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## UNPACKING COLLABORATIVE PRACTICES TO DELIVER DECARBONISATION IN BUILDINGS

### SKILLS, FINANCE AND LOCAL DELIVERY

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Five years after launching the European Green Deal, the EU is making tangible progress in delivering climate neutrality. However, as implementation deepens, success will be realised not through siloed initiatives or individual sectoral gains. It will hinge on a collaborative approach that addresses cross-cutting challenges such as skills, redirecting finance, and local delivery.

Transformational change depends on the right skills, finance, and delivery mechanisms, and calls for deeper levels of collaboration – among policymakers, with private actors, civil society, and citizens. In the face of an uncertain political environment, collaboration is also an overlooked approach to securing continuity of EGD. Collaboration incorporates multiple stakeholders in collective action by developing a shared vision to realise a common goal.

To realise the potential of collaborative approaches in delivering the energy transition:

- > Local governments must act as orchestrators of local climate action by facilitating ownership of delivery across sectors and municipal departments.
- > Private sector must embrace a longer-term vision and dedicate the necessary resources – knowledge, financial, human – to innovative transition pathways.
- > CSOs must identify and engage with unusual allies, supporting initiatives by fostering trust and people-centered approaches.



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This briefing presents a deep dive into several examples of effective collaboration and a framework to understand and embrace it at deeper levels. This will support stakeholders – including local governments, private sector, and CSOs - to situate their ongoing efforts, adjust strategies according to the goal they want to reach and identify next steps.

## The Green Deal: launching a whole-of-society project

In 2019, Ursula von der Leyen declared the EU Green Deal (EUGD) “Europe’s man-on-the-moon moment”<sup>1</sup> emphasising the groundbreaking nature of the EU’s launchpad for reaching climate neutrality by 2050. Yet, the man-on-the-moon metaphor is faulty. The moon landing, however complex and unprecedented the endeavour, was a single, well-defined aim, while the goal of the EUGD is transformational: in von der Leyen’s words “to reconcile the economy with our planet [...] and to make it work for our people”. A new metaphor is needed to describe the magnitude of this task and to actualise the sentiment expressed by former Vice President Timmermans at the outset of the EUGD implementation: “for the EU’s green transition to succeed, it needs everyone on board”.<sup>2</sup>

Five years later, the EU political cycle is closing, including negotiations on the Fit for 55 package, which translates climate targets into sectoral pathways. The revision of regulations that directly impact people, such as improving the energy performance of the building stock, have faced political backlash in some member states. This stands in contrast to the outcome of recent polls highlighting climate as one of the top concerns of Europeans,<sup>3</sup> begging the question: as the decarbonisation project deepens, how can policymakers secure a whole-of-society approach to deliver the transition?

As the EU prepares for the next five years, facing a more fragmented political landscape, implementation of Fit for 55 is a decisive moment to align action with ambition. A stream of success stories is emerging that show how the transition is accelerating, with collaboration at the core. For example, a collaboration between the European Investment Bank (EIB), the Government of Lithuania and

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<sup>1</sup> European Commission, 11 December 2019, **Press remarks by President von der Leyen on the occasion of the adoption of the European Green Deal Communication**

<sup>2</sup> European Commission, 28 March 2023, **Transcript of speech by Vice-President Timmermans to the Covenant of Mayors 2023 Conference: Cities on the frontline of the energy crisis**

<sup>3</sup> European Commission, 20 July 2023, **Eurobarometer: Majority of Europeans consider that the green transition should go faster**



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commercial banks is releasing finance for building renovations.<sup>4</sup> In the Netherlands, a local organisation is collaborating with SMEs with the support of universities and municipal governments to promote education and training for clean-energy services. To move towards climate neutrality by 2030, the city of Leuven, Belgium, is bringing together over 600 local stakeholders who are jointly accountable for delivering on this ambition. To upscale collaborative approaches across the skills, finance and local delivery challenge, we need to understand how these examples came about and how they can encourage a potential for transition that remains untapped.

The following section offers examples of what delivery and collaboration looks like on accelerating the skills transition, driving finance to green investments in the built environment and delivering through local authorities. This analysis is based on a non-exhaustive review of collaborative initiatives, undertaken through stakeholder interviews, and complemented by desk-based research.

