9. Governing energy transition in a fragmented landscape: Belgium's social dialogue challenge

Frédéric Naedenoen, Indira Kuburas and Clémentine Colmont

INTRODUCTION

Belgium's energy transition takes place within fragmented institutions, a reshaped value chain, and industrial relations systems under strain. This chapter examines these dynamics through the perspective of industrial relations, exploring how unions, employers and public authorities anticipate and manage change, and at times are overtaken by the reorganisations that decarbonisation entails.

The energy transition in Belgium is unfolding against a backdrop of political, economic and social tensions, industrial restructuring and fragmented governance between the country's different regional levels in order to meet the challenge of carbon neutrality by 2050. The sector, historically dominated by a few integrated players, is undergoing rapid transformation as a result of new specialised operators, the decentralisation of production and the emergence of hybrid activities. Recent political reversals, such as the extension of the operation of the Doel 4 and Tihange 3 nuclear reactors until 2035, have reignited debates on energy security, industrial policy and employment timetables.

The central idea of this chapter is that, in Belgium, the impact of the energy transition on employment is not limited to creating or destroying jobs, but rather leads to richer dynamics. It leads to adjustments in skills, status, work patterns, etc. Furthermore, this evolution of the energy market highlights grey areas in employment protection in the context of the transformations of the contemporary world and the ability of social actors to deal with them.

To ground this analysis, the chapter draws on three company trajectories. EnergyCo closes an ageing unit while commissioning a nearby gas plant, achieving a rapid industrial conversion with a smaller workforce despite

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

negotiated redeployments. EMMA, a distribution system operator, gradually transfers staff from gas to electricity, relying on multi-skilling and training. NuclearCity experiences a political reversal that restarts recruitment and combines decommissioning with renewed operations under strict safety rules.

The chapter first situates Belgium's energy transition in its institutional and sectoral context, underlining contrasts between Flanders, Wallonia and Brussels in governance, industrial structure and policy orientation. It then examines the three company cases, tracing how organisations anticipate and manage transition decisions. A cross-reading highlights four recurring dimensions – employment, work organisation, social dialogue, and territorial anchoring – through which both the levers and blind spots of a just transition become visible.

GENERAL CONTEXT OF THE ENERGY TRANSITION IN BELGIUM

Belgium has committed to achieving carbon neutrality by 2050, in line with the European Green Deal. This ambition requires a profound decarbonisation of the economy, based on four pillars: electrifying end uses, renewable energies, energy efficiency, and a gradual phase-out of fossil fuels. For context, in 2021 Belgian electricity production was dominated by nuclear energy (52.5% of electricity production), natural gas (28.5%) and renewable energies (19%).[1] Three years later, in 2024, renewable energies became the second largest source of electricity production with 30.4%, still behind nuclear energy (40.8%).[2] Among renewable energies, wind power accounts for the largest share, 11.5% in 2021 and 18.8% in 2024 (i.e. almost two-thirds of electricity production from renewable energies).

However, despite an undeniable increase in the share of renewable energies in electricity generation, the implementation of this decarbonisation strategy faces several structural constraints specific to the Belgian institutional model that we can sum up in three main points: a fragmented institutional system, the armed crisis in Eastern Europe, and a liberalisation of the electricity market

The Belgian federal system is characterised by a particularly complex distribution of powers, which fragments the levers for action. Energy policy is a shared responsibility between the federal level – responsible for security of supply, major infrastructure and nuclear power – and the regions – responsible for energy efficiency, renewable energy, housing, land use planning

[1] Nucleair Forum. *Monthly electricity mix* [Base de données 2025]. https://www.nuclearforum.be/elektriciteitsmix

[2] Federation of Belgian Electricity and Gas Companies. (2024). *Annual Report 2024* (p. 66). Febeg.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353617 86
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

and vocational training. As a result, no single steering centre exists; several inter-ministerial and inter-regional bodies coordinate climate-energy matters, yet strategies often remain parallel or partially divergent across entities. Fieldwork conducted for the Rejeneraxion project indicates that coordination instruments tend to aggregate sub-plans rather than express a unified national vision. The National Energy and Climate Plan (NECP) essentially pools the federal and three regional components; similarly, the National Recovery and Resilience Plan (NRRP) was assembled from six regional/community plans, reflecting institutional compartmentalisation more than an integrated strategy. This fragmentation weakens the capacity to anticipate socio-economic effects, to plan industrial reconversions, and to align training, innovation support and inclusion policies.

