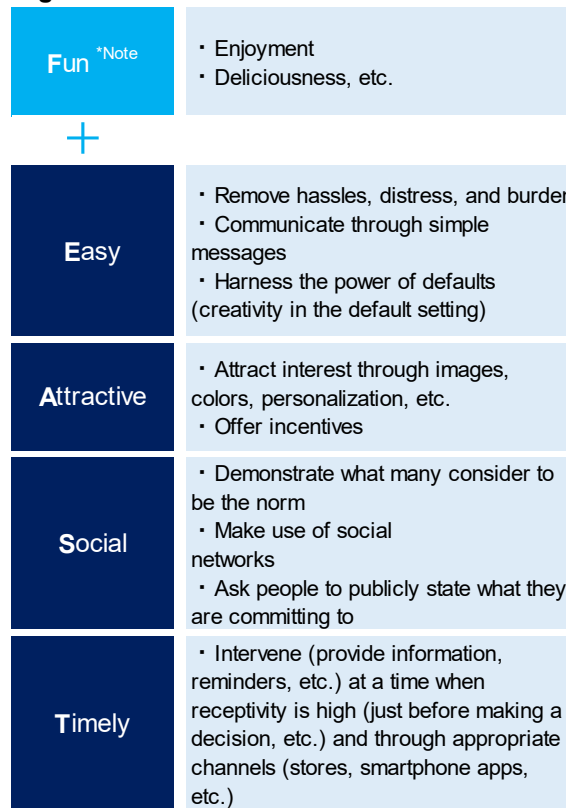
Toward 2030, the market for sustainability-related products and services is expected to grow as a result of the interplay and synergies between policy support, corporate initiatives, and heightening consumer awareness. The UK's Behavioural Insights Team¹⁰, a social purpose organization providing insights for behavioral change, has developed a framework for promoting behavioral change called "EAST" (taken from Easy, Attractive, Social, and Timely) based on past research findings, trials, and practices, and Professor Cass R. Sunstein of Harvard Law School has added "Fun" to this framework and proposed "FEAST" (Figure 8). To further encourage sustainability-conscious consumption behavior, not only will social issues need to be addressed, but consumer benefits will also be required, such as the elimination of hassles experienced by consumers through the use of digital technology and other means, simple messages that appeal to consumers, and the element of fun of itself, or deliciousness in the case of food products.

In addition to this, benefits such as promoting and maintaining good health are also directly linked to the choice of related products and services. Health, in addition to the environment, will likely be a major lifelong theme for Gen Zers, who are also experiencing the rise of movement to mitigate climate change and the global pandemic

¹⁰ The Behavioural Insights Team (BIT) was established in the UK in 2010 as an organization within the government to apply behavioral science findings to policy. The BIT is the world's first nudge unit (a specialized organization of government and public institutions that promotes the application of nudge theory), which is now affiliated with the National Endowment for Science, Technology and the Arts (NESTA) and has eight offices around the world.

in their youth. It will become increasingly important to address sustainability that holistically incorporates the health of humans and the planet as well.

Figure 8: FEAST framework for behavior change



Source: Compiled by MGSSI based on "Behavioral Science and Public Policy" by Cass R. Sunstein (p52, Japanese translation published by Keiso Shobo Publishing) for Note, and "EAST, Four simple ways to apply behavioural insights" by The Behavioural Insights Team for all other information

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