## 1.0 Skills development across the building ecosystem

Investing in skills and workers is at the heart of EUGD implementation and is one of the main bottlenecks to overcome. The buildings sector employs 6% of the total EU workforce (12.7 million) and approximately 25 million across the whole industrial ecosystem.<sup>5</sup> A sector of this size and scope requires a whole-of-society approach to transition.

In 2023, the EU proclaimed a Year of Skills<sup>6</sup> providing an overarching policy framework for skills development, fostering several initiatives including BUILD UP Skills.<sup>7</sup> This EU umbrella initiative encourages member states to develop and learn from successful programmes and partnerships for upskilling and reskilling of workers. This builds on existing initiatives at the member-state level, including FEEBAT in France and Building Changes in the Netherlands (Table 1).

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<sup>4</sup> European Investment Bank, 2020, **Case study - Residential energy financial instruments in Lithuania**

<sup>5</sup> European Commission, consulted on 8 April 2024, **Construction ecosystem and large-scale partnerships**

<sup>6</sup> European Commission, consulted on 8 April 2024, **European Year of Skills 2023**

<sup>7</sup> European Commission, consulted on 8 April 2024, **BUILD UP Skills**



Table 1. Examples of skills development initiatives in member states

Initiative	Stakeholders	Member state	Vision	Impact	Start date
FEEBAT	Ministries, <sup>8</sup> building industry, trade unions, education institutes, with the financial support from energy companies	France	3-stage learning process to acquire knowledge and ensure access to the labour market	Training of more than 190k professionals	2007
Building Changes	SMEs, universities, local authorities	Netherlands	Informal learning, network building	Ongoing assessment	2011

### 1.1 Joint public-private efforts for the skills transition (FEEBAT, France)

First launched in 2007, FEEBAT is a French national training body promoting reskilling and upskilling of professionals (for example, craftspeople, construction managers, architects and project managers, education teachers and training providers) in the buildings sector.

**A win-win framework for converging interests:** Under a public-private partnership scheme, FEEBAT has played a major role as a programme through which relevant actors<sup>9</sup> join forces to address the skills gap in the sector.<sup>10</sup> The introduction of white certificates – a scheme incentivising energy suppliers to achieve a certain energy savings target – marked a turning point for FEEBAT. The platform coordinated a ‘win-win’ framework through which public authorities granted certificates to energy suppliers who would fund FEEBAT’s training programme. The certificates prove that suppliers were complying with their energy savings obligations.

**A flexible and up-to-date approach to training:** To ensure that quality and performance of training matches the pace of the transition, FEEBAT developed comprehensive education paths. These included designing toolkits and teaching modules that incorporate new practices and innovative methods that reflect upcoming legislation. This forward-looking approach has rewarded FEEBAT with

<sup>8</sup> These actors currently include French Ministries (Ministry of Ecologic Transition, Ministry of Education, Ministry of Culture, Ministry of Labour, Ministry of Buildings, ADEME), the buildings industry and confederations (CAPEB, FFB, CNOA, SCOP BTP), energy companies and providers (EDF, SIPLEC and DISTRIDYN), education institutes (l’ATEE, l’AQC, le CCCA-BTP).

<sup>9</sup> See Table 1 and footnote 8 for more details.

<sup>10</sup> Convention FEEBAT, Juillet 2022-Décembre 2025, **Convention de mise en œuvre du programme FEEBAT**



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a record growth in subscriptions – an additional 60,000 people enrolled in their programmes following the introduction of a label in 2014<sup>11</sup> imposing higher standards for professionals in the sector.

### **1.2 Empowering small-scale stakeholders (Building Changes, Netherlands)**

*“Bet on the potential of SMEs as drivers of buildings renovation”* – This is the guiding principle of Building Changes, a flagship initiative in the Netherlands. Launched in 2011, it supports the buildings ecosystem by providing analytical and strategic tools for worker training. The independently funded project engages and collaborates with universities, municipalities and regions, buildings confederations and trade unions to deliver its training.