In addition, Belgium's energy trajectory has recently been altered by the geopolitical crisis linked to the Russian invasion of Ukraine. The energy insecurity caused by this war has led the federal government to partially suspend the 2003 law providing for a complete phase-out of nuclear power by 2025. In 2023 an agreement was reached with the operator Engie Electrabel to extend the life of two reactors (Doel 4 and Tihange 3) until 2035. This decision, based on considerations of security of supply and price control, marks a strategic turning point. It also raises questions about the long-term governance of Belgium's energy mix, the place of nuclear power in the post-fossil fuel landscape, and the consistency between political decisions, industrial planning and social acceptability.[3]

At the same time, the liberalisation of energy markets and the growing decentralisation of production have reshaped the Belgian energy landscape. Since the full opening of the market in 2007, following the 1999 Electricity Law and the European directives on competition, electricity is no longer managed by a handful of vertically integrated companies. The system now brings together public and private players with very different profiles: traditional utilities such as Engie Electrabel or the transmission operator Elia, but also new entrants focusing on specific segments of the value chain. Decentralisation is also accelerating through the rapid spread of local renewable production. In 2024 Elia recorded a 23% increase in installed solar capacity, reaching about 11 GW, most of it from individual or small installations. The regions have each built their own frameworks to support these developments: Flanders introduced *Energiedelen* and *Energiegemeenschappen* to allow energy sharing; Wallonia adopted a decree in May 2022 on collective self-consumption and

[3] Commission Européenne. (2025, 21 February). *La Commission autorise une mesure d'aide d'État belge visant à soutenir la prolongation de la durée de vie de deux réacteurs nucléaires* [Text]. European Commission. https://ec.europa.eu/commission/presscorner/detail/fr/ip_25_565

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353617 86
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

energy communities; Brussels-Capital published its own guidelines through Sibelga and Brugel for apartment buildings and local projects. These initiatives have multiplied the number of small producers, cooperatives and service companies managing local grids or efficiency projects. The result is a value chain that is far more complex than before, where large utilities and network operators coexist with a patchwork of smaller actors – some innovative, others very fragile. The absence of a shared socio-industrial framework means that responsibilities, training needs and social protections are increasingly uneven. Activities linked to installation, maintenance or flexibility services often fall outside the established collective bargaining structures of the sector (joint committees 326, 117 and 211), leaving gaps in representation and regulation.

The Belgian transition is therefore not short of ambition but of coordination. The challenge lies in an execution gap created by fragmented competences and decision-making processes that often bypass the arenas of social dialogue. A good example is the agreement between the Belgian government and Engie to extend the life of the Doel 4 and Tihange 3 nuclear reactors until 2035. This rapid reversal of policy was taken in a context of urgency, leaving little room for negotiation with unions or local actors. It illustrates the kind of accelerated and extra-social decision cycles that this chapter examines more broadly through the cases of EnergyCo, EMMA and NuclearCity.

Sectoral Level and Value Chain

In this context of both transition and tension, the Belgian energy sector is being impacted in two ways: firstly, in terms of its scope for consultation, and, secondly, through a profound restructuring of value chains within organisations.

Historically dominated by a limited number of vertically integrated players – producers, network operators, suppliers – the sector is increasingly fragmented by the entry of new operators, often specialising in a specific activity (aggregation of flexibilities, demand management, decentralised production, energy services). This restructuring is creating discontinuity in the scope of application of social regulations. While large, long-established companies remain covered by the sector's traditional joint committees (see below), which contain protective collective agreements, many new entrants operate outside this framework or are covered by other committees that offer less social protection. This development calls into question the universal scope of sectoral regulations and raises the question of extending the scope of collective agreements to these new players.

Furthermore, the value chain is becoming more complex with the emergence of hybrid activities. The traditional distinction between production, transport, distribution and supply is becoming less clear due to the decentralisation of production (self-consumption, energy communities), the development of local

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353617 86
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

storage, and the proliferation of two-way exchanges between consumers and networks. These transformations are blurring organisational boundaries, creating grey areas in terms of skills, responsibilities and worker protection. On the business side, the response to this restructuring takes various forms. Some companies choose to internalise new activities (e.g. flexibility management or energy renovation) by attaching them to their central structure. Others outsource or create specialised subsidiaries, sometimes with different legal statuses, which introduces a duality of employment conditions within the same group. Trade unions denounce these practices as forms of 'internal social dumping', which weaken the coherence of collective rights.

