



გარემოს დაცვისა და სოფლის
მეურნეობის სამინისტრო



Governance Reform Fund (GRF)
Supporting the Government of Georgia in Enhancing Governance & Policies
for a Transition to a Circular Economy

Roadmap for Developing Circularity Strategy
in Georgia

Circularity Gap Report 2024

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Circular Economy Concept



Key Facts

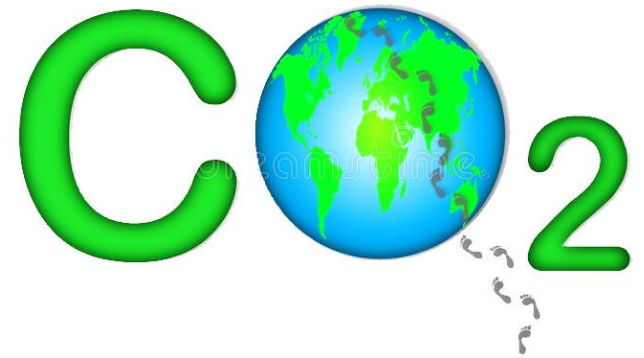
- The world's circularity is in reverse and stands at **only 7,2% in 2023 (9,1 % 2018, 8,6% 2020)**.
- In only six years, half a trillion tonnes of virgin materials were taken from the earth to fulfil societal needs and wants: **70% more than what the earth can safely replenish**.
- Renewable energy solutions fail to address the chunk of emissions. **70% are stemming from resource use and handling**.



- ▶ We need the clean energy transition to happen, but it cannot keep us on the well below 2-degrees trajectory alone. Nor does it tackle our rising consumption levels and concerning resource scarcity.
- ▶ If the world moved away from a linear economy and toward a circular one, the analysis shows that global greenhouse gas (GHG) emissions would drop **by 39% and virgin resource use by 28%**, and we would reach the goals of the **Paris Agreement**.

Mobility, Housing and Nutrition Account for Almost 70% of Global Emissions

- Mobility has the largest emissions footprint at 17.1 billion tonnes—largely due to fossil fuel use across passenger and freight transport.
- The production of automobiles, trucks, trains and aeroplanes is relatively limited in emissions contributions.
- Housing, at 13.5 billion tonnes of emissions, has the second largest contribution. This is due to the vast extraction, transport and construction activities it entails, as well as the energy used to light, heat and cool our homes.
- Third in line is the provision of food for Nutrition, which contributes 10 billion tonnes of emissions. Land use, land-use change and forestry (LULUCF) — a GHG inventory sector referring to emissions from human land-use activities—is associated with the production of food, but also fibres and clearing for the expansion of urban centres, and is responsible for about 4 billion tonnes of emissions.



