



GOVERNANCE FRAMEWORK		REDUCE	REUSE	RECYCLE	REGENERATE	EMBEDDED EMISSIONS	AVOID
PRODUCT DESIGN \ PRODUCT ITSELF	POLICY Soft law \ Non-binding strategies	National strategy for reducing SUP e.g., Chile's CE roadmap promoting alternative	Promoting reusables e.g., support for refill systems in the food service sector	Establishing targets to increase recycling rates of SUP packaging e.g., targets for municipal collection and sorting	Supporting R&D on compostable alternatives and development of industrial composting infrastructure	Integrating life-cycle footprint criteria into public procurement and labelling e.g., guidance based on LCA for SUP alternatives and substitutes	
	REGULATIONS Hard law \ Binding rules	Banning or restricting certain SUP items e.g., prohibiting public purchase of banned single-use plastic; Law 2,232 of 2022 (Colombia)	Mandate for refillable systems for specific products e.g., mandatory refill compatibility for cleaning product dispensers	Setting mandatory recycled-content targets for bottles and packaging e.g., Chile requiring minimum rPET in bottles	Banning oxo-degradable plastics and regulating compostability standards for marketed 'biodegradable' items	Requiring carbon-footprint disclosure on packaging, aligned with ISO 14067 or equivalent standards	
	STANDARD SETTING Voluntary \ Mandatory	Eco-design standard for minimal material use per SKU Optionally, including reparability or durability scores	Voluntary certification for reusable packaging durability and safety Test standards for reuse cycles	Developing standards for recyclability labelling and recycled-content traceability	Setting compostability certification standards e.g., adopting EN 13432 or equivalent national standards	Implementing voluntary product carbon-label schemes for packaging alternatives (based on LCA)	
	MARKET AUTHORIZATION Safety, environmental, and technical compliance requirements	Market access conditioned on packaging meeting minimum weight/volume efficiency thresholds	Sale of beverage containers permitted only if compatible with established reuse/refill systems	Limiting market entry to mono-material packaging to facilitate recycling e.g., authorization lists specifying allowed formats	Verifying compostability claims before items are marketed as 'compostable' (ambient or industrial), against established standards	Requiring LCA and carbon data for product registration in high-volume SUP categories e.g., beverage bottles, as encouraged by the EU SUP Directive	
	MARKET MONITORING Regulatory enforcement	Monitoring progress toward national SUP reduction targets and enforcing reporting compliance	Inspecting refill stations and enforcing refill/refillable rules e.g., consumer protection and health checks	Auditing ecolabel compliance for 'recyclable' claims and removing misleading labels	Conducting market surveillance testing of 'compostable' items to verify compliance with recognized standards	Conducting verification audits of declared product carbon footprints and sanctioning misreporting	
	PUBLIC PROCUREMENT	Prioritising reusable alternatives e.g., bans on single-use plastics in government facilities; Law 2,232 of 2022 (Colombia)	Prioritising suppliers offering refillable packaging and reusable services in public tenders	Requiring minimum recycled-content in supplied packaging through procurement criteria e.g., rPET targets in tenders	Ensuring municipal procurement of certified ambient-compostable serveware where industrial composting infrastructure is not available	Requiring suppliers to provide product-level carbon footprints for bid evaluation in procurement processes	
	SUPPORT MEASURES Incentives, subsidies	Supporting R&D on materials better suited for circularity (3Rs) and existing waste management capacities	Supporting R&D on materials better suited for circularity (3Rs) and existing waste management capacities	Supporting R&D on materials better suited for circularity (3Rs) and existing waste management capacities	Supporting R&D on materials that are fully biodegradable in line with national regulations	Subsidising SME purchases of GHG emissions measurement systems	
PROCESS AND PRODUCTION \ HOW PRODUCT IS MADE	POLICY Soft law \ Non-binding strategies	Developing industrial material-efficiency strategies and incentivising reduced use of virgin plastics in manufacturing disposable items	Promoting industrial reuse of by-products and wastewater e.g., incentives for on-site reprocessing of plastic scrap and water recovery	Supporting national programmes for closed-loop recycling of process chemicals and by-products	Supporting valorisation of production residues e.g., requiring capture and composting of organic-laden film residues where feasible	Developing national low-emission industrial strategies promoting renewable electrification, water reuse, and cleaner plastic production	Developing strategies to phase out toxic additives in plastic production e.g., roadmaps to eliminate oxo-degradable additives