Energy Policy Developments and Socio-environmental Challenges: A Territorial and Regional Dimension

Furthermore, Belgium's energy trajectory remains heavily dependent on technical and political choices discussed in expert forums, to the detriment of genuine spaces for democratic deliberation, such as the life extension of Doel 4 and Tihange 3 decided in 2023, later approved under EU state-aid rules on 21 February 2025 and formalised by an ENGIE–state agreement on 14 March 2025, as well as gas-infrastructure guidelines and the rollout of renewables; these are generally taken by the executive in consultation with major operators, within accelerated timeframes and via negotiation formats with limited openness. This technocratic tilt undermines the social acceptability of the transition, particularly in vulnerable or historically marginalised areas. Belgium's energy transition, accelerated by commitments made under the European Green Deal, is taking place within a fragmented institutional framework (federal vs. regional competences) and against a backdrop of significant social tensions.

The Belgian energy transition is taking place across a territory deeply marked by diverse regional realities, inequalities in terms of energy poverty,[4] differentiated sectoral specialisation and fragmented policy instruments. The three regions, Flanders, Wallonia and Brussels, each have distinct priorities, often aligned with their economic structures, energy resources and political orientations.

In Flanders, the focus is on technological solutions and stimulating the market through innovation. The region strongly supports research into smart grids, carbon capture and storage (CCUS), low-carbon hydrogen and the circular economy in heavy industry. It also promotes the development of energy

[4] Fondation Roi Baudouin. *Baromètre de la précarité énergétique. Analyse et interprétation des résultats* 2022, 2024.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

ports (Antwerp, Zeebrugge), which are becoming strategic hubs for energy import, storage and distribution (e.g. Antwerp@C CCUS consortium; hydrogen import-hub roadmap at Port of Antwerp-Bruges; Correra Laguna et al., 2023[5]).

Wallonia, for its part, is taking a more industrial and territorial approach. It is focusing on green reindustrialisation, the relocation of low-carbon activities and support for renewable energy sectors (biomethane, hydroelectricity, photovoltaics). The Walloon Air, Climate and Energy Plan[6] adopted in March 2023 sets emission reduction targets for each sector (industry, construction, transport), but its implementation depends heavily on coordination with local economic operators and European mechanisms. This is now taking shape thanks to the Just Transition Fund (FTJ). Sixty-two projects have been selected in Charleroi, Mons and Tournai, including hydrogen research initiatives and industrial decarbonisation demonstrators, marking the shift from planning to implementation in historically affected industrial basins (Fransolet & Vanhille, 2023). Wallonia is the region most affected by energy poverty, with 29.2% of households in a precarious energy situation in 2022, a figure that is almost twice as high as in Flanders (16.4%).

The Brussels-Capital Region, which has very limited energy autonomy, is moving towards a strategy focused on building renovation, soft mobility, citizen energy and the fight against energy poverty. The city is concentrating its efforts on the social externalities of the transition and the integration of energy issues into urban policies (housing, employment, public health) (e.g. The RENOLUTION[7] programme consolidates renovation and energy grants and embeds renovation in wider urban policies (housing, employment, public health).

The territories themselves are unevenly equipped to take advantage of the transition. Some benefit from a high density of industrial players, technical skills and supported projects, while others, particularly rural areas and former coal mining areas, struggle to attract investment. The EU Just Transition Fund has, for example, targeted Walloon territories (Tournai, Mons, Charleroi)

---

[5] *Circular economy.* https://www.portofantwerpbruges.com/en/our-port/climate-and-energy-transition/circular-economy (consulted on 8 December 2025).

[6] (1) Environnement Brussels. (2023, April). Plan Régional Air-Climat-Energie [Plan]. (2) Mouillard, E. (2025). Rapport de synthèse d'Etat d'avancement du plan AIR-CLIMAT-ENERGIE de la Région de Bruxelles-Capitale. Année 2. Environnement Brussels. (3) Stratec (8 November 2022). Rapport sur les incidences environnementales du second Plan Air-Climat-Energie (PACES 2) en RBC. Rapport sur les incidences environnementales (No. C1375). Stratec.