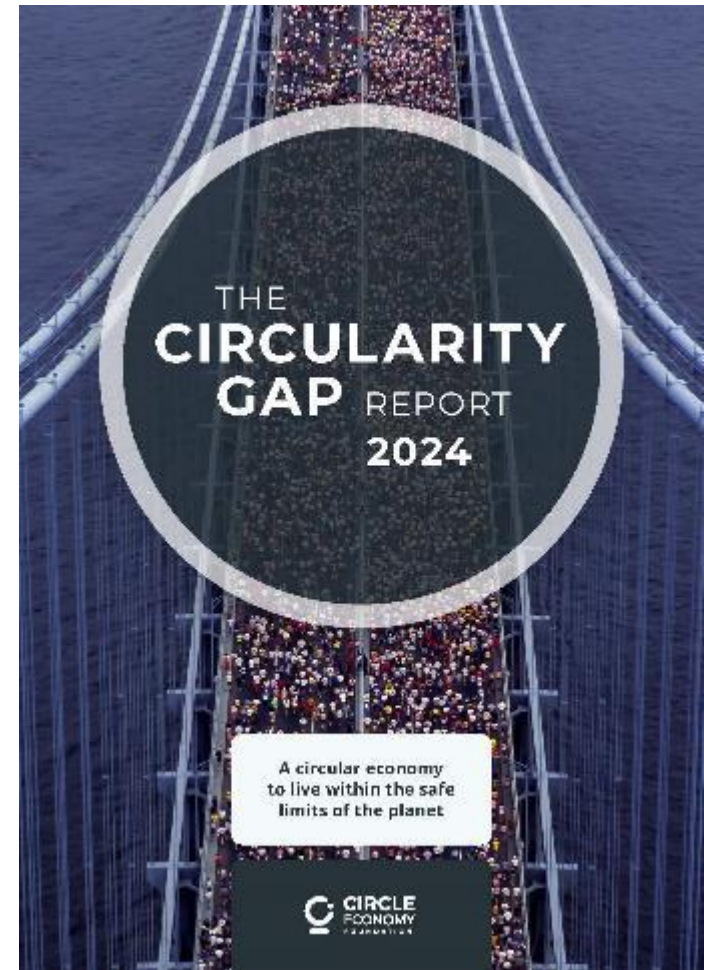
The Global Material Footprint

- Our growth rate of resource extraction outpaces improvements in efficiency and in end-of-use recovery by a factor of two to three—and as a result, the quantities of secondary materials available for use are falling short.
- To serve the needs of a growing population, we keep extracting materials to build housing, infrastructure and heavy machinery—we should make use of what is already there.



The Circularity Gap Report 2024 – Key Objectives

1. To pinpoint key leverage points for each country profile. Build, Grow and Shift countries all have a role to play in the transition—but these roles will look different. The report uncovers the most important value chains to transition to a Circular Economy across these three country profiles.
2. To move from theory to action: previous Circularity Gap Reports have defined the ‘what ’— the report lays out the ‘how ’ to put these solutions into action.
3. Explore and raise awareness for circular enablers. The report explores the underlying political, financial and social conditions these solutions need to succeed to transform our economic system and boost circularity around the world.



Shift Countries

- These countries are home to around a quarter of the global population, yet consume over one-third (34%) of raw materials.
- These are high-income countries in the Global North, as well as in the Gulf, Australia and Oceania. Examples include Member States of the EU, the US, Japan, the UK, Canada and Argentina.
- While much of their infrastructure is already built, they still contribute heavily to the overshoot of planetary boundaries: they contribute 42% of climate change, 27% of nitrogen, 18% of phosphorus, 16% of freshwater use and 38% of land use change.
- Key development pathways: High-income Shift countries on average enjoy affluent, comfortable lifestyles and perform well on social indicators— but they consume far more than their fair share of materials. While they house a minority of the world’s population, they generate close to half of global emissions and consume the most (per capita) across all material groups. These countries must focus on reducing material extraction and use to lighten their environmental burden.



Grow Countries

- Grow countries globally account for 55% of all raw material extraction and 52% of the material footprint, while housing around 37% of the global population.
- These are larger Southeast Asian countries and countries in Latin America and Northern Africa, as well as those with an economy in transition in Eastern Europe, the Caucasus and Central Asia.
- These countries contribute 50% of climate change, 62% of nitrogen, 60% of phosphorus, 53% of freshwater use and 42% of land use change.
- Key development pathways: Largely middle- income, Grow countries need to continue growing to meet their peoples' needs, but in a way that is much more sensitive to the various planetary boundaries.
- While many countries are and will likely remain key manufacturing and industrial hubs for the rest of the world's and their own consumption, this necessitates a shift to make this sustainable environmentally and supportive and safe for workers.



Build Countries

- Build countries consume 13% of the global material footprint, while they account for almost 50% of the population.
- Countries in Sub-Saharan Africa and South Asia such as Bangladesh, Ethiopia, Nigeria, Pakistan and the Philippines, and some small island states, for example.
- Minimal contribution to the overshoot of planetary boundaries: these countries contribute 20% of land use change, 30% of freshwater use, 23% of phosphorus emissions to soil and 11% of nitrogen emissions.
- Key development pathways: As these countries generally struggle to meet basic needs for healthcare and education, their primary objective is to improve living standards. This necessitates increased material use to provide the infrastructure, goods and services that deliver on human needs. It will also require uplifting workers in nations with prevalent informal economies, which are especially common in the agricultural, forestry and waste management sectors.