	REGULATIONS Hard law \ Binding rules	Setting mandatory material-efficiency standards for manufacturers e.g., limits on packaging-to-product ratios	Requiring manufacturers to offer or accept reusable packaging options for certain product categories	Requiring implementation of reverse logistics and EPR for packaging e.g., National Solid Waste Policy (PNRS), Law 12,305 of 2010 (Brazil)	Regulating industrial residue management to prevent landfilling or incineration e.g., mandated recovery rates for production waste	Setting emission limits for plastic production facilities and caps on process effluents and air pollutants	Banning use of hazardous additives and microplastic-generating processes
	STANDARD SETTING Voluntary \ Mandatory	Establishing resource-efficiency standards for manufacturing e.g., based on ISO 14000 or similar material-efficiency guidance	Setting standards for safe reuse of industrial residues e.g., quality and contamination limits	Setting quality standards for recyclates suitable for food-contact packaging	Setting standards for processing and safe use of bio-based residues and compostable feedstocks	Establishing compliance standards for industrial wastewater discharges to sewers and the environment	Setting guidance or standards to restrict certain additives e.g., voluntary or mandatory codes to eliminate oxo-additives and POPs
	MARKET AUTHORIZATION Safety, environmental, and technical compliance requirements	Requiring documentation of efficiency measures in production e.g., material usage KPIs	Granting operating permissions to manufacturing lines that facilitate residue reuse	Conditioning market authorization on approved recycling or collection routes e.g., registered EPR/reverse logistics systems; Law 12,305 of 2010 (Brazil)	Authorising operations only after demonstration that process by-products are managed or valorised to avoid waste	Conditioning operating permits on compliance with emissions monitoring and reporting requirements	Denying operation permits for production relying on prohibited hazardous additives
	MARKET MONITORING Regulatory enforcement	Auditing compliance with material-efficiency standards and manufacturers' reporting	Checking industrial reuse chains for contamination levels and safety of reused inputs	Auditing recycled-content claims and chain-of-custody records to verify recycling performance e.g., rPET rules; Law 21,368 of 2021 (Chile)	Verifying 'regenerated' or 'valorised' residues before recognising waste diversion e.g., compost maturity, pathogen levels, or contaminant thresholds	Implementing emission-monitoring programmes, periodic reporting, and enforcement actions against non-compliant facilities	Inspecting markets to detect illegal use of banned SUP items and applying fines or seizures e.g., enforcement under Colombia and Chile frameworks
	PUBLIC PROCUREMENT	Awarding preferential procurement points to bidders demonstrating reduced material use	Prioritising reuse of industrial by-products in public infrastructure construction contracts e.g., trimmings and offcuts	Requiring government suppliers to participate in registered EPR take-back systems e.g., registered EPR/reverse logistics systems; Law 12,305 of 2010 (Brazil)	Favouring suppliers in procurement who valorise process by-products e.g., use of biowaste for composting	Requiring suppliers in tenders to report factory scope-2 pollution emissions	Excluding avoidable items from public tenders in favour of alternative delivery channels e.g., water filters instead of plastic bottles
	SUPPORT MEASURES Incentives, subsidies	Supporting collection and sorting of used materials	Applying low tariffs to capital goods required for reuse systems	Granting tax exemptions for investments in new recycling facilities	Granting tax exemptions to farms and processors of food or biological materials that compost agricultural and organic wastes	Supporting emission-reduction programmes across relevant value chains	Withholding subsidies from material inputs unsuitable for circularity
KEY		ACRONYMS AND ABBREVIATIONS					
Product design Processes and production		CE Circular economy EPR Extended producer responsibility	EN European norm EU European Union	GHG Greenhouse gas ISO International Organization for Standardization	LCA Life-cycle assessment POP Persistent organic pollutant	R&D Research and development SKU Stock keeping unit	SME Small and medium enterprise SUP Single-use plastics