[7] Ville de Bruxelles. (2025). Renolution, la stratégie de rénovation de Bruxelles-Capitale. https://renolution.brussels/fr/la-renolution-bruxelloise

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353617 86
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

with dedicated support, underlining the risks of widening territorial divides if policies are not actively redistributive (Fransolet & Vanhille, 2023). Beyond regional strategies, territorial impacts will depend on whether current measures, industrial pilots and port strategies in Flanders, FTJ-funded projects and PACE implementation in Wallonia, and large-scale renovation through RENOLUTION in Brussels, can effectively translate into local employment, skill development pathways and supplier ecosystems, rather than merely physical assets. Strengthening the alignment between company projects and basin-level training and procurement, while systematically tracking uptake indicators (such as participation in energy-sharing schemes, number of chargers installed, or projects funded), would support a shift from policy intent to tangible territorial outcomes.[8]

Employment

The energy transition is having mixed effects on employment. On the one hand, the gradual closure of fossil fuel facilities (coal-fired power plants, outdated gas-fired units, etc.) is leading to job losses, often concentrated in industrial areas with a long history of energy specialisation (Belgium's last coal plant at Langerlo closed in 2016).[9] On the other hand, the emergence of new sectors – such as photovoltaics, wind power, smart grids and energy renovation – is creating growing demand for skilled labour, whose activity is more dispersed across Belgium (e.g. installed solar PV rose by ~23% in 2024, reaching ~11.4 GW by spring 2025[10]).

However, while the jobs created and lost do not coincide in space, they do not coincide in time either. Regional shortage lists consistently flag technical profiles, such as HVAC technicians, electricians and network/industrial technicians, as bottlenecks ('*métiers en pénurie*') but new jobs require skills that are not always currently possessed by workers in the sector and require significant learning efforts. This situation creates risks of disruption in career paths, particularly for older or less skilled workers.

The Belgian vocational training system, managed at the regional level, is struggling to respond to these challenges. Training providers report a sharp

---

[8] VREG. (2024). *Energiegemeenschappen, energiedelen en energie verkopen*. VREG.

[9] Drazkiewicz, A. (2016, 5 April). Belgium says goodbye to coal power use ... . *CAN Europe*. https://caneurope.org/belgium-says-goodbye-to-coal-power-use/

[10] Vanwanseele, M. (2025, 2 January). *Electricity mix for Belgium in 2024: Record international exchanges, significant increase in solar generation, and low use of gas-fired capacities.* Elia.Be. https://www.elia.be/en/press/2025/01/20250102_electricity-mix

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

increase in demand for technical professions (installers, network technicians, plant operators, network data analysts), yet they struggle to recruit and retain qualified staff. Although measures like training vouchers, skills validation and partnerships between companies and training centres are in place, their impact remains limited due to weak interregional coordination, insufficient anticipation of sectoral needs and fragmented governance. Recent examples illustrate both the scale and the dispersion of efforts: ORES announced nearly 500 hires in 2024, supported by a seven-month apprenticeship programme co-organised with Le Forem, the Walloon public employment and training agency, for network fitters. Similarly, distribution system operators (DSOs) have created dedicated academies – such as Fluvius Academy and Sibelga Academy – offering certifications in gas and electricity.

Against this backdrop, trade unions are calling for a more structured approach to the transition, building on regional retraining plans, mapping of changing professions, and shared governance of skills development. Recent union positions and campaigns emphasise a 'just transition' that connects climate policy with quality jobs, training rights and social dialogue (e.g. FGTB's JUST campaign; CSC/ACV memoranda). While some companies in the sector – such as Elia, Resa and Engie – have launched ambitious internal initiatives, their impact remains limited without mechanisms to connect these efforts at the industry level. Both corporate initiatives and union proposals point in the same direction – anticipating skills needs and securing quality employment – but lack a common framework to align efforts and scale impact, reinforcing the need for inter-regional skills alliances and portable qualifications across subcontracting chains.[11]

Work Organisation and Working Conditions

The energy transition in Belgium is leading to a gradual but significant transformation of work organisation and working conditions, particularly in the energy and related industries. These changes are manifesting themselves in three major trends: the increasing technicality of tasks, the diversification of organisational modes, and the redefinition of job profiles.

The digitisation of energy infrastructure, combined with the decentralisation of production resources, is profoundly changing the way technical professions work. The increasing complexity of tasks is raising the bar in terms of digital skills, analytical abilities and interdepartmental coordination (Collectif, 2023). For instance, Elia's recent adequacy and flexibility studies highlight

[11] Flavius. (2022). *Flavius System Operator. Annual Report 2022*. Brussels.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

how electrification and digitalisation are transforming system operation and interfaces with consumers.[12]

Work organisation is also evolving towards greater functional versatility. Energy companies expect their employees to be able to work on several types of networks (gas and electricity) or combine maintenance activities with diagnostic or customer advisory tasks. While this development can be rewarding, it also generates stress and overload, particularly when staff numbers are low or teams lack technical support or the necessary skills.