Key Tasks for Governments and Industry Leaders

- **Create a level policy playing field:** Set the ‘rules of the game’ through policies and legal frameworks that incentivise sustainable and circular practices while penalising harmful ones, thereby shaping the nature and scale of economic activities across industries and nations.
- **Get the economics right:** Adjust fiscal policies and leverage public investment to create true prices and ensure that circular solutions become more valuable instruments and begin to replace linear norms.
- **Build circular expertise and skills:** Ensure people are skilled and trained to ensure a just transition where opportunities and decent livelihoods are fairly distributed across and within societies.



Food System

THE FOOD SYSTEM nourishes populations and employs 50% of the global workforce, but:

- it currently drives a quarter of the overshoot on the climate change planetary boundary due to its greenhouse gas (GHG) production,
- animal farming alone uses over one-quarter of all land, equivalent to the size of the Americas,
- nearly a quarter of freshwater resources are lost due to rampant food waste, and
- it is the single largest driver of biodiversity loss.



The Built Environment

THE BUILT ENVIRONMENT, including housing, commercial buildings and the necessary infrastructure for mobility, is essential for our livelihoods, but:

- the extraction of minerals used to produce construction materials is responsible for a quarter of global land use change,
- approximately 40% of global GHG emissions can be attributed to buildings' construction, use and demolition, and
- construction and demolition processes drive nearly one-third of all material consumption.



Manufactured Goods

MANUFACTURED GOODS, such as vehicles, textiles, appliances and equipment and their associated production processes are big employers but:

- production processes often rely on fossil fuels and currently drive one-third of the overshoot on the climate change planetary boundary due to its GHG production,
- material- and energy-intensive industrial activities are linked to deforestation and drive 15% on both the land use and freshwater planetary boundaries,
- manufacturing goods results in substantial amounts of hazardous industrial waste and leaks chemicals into the environment.



Key Steps for Policy Makers

Ministries of Economy, Finance and the Environment, Business leaders, Multilateral organisations and International Financial Institutions should:

- **Develop and apply holistic indicators.** Move beyond GDP and other traditional economic metrics. We need to shift the goal from maximising economic output to maximising human wellbeing within planetary boundaries.
- **Work together to reform** international financial and trade architecture to ensure all nations have the means to invest in sustainable development.
- **Reform financial and trade patterns** to promote circular solutions.
- **Increase fair access** to affordable circular technological innovations.
- **Roll out measures for debt cancellation and relief.** Debt cancellation and relief for Build and Grow countries is essential because it enables them to invest in the circular economy transition.

Taxation and Incentives

- **Redesign taxation** to ensure that prices reflect and include all costs. This should include those linked to environmental and health impacts, and can be done through carbon pricing and resource taxes.
- **Dismantle incentives for excessive material consumption.** We can not only curb excessive consumption but also channel the generated revenue into public goods.
- **Complement pricing signals** with fee-and-dividend schemes. Other mechanisms can also complement and reinforce better pricing, with the ultimate aim of limiting inflation and fostering social support.
- **Rethink accounting standards** to capture value of built assets, frame waste as a resource and acknowledge benefits of social and environmental impacts for investments.



Aligning Environmental Goals with Social and Economic Ones

- **Ensure the circular economy transition is people-centric.** Working towards a just transition means leaving no one behind.
- **Build substantial support and leadership** among governments around the world for this social transition to take place. Transitioning towards a circular economy requires state planning, strong social policy and the implementation of specialised public labour agencies that manage the transition of workers.
- **Harness policymakers' creativity** to achieve results within a tight timeframe. In *Shift* countries, job guarantees and Just Transition Funds can be used to support workers in resource-intensive industries that will undergo changes, both in their own countries and in partner *Grow* and *Build* countries.



Education

- **Ensure** education addresses the inevitable shift in jobs and skills.
- Vocational Education and Training (VET) and lifelong learning opportunities are made available.
- **Ensure that circular, green employment** means better employment. This includes better representation, decent pay and improved working conditions.
- Despite having a highly skilled workforce, critical knowledge and skills gaps persist in the building sector. This presents a number of opportunities, such as bringing more women into the workforce, training migrant workers, and increasing workers' safety—all of which remain challenges in this sector today.
- **Invest in and use just transition funds** to invest in skills development, education and training. In particular, support regions with historically extraction-focused economies in (re)training their workers and youth to prepare them for a circular future.



