# INTERNATIONAL ECONOMIC RELATIONS

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## GREEN TRANSITION OF SMES IN EASTERN PARTNERSHIP COUNTRIES: A MECHANISM FOR CLIMATE NEUTRALITY

The green transition of small and medium-sized enterprises (SMEs) is becoming a structural component of climate policy. Recent European Commission evidence shows that, despite low emissions per individual firm, SMEs collectively account for a major share of corporate CO2 emissions [1]. Their transition therefore affects the diffusion of low-carbon technologies, resource efficiency and climate-oriented innovation throughout value chains. This is especially important in Eastern Partnership (EaP) countries, where SMEs combine major employment and local value-creation functions with constrained financial, technological and managerial capacity. Climate neutrality for SMEs should thus be interpreted as a staged transformation trajectory: measure the footprint, reduce carbon and resource intensity, substitute fossil energy, expand circular flows and neutralise only hard-to-abate residual emissions.

The central barrier is the asymmetry between the strategic importance of the transition and the absorptive capacity of smaller firms. Short investment horizons, limited collateral, scarce environmental data and shortages of specialised expertise reinforce risk aversion and delay green investment. At the same time, the transition can lower energy and material costs, open access to green procurement and export markets, stimulate eco-innovation and strengthen participation in sustainable value chains [2; 3].

Moreover, recent studies confirm that green process innovation, digital capabilities and organisational knowledge can improve SME sustainability and competitiveness when adequate resources are available [4–6]. The opportunity-risk balance is therefore sector-specific (Table 1).

Table 1

**Green transition for SMEs by sphere of activity**

| Sphere of activity | Key green-transition opportunities | Main problems / constraints | Priority climate-neutrality lever |
|---|---|---|---|
| Agri-food and livestock | Energy and water savings; biomass use; waste valorisation; local circular chains | Seasonality; dispersed emissions; limited finance and technical expertise | Resource-efficient production, by-product valorisation |
| Transport and logistics | Fleet efficiency; route optimisation; electrification; digital monitoring | High replacement costs; charging infrastructure gaps; fuel-price exposure | Fleet renewal, e-mobility, logistics optimisation and renewable electricity |
| Hospitality, retail and consumer services | Energy-efficient premises; waste prevention; eco-labelling | Small scale; low awareness; split incentives in rented premises | Energy management, waste prevention, green purchasing and certification |
| ICT and professional services | Low-carbon digital services; remote delivery; data tools for carbon management | Indirect Scope 3 impacts; data-centre energy use; limited footprint visibility | Green digital infrastructure, carbon accounting and climate-oriented service innovation |

*Source: developed by the author based on [1; 3]*

A policy-relevant interpretation of SME climate neutrality requires a mechanism connecting operational improvements with strategy, finance and market incentives. The proposed mechanism follows transition sequencing: measurement precedes target-setting; efficiency measures precede capital-intensive substitution; circularity and eco-innovation extend decarbonisation beyond energy; and reporting connects internal change with finance and market access. Such sequencing is particularly relevant for resource-constrained EaP SMEs (Fig. 1).

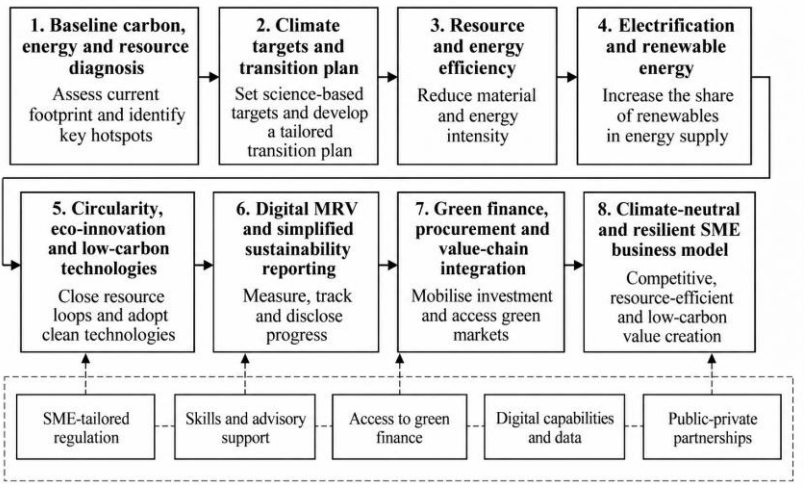



**Figure 1. Mechanism for achieving climate neutrality of SMEs in Eastern Partnership countries**

*Source: developed by the authors*

For EaP countries, the key task is selective adaptation rather than mechanical replication of EU regulation. The outcome is a climate-neutral and resilient SME business model combining lower carbon intensity with productivity and long-term competitiveness [5; 6]. EU approaches are most useful when they reduce transaction costs and translate climate requirements into simple, financeable and measurable actions. The 2025 Voluntary Sustainability Reporting Standard for SMEs (VSME) is particularly relevant because it offers a proportionate information architecture that may also be used by SMEs in third countries [8]. Policy adaptation should differentiate SMEs by transition exposure. Export-oriented firms embedded in EU value chains require early carbon accounting, product-footprint methods and credible reporting; locally oriented low-risk SMEs need simplified requirements, efficiency audits and small-scale finance; green start-ups need innovation vouchers, demonstration finance and procurement access [1; 2]. Together with resource-efficiency policy and sustainable finance instruments it provides a transferable basis for EaP adaptation (Table 2).

Table 2

**EU approaches adaptable to SME climate-neutrality policies in Eastern Partnership countries**

| EU approach | The core | Adaptation for EaP SMEs | Expected effect |
|---|---|---|---|
| Risk-based and SME-proportionate regulation | Differentiate requirements by environmental risk and firm capacity | Simplified permits, standard rules, SME tests and sector guidance | Lower compliance costs and higher participation |
| VSME-type sustainability reporting | Use a limited, standardised disclosure set for smaller firms | Carbon/resource metrics linked to bank and supply-chain requests | Better MRV, lower reporting burden and improved finance access |
| Green finance and de-risking | Blend loans, guarantees, grants and technical support | Dedicated SME green credit lines and guarantees | Higher investment in energy efficiency and clean technologies |
| Green public procurement and value-chain pressure | Create market demand for low-carbon goods and services | Life-cycle criteria, SME-friendly tender lots and supplier-development schemes | Stable demand and diffusion of climate standards through supply chains |
| Product environmental footprint and eco-labelling | Measure life-cycle impacts and communicate environmental performance | Phased PEF pilots in export-oriented sectors and simplified labels for micro/small firms | EU market access, product differentiation and reduced greenwashing risk |

*Source: developed by the author based on [1; 2; 7; 8]*

Such segmentation allows scarce public resources to target the highest marginal climate effect while avoiding disproportionate administrative costs and shifting policy from compliance control towards capability building [7; 8].

Thus, the green transition of EaP SMEs should move from fragmented environmental actions to an integrated climate-neutrality pathway. Its effectiveness depends on aligning enterprise capabilities with an enabling

policy, finance and market environment through cost savings, risk reduction, finance access, market entry or resilience. Climate neutrality then becomes a mechanism of technological renewal, productivity growth and integration into European green value chains.

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