**Designing training within a dynamic labour market:** Given the limited size and capacity of SMEs, skills development is often at risk of deprioritisation. The Social Innovation team within Building Changes has committed to tackle this challenge. After carrying out an analysis of the main trends and needs of the construction company, Building Changes provides a tailor-made programme for requalification of workers.<sup>12</sup>

**Connecting people and informal learning:** The vision underpinning this initiative is based on a dynamic labour market that is able to overcome rigidities, by valuing upskilling and reskilling with straightforward approaches for workers. Building Changes promotes ‘informal learning’ as an approach to upskilling, fostering workers’ awareness and supporting the acquisition of concrete and practical skills, without enrolling in a formal education programme.

**Scope for retraining across sectors:** Building Changes and CrossOver<sup>13</sup> ran a pilot project for requalification of workers from the financial to the buildings sector.<sup>14</sup> The initiative has a twofold positive effect on repopulating the building labour market with a younger workforce and preventing a rise in unemployment after a wave of layoffs in the financial sector.

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<sup>11</sup> REG (Recognised Environmental Guarantor)

<sup>12</sup> **Building Change**, consulted on 8 April 2024

<sup>13</sup> CrossOver is a Dutch agency providing companies with technical training and expertise in the building sector. Further information at: <https://www.crossovernederland.nl/over-crossover>

<sup>14</sup> “De menukaart is klaar!” Project. Further details at: <https://www.buildingchanges.nl/ons-werkveld/sociale-innovatie/de-menukaart-is-klaar/>



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## 2.0 Financing energy transition in buildings

When the European Commission published its Renovation Wave strategy in 2020, it anticipated that €275bn of additional investments would be required per year in buildings renovation for the sector to contribute its 55% emissions reduction target by 2030.<sup>15</sup> Three-quarters of this investment must come from the private sector.<sup>16</sup> Collaboration to develop *blended finance* – the combination of public and private funds – is therefore essential.

Table 2. Examples of financing transition in member states

Initiatives	Actors involved	Member state	Vision	Impact	Start date
Crowdfunding for clean energy	Municipality Citizens NGO	Croatia (city of Križevci)	Use clean energy transition to foster greater social cohesion and wealth	277kW installed solar PVs, €500k; unemployment drop from ~8% to ~2%	2017
Blended Finance for renovation	EIB Lithuanian Government Commercial Banks	Lithuania (nation-wide)	Use EU public funds to leverage private capital for renovation	90,000 homes renovated	2007

### 2.1 A citizen-centred energy transition (Križevci, Croatia)

The city of Križevci, with a population of 20,000, located 60km north of Zagreb, has been recognised for its innovative engagement of citizens in the local clean energy transition.<sup>17</sup> Launched in 2017, this project has gradually grown through successive campaigns. The first phase brought together 43 citizens who invested €150 (minimum) to €1500 (maximum) in small PV installations on the town’s public buildings. The initiative has grown beyond Križevci’s borders and a third campaign, launched in February 2024, will establish a national investment cooperative where electricity production will be traded daily. From the perspective of Križevci’s local government, the transition to clean energy must directly benefit citizens, ensuring they shift from stakeholders to shareholders.

<sup>15</sup> European Commission, 14 October 2020, **Renovation Wave: Doubling the renovation rate to cut emissions, boost recovery and reduce energy poverty**

<sup>16</sup> Climate Strategy & Partners, December 2023, **Engaging Retail Lenders in Home Renovation: Turning Sustainable Finance Commitments into Household Energy Savings and Climate Resilience**

<sup>17</sup> European Commission, 20 June 2023, **Energy Community in Croatia bringing clean energy to citizens wins European Sustainable Energy Award**



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**An evolving vision:** The local government of the city of Križevci was first elected in 2017 on a non-partisan list. It initially aimed to shift the local economy and people’s mindsets towards climate neutrality and a greener future. Energy independence through the deployment of renewables was seen as a first step towards that goal. Six years later, the goal has evolved to improve the socio-economic conditions of the community as a whole through development of a new economic model based on locally available resources.