Reward Market Players for Investing in Circular Solutions and Business Models

- Implement strict regulations that prioritise renovation, retrofitting and adaptive reuse wherever possible
- **Develop effective certifications** and warranties for secondary materials to validate their safety and quality
- **Roll out standards and criteria** for circularity throughout public procurement
- **Roll out innovative land ownership models**, such as Community Land Trusts, to ensure affordable long-term housing for communities
- **Financially incentivise circular construction** by cutting property taxes for buildings that meet circular criteria, providing tax credits for circular material use or reducing insurance premiums for circular buildings or infrastructure.
- **Establish a common language amongst stakeholders** in the financial and building sectors. This is already taking place in the EU (EU Taxonomy, Corporate Sustainability Reporting Directive (CSRD), Sustainable Finance Disclosure Regulation (SFDR) and labelling of circular built environment projects.

Skill Gaps

- **Address labour shortages** in the industry by aligning policy and increasing the attractiveness of jobs. Construction industries across *Shift* countries face persistent labour and skills shortages that are increasing with ageing societies and worsened by the impacts of the Covid-19 pandemic.
- **Support the development of necessary circular skills** in the labour market by including the circular economy in Technical and Vocational Education and Training (TVET) curricula, lifelong learning systems and workplace training.
- **Review and (re)formulate skills development policies**, especially for the validation and recognition of skills and qualifications for migrant and more informal workers. Such an approach would address local shortages of workers and provide greater mobility to workers who can bring the necessary skills that deliver circular approaches within the construction sector through tools like skills passports.



Product Standards

- **Encourage products to be designed for circularity:** durable, and easy to reuse, repair and recycle
- **Support regulations to scale up adoption of circular business models** and to encourage the uptake of new ownership models, such as Product-as-a-Service and Peer-to-Peer product-sharing platforms.
- **Strengthen universal Right to Repair legislation and Extended Producer Responsibility**, which require manufacturers to provide spare parts, tools and repair manuals to their customers and repair shops. Ensure legislation puts repair before replacement, provides data for the open-source production of spare parts and removes software barriers to repair.
- **Set standards for material efficiency and product durability**, especially for electronics and appliances.



Ensuring Public Support

- **Use pricing and convenience to nudge people toward sufficiency lifestyles.** Making circular products and services more affordable and cost-effective is crucial to encourage consumers to adopt less materialistic lifestyles and more sustainable consumption patterns.
- **Stimulate demand-oriented shifts** that encourage lifestyle changes and reduce barriers to repairing, refurbishing, remanufacturing and recycling products, both for consumers and industries. This could include developing an environmental 'score' for all products to be included on labels, and banning the advertising of high-impact goods and services, from fast fashion to air travel.
- **Provide consumers with financial incentives** such as bonus cheques, or reduced or zero tax on repair services and refurbished goods, that allow them to easily repair their goods or shop second-hand. These incentives could be quite targeted towards specific consumer goods like fast-fashion and electronics.
- **Foster a cultural shift** where sustainability is the norm and sufficiency mindsets prevail



Awareness Raising

- **Roll out awareness-raising campaigns** to overcome cultural barriers to a more circular lifestyle.
- **Encourage the practical realisation** of such lifestyles by funding awareness campaigns, responsible advertising and other interventions that promote more sustainable choices and reduce stigma related to prolonging the life of or sharing consumer goods.
- **Foster a cultural shift** where sustainability is the norm and sufficiency mindsets prevail. Ultimately, the entrenchment of consumerism and linear production-consumption patterns in contemporary culture and social norms underscores the necessity of a paradigm shift, where values, attitudes and behaviours are realigned to embrace circularity and sufficiency.



Promoting Circularity in the Food System

- **Roll out an integrated policy mix** to encourage nutritious choices and cut food waste across all stages of production and consumption.
- **Roll out effective market-based incentives** tailored to consumers that make healthy and sustainable foods the preferred option. This could mean taxes on high-impact food products, within a broader redesign of taxation so that poverty and inequality are not exacerbated. Set mandatory public procurement standards.
- **Create an effective regulatory environment**, including advertising sales bans on certain high- impact food products that threaten human and planetary health—especially ones directed at children or placed in public spaces such as hospitals.