In terms of working conditions, several studies have highlighted an intensification of work rhythms, a reduction in autonomy and increased pressure linked to energy performance or regulatory compliance targets. Furthermore, in jobs related to energy renovation or the installation of equipment (photovoltaic panels, charging stations, etc.), physical working conditions often remain difficult, sometimes precarious and, as we will see below, rarely covered by traditional sectoral agreements (Collectif, 2023).

In the face of these changes, continuing training is becoming a key issue, but its organisation remains uneven. In large integrated companies, training plans are put in place and co-negotiated with trade unions, including technical modules, specific certifications and support for retraining. In small structures, however, particularly subcontractors and new entrants to the energy transition, training is more often ad hoc, self-taught or entirely at the expense of workers. This results in a polarisation of working conditions between workers in large companies protected by collective bargaining and those operating in less regulated conditions.

Finally, the shortage of skilled labour in certain technical professions is putting pressure on existing teams and increasing the use of atypical forms of employment (temporary work, freelancing, subcontracted employees). These tensions could ultimately undermine the social acceptability of the transition if they are not offset by proactive policies to improve working conditions.

Role of Industrial Relations and Social Dialogue

In this fragmented and evolving context, the social partners play a crucial role in structuring the social management of the energy transition. The Belgian industrial relations system is historically characterised by a high degree of institutionalisation and a tripartite structure involving the state, employers and trade unions. It is based on several levels of negotiation: inter-professional (National Labor Council, Groups of 10), sectoral (joint committees) and

[12] Dunon, F. (2023). *Adequacy and flexibility study for Belgium 2026–2036.* Elia Transformation Belgium.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

company (works councils, trade union delegations, committees for prevention and protection at work).

In the energy sector, Joint Committees 326 (gas and electricity sector), 117 (blue-collar workers in the oil industry) and 211 (white-collar workers in the oil industry) are the main collective bargaining frameworks. Since 1 April 2023, CP 117 has been merged into CP 211, so all petroleum-sector workers now fall under CP 211. These committees are characterised by strong institutional continuity and the regular conclusion of collective labour agreements (CLAs) covering wages, employment conditions, professional mobility and training plans. They are considered by stakeholders as strategic forums for sectoral regulation in a rapidly changing energy sector.

One of the major achievements of social dialogue in the gas and electricity sector is the existence of a historic sectoral agreement dating from 1962, which guarantees the redeployment of workers affected by site closures through collective mobility, training and compensation schemes. This mechanism, which has been activated in several recent cases (notably the closure of coal-fired power plants), provides a safety net that mitigates the social shocks associated with the transition. It is a tool for a 'just transition' ahead of its time.

However, the emergence of new players, particularly in renewable energies, decentralised energy services, and tech start-ups, and sometimes their reliance on the atypical employment statuses mentioned above, often falls outside the scope of traditional industrial relations. These smaller companies, less unionised, and less integrated into conventional systems, raise the question of extending social standards to new segments of the sector.

Trade unions are seeking to move into these grey areas through unionisation campaigns, local collective bargaining initiatives or demands for the scope of existing committees to be extended. However, these efforts are facing multiple obstacles: weak labour collectives, unstable companies, and a lack of institutional mediation.

As Galgóczi (2020) points out, Belgium is experiencing a similar ambivalence to that observed in other European countries regarding the role of trade unions in the just energy transition. Tension is building between the national level, where trade unions are involved in strategic policies related to the transition, and the local or sectoral level, which is confronted with the direct and often painful impacts of these transformations. While trade union representatives in federal and regional forums recognise the need for an energy transition within

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

a structured framework, specific discussions on employment, restructuring and productivity efforts remain contentious. Strategic negotiations related to the transition appear to be taking place outside the scope of joint committees, which remain focused on traditional issues (pay, end-of-career arrangements, benefits). Environmental issues are more the preserve of cross-sector working groups, where trade unions are consulted at a more macro-institutional level. This dissociation between levels of engagement creates a form of asymmetry in the trade unions' consideration of transition issues.