**Citizens’ empowerment as a starting point:** From the outset, the municipality established that the initial goal of energy independence would only be reached by involving citizens in *learning* about the technology, *implementing* the project and financing it. This was the starting point for a first crowdfunding campaign which led to the creation of a citizen-led local energy cooperative following the second campaign. The local government actively communicates and engages with citizens. In addition to social media, a collaborative tool has been integrated into the city’s official website through which suggestions can be made. Citizens’ engagement has been further reinforced with the creation of KLIK, an energy and climate office jointly set up by the energy cooperative and the municipality. In 2022–23, KLIK put knowledge-sharing at the centre of its efforts by offering 22 lectures to nearly 400 people.

## **2.2 Ten years in the making: a blended finance scheme for renovation (Lithuania)**

Since 2007, a financing programme for building renovation, jointly offered by the European Investment Bank (EIB) and the national government, has been rolled out across Lithuania. The programme has been ongoing for nearly two decades and has led to the renovation of more than 90,000 apartment units with an average of 60% energy savings. Under this scheme, low-income households are fully subsidised.

**A step-by-step approach:** The EIB identified a market gap for financing energy efficiency in buildings. However, new delivery mechanisms were needed including moving away from subsidies to financial instruments – a more efficient way to deploy public funds. Commercial banks were not comfortable with the perceived risk of financing renovation of private homes, requiring guarantees. To overcome the banks’ reluctance, the EU provided structural funds to disburse as loans and build their capacity to deliver these funds. The second step was getting banks to use their own funds and increase the overall envelope of available funds. The ratio of private to public funds slowly increased, however, only one bank moved forward. The EIB devised a blended finance scheme with varying



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levels of risks, with public funds bearing the highest risk and used as first-loss guarantee. It took over a decade to bring banks onboard. This patient effort led to €1bn of private capital being leveraged by €275m of public funds. The programme is still running, with an additional funding level of €200m.

**A politically driven initiative:** This programme was driven by the European Commission to address a lack of investment in energy efficiency and a lack of bankable projects. In the immediate aftermath of the 2008 financial crisis, the renovation programme was seen as a solution to restarting the economy and boosting employment. The Lithuanian government made legislative changes to enable the roll-out of renovations. This sheltered the programme from future partisan debates and secured its continuity over the years as the EIB worked with successive governments in support of the scheme.

### 3.0 Local authorities

Cities, towns and villages are where policies meet people. Several recently adopted EU legislative files put municipalities at the forefront of the delivery challenge with local authorities required to foster collaboration, facilitating the interactions of numerous stakeholders and intersecting interests.

*Table 3. Examples of local delivery in member states*

Initiatives	Actors involved	Member state	Vision	Impact	Starting date of municipal climate action
Pilot City of the EU	Over 600 stakeholders	Leuven (Belgium)	Climate neutrality by 2050 with drastic reductions by 2030	Multi-farious <sup>18</sup>	2013
Mission for Climate-neutral and Smart Cities	Municipality Citizens NGO Industries Academia	Kraków (Poland)			2003

<sup>18</sup> The scope and nature of climate action at a systemic level is a long-term transformative journey. This makes it more challenging to pinpoint single achievements and to quantify others. For instance, recognising the cross-cutting nature of climate action, both municipalities are exploring new governance models to foster a greater integration of their departments working on climate issues. Another example is the 'Climate Quarter' Krakow is creating in its city centre – an area with reduced car traffic to lower emissions, the heat island effect and the city's environmental footprint (see Małgorzata Stuch, 7 May 2021, **Powstanie nowe, zielone centrum Krakowa?**)





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### 3.1 Glimmerings of transformational change (Kraków and Leuven)

Tapping into the natural convergence of multiple stakeholders at the local level can serve as a catalyst for climate action. Striking similarities were found between Leuven and Kraków, unveiling key elements of the pathway towards deep collaboration. Both cities are part of the first cohort of pilot cities<sup>19</sup> testing innovative solutions and approaches not only to accelerate the reduction of greenhouse gas emissions, but also to support systemic transformation.