Financial Policies in Food System

- **Use policy** to ensure that financial institutions invest in regenerative farming and circular food.
- **Ensure that the financial regulatory** environment supports long-term transformation by introducing transparency requirements.
- **Shift capital** toward regenerative agriculture, alternative protein and food waste upcycling companies, while actively encouraging investee companies to adopt such methods.
- **Ensure a true price for sustainable food** that fully reflects the social and environmental impacts so that products of regenerative and sustainable farming are competitive and attractive.
- **Establish fact-based regulatory frameworks** tailored to particular farming systems and regions to support the roll out of carefully implemented agroecological approaches and regenerative practices
- **Create just transition funds** to de-risk and enable changes in farming practices, supplying farmers with the tools and knowledge they need to convert their farms.



What is CE Roadmap

- A roadmap is a strategic plan that defines a long-term vision and establishes the main initiatives required to achieve it.
- Roadmaps are high-level documents that serve as communication tools and help articulate thinking around common challenges and plans to address them.
- The first circular economy roadmap was published in 2016 by SITRA, the Finnish Innovation Fund. Since then, other countries, such as France, Slovenia, Netherlands, Chile and some sub-national territories, such as the city of Amsterdam, have published circular economy roadmaps.



Vision, Strategic Goals and Targets for Circular Economy Road Map

Strategic goals:

- Strategic goal is to become a regional leader and be close to European standards of circularity.
- Improving regulations, raising awareness and creation of specific platforms for interaction of different stakeholders for creating enabling environment.

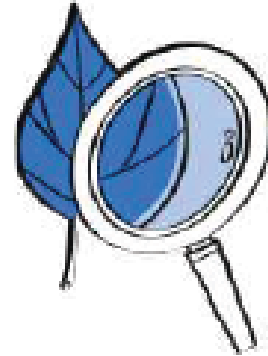
Targets:

- ▶ The target for coming 5/10 years will be to increase the level of circularity from current 1.3% up to 6.6%.
- ▶ The other target for coming 5/10 years will be to create enabling environment for further efficient transition to circular models of economy



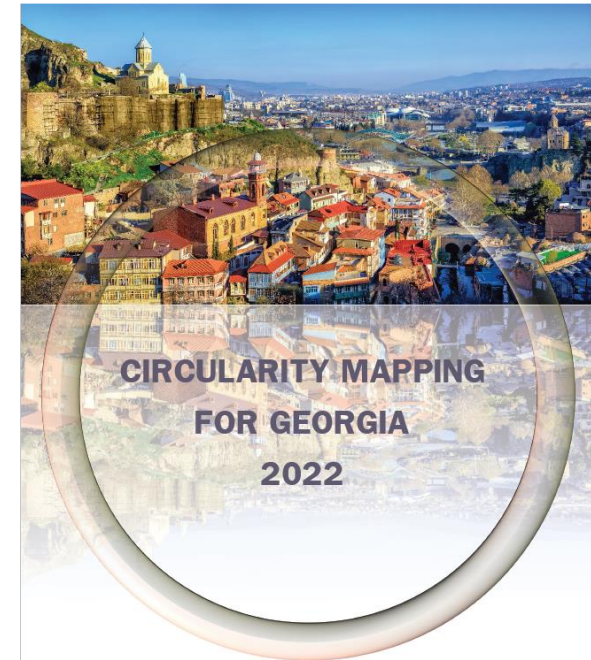
Key Pillars of the Transition

- Circular Innovation
- Circular Regulation
- Circular Culture



Key Recommendations from 2022 Mapping

- **Narrow flows — use less:** Sharing and rental models, material lightweighting, multifunctional products or buildings, energy efficiency, digitisation.
- **Slow flows — use longer:** Durable material use, modular design, design for disassembly, repair, remanufacturing, refurbishing, renovation and remodelling over building new structures.
- **Regenerate flows — make clean:** Regenerative and non-toxic material use, renewable energy, regenerative agriculture and aquaculture.
- **Cycle flows — use again:** Design for recyclability (both technical and biological), design for disassembly, recycling, upcycling, reuse.



