Dimension	Factor	Description	EXP1	EXP2	EXP3	EXP4	EXP5	EXP6	EXP7	EXP8	EXP9	EXP10	EXP11	EXP12
Management	Environmental Leadership of Management Personnel	The ability to integrate environmental concepts into the entire company's management operations and production activities.	4	4	3	5	2	3	1	5	2	1	5	3
	Orphan Product Collection Points	Establishing centralized collection points based on product types to optimize the logistics network and reduce transportation costs and time.	5	3	4	3	2	1	4	1	3	4	4	2
	Supply Chain Traceability	Improving supply chain transparency through technologies such as blockchain to ensure accurate and traceable information on waste disposal and recycling.	3	5	1	5	2	2	2	4	4	3	5	2
	Business Ethics	Using IoT technology to supervise recycling companies to ensure the treatment process of household appliance waste complies with environmental ethical standards.	2	5	4	1	1	5	5	2	4	1	2	2
	Partnerships	Evaluating cooperation and synergy among supply chain parties, including the establishment of public-private partnerships (PPP).	4	2	3	1	5	4	5	2	1	1	5	2
Environment	Resource Utilization Efficiency	The efficiency of resource use during recycling and reuse processes.	2	3	2	2	5	5	1	2	2	1	3	1
	Carbon Emissions	Assessing greenhouse gas reductions from household electronic waste reverse supply chain activities, including disposal, reuse, and remanufacturing stages.	3	4	5	3	2	2	1	4	3	1	5	2
	Environmental Impact	The positive or negative effects on the natural environment and ecosystems.	3	1	4	1	1	5	3	3	2	1	2	3
	Energy Consumption	The reduction in energy consumption throughout the entire reverse supply chain.	4	2	2	5	5	3	2	4	1	1	1	3
	Biodiversity	The impact of recycling activities on local biodiversity.	5	2	4	4	1	4	1	1	1	2	5	5
	Emissions of Microplastics and Hazardous Substances	Emissions of microplastics and hazardous substances (e.g., heavy metals) during electronic waste recycling.	4	2	3	2	3	2	5	1	5	3	4	2
	Corporate Environmental Ethical Responsibility	The responsibility and contribution of enterprises in minimizing environmental impacts of electronic waste.	4	4	4	5	2	5	3	1	5	5	2	5
Technology	Household E-Waste Recycling Mechanisms	Efficient recycling mechanisms including setting recycling fees and licensing and auditing recyclers.	5	4	4	4	5	5	4	3	1	1	4	3
	Propagation of Information on the Hazards of e-waste	Using new media platforms to publicize environmental hazards caused by electronic waste and promote public environmental responsibility.	5	5	2	1	4	3	5	4	1	3	5	1
	Optimization of Logistics Networks	Using IoT technology to optimize recycling processes, such as monitoring waste volumes with smart containers and intelligent sorting.	2	2	2	2	2	1	5	2	3	4	5	5
	Recycling Technology	Applying advanced technologies such as CRT and PCB for efficient recycling and resource utilization of household electronic waste.	2	3	2	2	3	4	1	2	3	3	4	1
	Dismantling and Processing Technology	Utilizing advanced technologies like LCD for effective dismantling and environmentally friendly treatment of waste.	4	4	3	1	3	4	3	2	5	1	4	1
Economy	Recycling Costs	Direct costs including collection and transportation of household electronic products.	5	4	2	1	5	2	3	1	1	5	2	1
	Dismantling and Processing Costs	Costs associated with the treatment and reuse of household electronic products.	1	4	4	2	1	5	3	2	3	3	3	5
	Market Demand for Second-Hand Household Electronic Products	Market size and growth trends of second-hand household electronic products.	4	4	5	5	5	2	3	5	4	3	4	5
	Economic Benefits of the Reverse Supply Chain	Direct and indirect economic gains generated by reverse supply chain activities.	2	2	1	5	5	1	2	4	3	4	3	5
	Employment Opportunities in the Reverse Supply Chain	The quantity and quality of jobs created by the reverse supply chain.	4	2	2	3	4	1	3	4	1	2	2	3
	Recycling Offset Mechanism	Compensation mechanisms such as trade-in programs offered by recycling platforms or companies for household electronic products.	3	5	2	1	3	4	3	1	2	4	2	3
	Remanufacturing Value of Recycled Items	Evaluation of the economic value of recycled items in the remanufacturing process to promote efficient resource utilization.	1	5	5	1	4	1	5	3	5	1	3	4
Scociety	Public Awareness of Household E-Waste Recycling	The level of public awareness regarding the importance of household electronic waste recycling.	5	3	5	4	3	4	5	1	5	2	1	3
	Recycling Skills Training	Enhancing knowledge and skills of the public and practitioners related to electronic waste recycling.	1	4	2	5	5	2	4	1	4	2	5	1
	Recycling Compensation Mechanism	Policies and regulations promoting the recycling and reuse of electronic waste.	4	5	3	3	2	3	1	4	4	1	4	2
	Community Engagement	The degree of community participation in electronic waste recycling activities and its impact on project success.	3	2	5	4	1	1	5	5	3	5	4	3
	Health and Safety in E-Waste Management	Assessing the impact of electronic waste handling on worker health and public safety, including risks from long-term exposure to hazardous substances.	3	2	4	4	1	5	5	4	3	1	4	1
Policy and Regulation	International Standards for E-Waste Management	The role of international cooperation in setting and implementing e-waste management standards and ensuring cross-border regulatory consistency.	3	1	2	4	1	3	3	4	3	5	5	5
	Consumer Responsibility for E-Waste Management	Consumers' obligations to return discarded appliances to retailers or designated collection points.	5	4	2	5	5	3	4	4	2	5	3	5
	Extended Producer Responsibility (EPR)	Formulating and implementing EPR policies that encourage manufacturers to take responsibility for their products' environmental impacts throughout their lifecycle.	4	2	1	5	5	5	3	1	3	4	2	3
	Policies for Household E-Waste Recycling	Developing and implementing incentive mechanisms for individuals, businesses, and organizations to promote higher recycling rates and environmental responsibility.	3	3	2	5	1	2	3	2	5	3	4	2