The transformation under way in Kraków and Leuven can be seen as twofold – a novel approach to governance and an active participation in learning communities. **A humble approach to policymaking** has been described as useful when dealing with complex and uncertain issues.<sup>20</sup>

In Leuven, this approach has been embedded in the vision-building process. The roadmap to achieve climate neutrality was developed in 2019 through a multi-stakeholder process involving over 600 local stakeholders.<sup>21</sup> The execution of the roadmap was entrusted to a team of 18 people from different organisations. The intention was to implement the principles of ‘distributive leadership’ whereby key stakeholders within the ecosystem are empowered and supported to drive forward parts of the strategy. Of the 80 most important actions to be carried out in the next two years, half are owned by the city, and half by an ecosystem of stakeholders. It has been noticed that fostering a collective ownership of the projects creates more transparency and accountability.

Kraków expresses a humble approach to governance by purposefully seeking citizens’ participation at each stage of the work,<sup>22</sup> using multiple channels of communication – including the official city website, social media and public transportation. It also offers climate education through regular public events.<sup>23</sup> Crucially, beyond knowledge sharing, staff of the municipal climate department use these opportunities to have informal conversations with people about their fears and expectations. In December 2023, they created 16 cross-sectoral advising teams who the mayor consults on important questions.

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<sup>19</sup> Net Zero Cities, **Pilot Cities Cohort 1 (2022)**

<sup>20</sup> Demos Helsinki and Prof. Charles F. Sabel, November 2020, **Humble Government: How to realise ambitious reforms prudently**

<sup>21</sup> Leuven 2030, consulted on 8 April 2024, **About Leuven 2030**

<sup>22</sup> City of Krakow, consulted on 8 April 2024, **Krakowskie Centrum Edukacji Klimatycznej**

<sup>23</sup> City of Krakow, consulted on 8 April 2024, **Wielka Lekcja Ekologii po raz siódmy**



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- > **Learning is at the heart of these frontrunner cities' mode of operation** and is fostered by an active participation in learning communities.
  - > **Kraków recognised that the climate challenges faced by cities are often similar.** It started cooperating with other pilot cities, the five largest cities in the country, and promotes resource efficiency through pooling resources, accessing specialist expertise, realising scale benefits and avoiding duplication. Cities work together through dedicated municipal staff, who meet regularly. This intensity, called for by the active learning approach, is also found in the city of Leuven.
  - > **Both cities participated in programmes hosted by EIT Climate-KIC, Europe's leading climate innovation initiative.** The city of Leuven and Leuven 2030, the NGO that brings together stakeholders to accelerate the city's transition, joined together for one of these programmes in 2019. They were introduced to systems thinking and learning in a context of uncertainty. It laid the ground for the work they are now doing as pilot city. Leuven 2030 has embraced and internalised this learning mindset. It translates into challenging assumptions and changing course if something does not work once implemented. Leuven 2030 is now actively seeking to bridge the gap between a bottom-up and top-down approach to climate action, looking at both ongoing initiatives on the ground and what is needed to achieve the goal of net zero. As the city itself still operates from a more classic project-management perspective, several consultations will be needed between the two entities, in which the strengths of each will be drawn upon to find a resolution.

## 4.0 Tapping into collaboration for transformational change

These examples to drive climate action reveal a wealth of collaborative practices. From initial to deeper levels of collaboration, a continuum emerges, delineating a whole-of-society journey towards decarbonisation (Figure 1). At any given stage, three main features of collaboration appear that both fuel increased collaboration and are further strengthened by it:

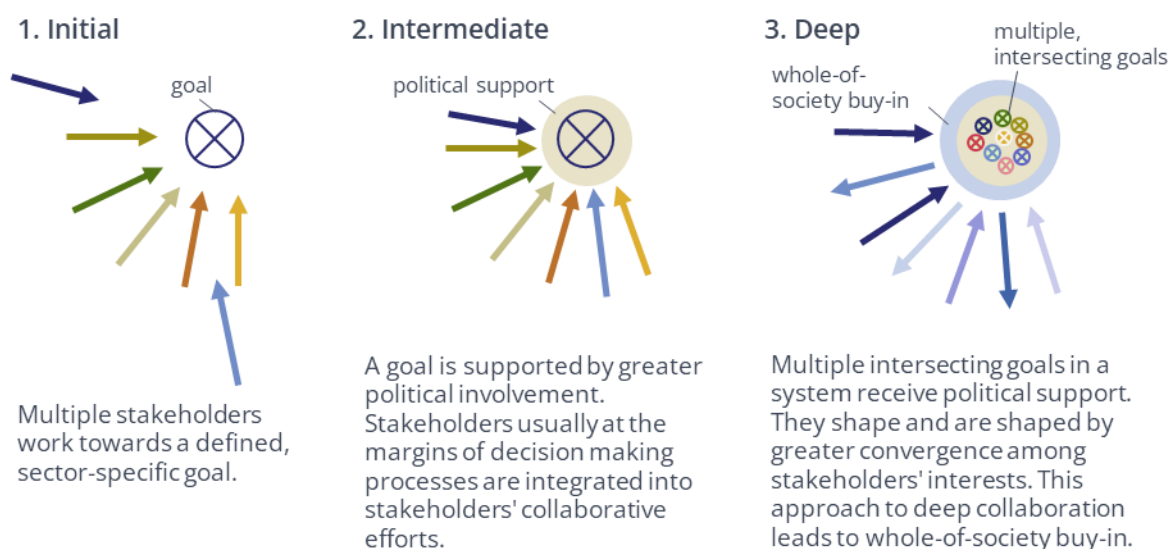
- > **Vision:** A vision of change is present at the outset of all the initiatives and evolves over time. At initial levels of collaboration, it may be more transactional, as in the FEEBAT example, and become more transformational as collaboration deepens.



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- > **Innovation and creative thinking:** Interactions among a variety of stakeholders necessarily call for and foster creative thinking and innovation in delivery models, as seen in the financing examples.
- > **Leaving no-one behind:** Collaboration facilitates inclusion and fairness. Initially, stakeholders' needs are considered, and interventions are designed to address them as seen in Building Change's work with SMEs in the Netherlands. The next step is stakeholders engaged in delivery of projects as seen when Križevci began deploying renewable energy. At deeper levels, stakeholders drive the design of climate action, as demonstrated in Kraków.

### A pathway towards whole-of-society buy-in to the transition



*Figure 1: Three stages of achieving deeper buy-in for the green transition. In a whole-of-society journey towards decarbonisation all stakeholders are involved in the delivery of intersecting goals, and their interests in turn are shaped by this process. Through this process, stakeholders on the margins of decision making – such as low-income households and SMEs – become fully engaged.*

The collaborative journey is not linear. Elements of all three stages can be found in a single initiative and each intervention calls for different levels of collaboration. It appears that the initial levels of collaboration might be sufficient for well-defined and sector-specific interventions, while deeper levels are needed for systemic interventions or settings, such as cities.



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## 5.0 Conclusion: the foundation of a successful EUGD delivery

Given the scale and complexity of achieving climate neutrality, collaboration will be the hallmark of the transition to a clean economy.<sup>24</sup> Crucially, by bringing together 'unlikely allies' collaborative approaches serve as a breeding ground for innovation and a transition from business-as-usual practices and mindsets to new ways of delivering outcomes. With shifting political winds, inclusive multi-stakeholder approaches hold the potential to establish a foundation to successfully steer the delivery of the EUGD and mitigate political risks. In particular, in the building sector, the promotion of citizen-centred approaches can help to reduce backlash by increasing people's awareness and agency in the transition.

Looking forward to the next five years of the European Green Deal, stakeholders will need to mainstream collaboration in the following ways:

- > Local governments must act as orchestrators of local climate action by facilitating ownership of the delivery across sectors and municipal departments.
- > Private sector must embrace a long-term vision and dedicate the necessary resources – knowledge, financial, human – to innovating creative transition pathways.
- > CSOs must identify and engage with unusual allies, supporting initiatives by fostering trust and people-centered approaches.

In the face of shifting political landscapes, deep collaboration stands as a shield against backlash and uncertainty, and a springboard for a fairer and faster transition. Yet, its true power lies in uniting diverse voices to pioneer new paths, where every step pulses with the energy of collective action.

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<sup>24</sup> Given the scale and complexity of the challenges posed by sustainable development, it can be "fruitfully addressed through collaborative innovation". Mariani, L., Trivellato, B., Martini, M. *et al.*, *Journal of Business Ethics*, 14 July 2022, **Achieving Sustainable Development Goals Through Collaborative Innovation: Evidence from Four European Initiatives**



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## About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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