Priority for Policy Interventions

- **Subsidies** should be removed and the negative externalities of linear economic activities internalised;
- **Public tools** such as public procurement should be used to accelerate the market for circular economy products and services. The use of GPP should be incentivised;
- **Public funds** should be activated as a ‘de-risking’ instrument to mobilise more private capital for scale-ups with a circular scope;
- **Technical assistance** should be provided to help businesses and local administrations understand linear risks and the economic and societal benefits of the circular economy;
- **Response measures** which mitigate the economic and social impacts of communities, sectors and regions particularly exposed to the legacy of linear economic systems (e.g., mining) should be introduced;
- **Priority** should be given to policy interventions that comprehensively address multiple environment, social and governance risks.

Financial Policy Recommendations

- Develop reporting standards for Georgian companies aligned with those proposed within EU for linear risks of investments and businesses and incorporate them into standard accounting practices could help to ensure that linear risks are sufficiently evaluated and disclosed.
- The reporting standards would provide a methodology for corporates and financial institutions to identify the exposure to linear risks within their portfolios or operations.
- Further refine the definition for the circular economy and develop a definition of circular economy finance.
- Establish in Georgia technical and financial advisory services to support the development of business models for circular economy businesses or projects seeking finance that effectively capture and articulate the benefits of circular economy strategies.
- Establish a dedicated proportion of finance within selected financial instruments existing or planned in Georgia to support circular economy investments and businesses.



Non-financial Policy Recommendations (1)

- Develop metrics and indicators to complement the existing in Georgia macroeconomic indicators adopted at national level.
- Make circular economy indicators mainstream part of statistical reporting.
- Set targets using suitable indicators. Where mandatory targets are not politically feasible, set non-binding aspirational targets that can serve as a basis for voluntary agreements with industries.
- Map where national fiscal policies in Georgia provide subsidies and price signals in favour of the linear economy.
- Expand the scope of EPR schemes, currently under implementation in Georgia, to additional products.
- Analyse where the existing EPR systems need to be modified in order to favour the production of high-quality secondary materials, e.g. via modulated fees.



Non-financial Policy Recommendations (2)

- Set national target dates for ending landfilling. Reduce landfilling and incineration by applying increasing taxes on these activities.
- Develop benchmarks for circular aspects of product performance, including benchmarks for durability, reparability, recyclability, minimum recycled content and hazardous substances content,
- Apply these benchmarks to remove underperforming products from the national market (e.g. via implementing measures such as those stipulated by the EU Eco-design Directive that extend to non-energy related products).
- Stimulate the adoption of high-performance products through fiscal and ‘reputational’ incentives (e.g. reduced VAT, eco-labels). Make the information about circular aspects of products available in business to business and business to consumers transactions through product information requirements (e.g. the product passports) or publicly accessible databases.
- Conduct checks and revisions of existing and planned relevant sectoral policies which may conflict with the objectives and actions described above.

Key Recommendations for Public Authorities

- Develop regional and national circular economy strategies that include collaboration with other countries and regions; on the regional level, ensure that regional authorities include circular economy opportunities in their smart specialisation strategies.
- Link the circular economy to other societal challenges and transitions, such as climate change in order to create a coherent strategic environment for businesses and facilitate synergies across different public initiatives.
- Develop innovative forms of collaboration within and between value chains and innovative ways of sharing costs and benefits of circular economy projects between companies who otherwise have no market incentive to collaborate.
- Allocate public funds to circular projects that bring significant benefits to the community to ensure that these projects materialise and are financially viable. This may include direct payments for public services but also indirect support such as guarantee schemes.
- Stimulate demand and create new markets for circular products and services through Green Public Procurement.

Summary of Key Recommendations

- Characterise circular economy projects through metrics and taxonomy
- Promote and clarify the enabling role of public authorities
- Build capacity to make the transition to a circular economy
- Ensure cooperation and coordination between governing bodies
- Ensure appropriate level of partnership





Georgia 2050

Thank you!

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