More broadly, social dialogue, although effective in managing the immediate effects of change (job losses, redeployment, training), is struggling to integrate the ecological dimension of the transition. Trade unions focus primarily on the social consequences, without always having the analytical tools, expertise or room for manoeuvre to take a position on energy choices themselves. This gap has been highlighted in recent research, which points to the need for structured mechanisms to embed environmental concerns into social dialogue frameworks (Demetriades & Cabrita, 2025; Demetriades & Adăscăliței, 2023; Gazier & Bruggeman, 2024).[13] According to the actors who met during the Rejeneraxion project, there is still a need to create a structured environmental pillar for social dialogue, similar to what exists for wage negotiations or restructuring plans. Academic literature also stresses that the lack of integration of ecological dimensions limits the transformative potential of just transition processes (Sun et al., 2023), reinforcing the urgency of equipping social partners with analytical tools and governance spaces to address energy choices.

Some union leaders advocate a more integrated approach, linking economic, social and environmental issues within a negotiated transition. However, this position remains in the minority. Many union representatives express reservations about the climate agenda, either because they fear it will dilute traditional demands (wages, working hours, working conditions) or because of memories of the harmful effects of past industrial restructuring. In some cases, this mistrust is reinforced by the impression that environmental measures result in costs being passed on to employees, without sufficient compensation or real guarantees of improvement.

Finally, social dialogue is sometimes caught off guard by the political timetable. The decision taken in 2023 to extend the Doel 4 and Tihange 3 nuclear units, subsequently approved by the European Commission on 21 February 2025 and formalised by an ENGIE–State agreement on 14 March 2025, illustrates this tension: taken in the context of an energy crisis,

[13] European Economic and Social Committee (EESC). (2022). *Social dialogue within the green transition*. Exploratory opinion NAT/864-EESC-2022.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353617 86
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

with limited prior consultation, it forced the social partners to react urgently to a major reversal of energy policy. This type of decision, taken outside the social dialogue arena, weakens the ability of trade unions to anticipate change and build stable regulatory frameworks.[14]

CASE STUDIES: COMPANY TRAJECTORIES IN THE FACE OF THE ENERGY TRANSITION

The three case studies carried out as part of the Rejeneraxion project in Belgium offer a contrasting and complementary view of the dynamics of energy transition at the company level. They illustrate different structural contexts, varying degrees of anticipation and unevenly mobilised social dialogue mechanisms. All cases show elements of disruption and continuity in industrial trajectories and provide empirical examples for analysing the restructuring processes at work. For reasons of confidentiality, the case studies have been anonymised and company names altered.

EnergyCo, a company in the energy sector, closed an old power plant (site A) due to the withdrawal of public funding, while launching the construction of a new gas-fired plant (site B) nearby. This industrial conversion process is part of the federal CRM mechanism, which supports production capacities. The company, which has historically been well organised by trade unions, organised internal worker mobility, combined with voluntary departures and retraining. The second case concerns EMMA, a distribution system operator (DSO) based mainly in Wallonia. It is a public operator, the result of an association of local authorities. As the entity responsible for transporting electricity and gas to end users, EMMA is at the heart of the transformations brought about by the energy transition: reducing the role of gas, electrifying uses, and integrating decentralised renewable energies. The company has embarked on a series of internal reforms focused on restructuring its technical services, reorganising support functions and creating a subsidiary dedicated to green innovation. The third case, called NuclearCity, concerns a nuclear power plant in Wallonia that was initially committed to a gradual decommissioning process, in accordance with Belgian law on phasing out nuclear power. However, the energy crisis triggered by the invasion of Ukraine has led to a major strategic reorientation. The Doel 4 and Tihange 3 reactors, which were scheduled to be shut down in 2025, have had their operating life extended until 2035. This government decision, accompanied by the lifting of the ban on the construction of

[14] Wijckmans, R. (2022). Du pain sur la planche. Gazelco. https://www.gazelco.be/fr/du-pain-sur-la-planche/

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

new nuclear capacity, has disrupted local prospects, organisational dynamics and internal social balances.

CROSS-THEMATIC ANALYSIS OF CASE STUDIES

Employment: Differentiated Transitions and the Reshaping of Career Paths

Across the three cases, employment adjusts at different times, through different instruments and with uneven net effects. EnergyCo shows a rapid industrial conversion with a net headcount reduction; EMMA relies on functional redeployment to preserve jobs; NuclearCity exhibits a policy-driven reversal that reopens hiring under tight skill constraints.

The EnergyCo case reveals a relatively rapid transition, with the planned closure of site A over two years and the early commissioning of site B. Of the 60 jobs lost in Wallonia, the majority were redeployed within the group, mainly to neighbouring sites or to the site B project. Retirement, early termination of employment and early retirement schemes were also used, within a collective bargaining framework. However, the gap between the number of jobs lost and those created remains significant: the new plant employs around 35 people, representing a net reduction in the workforce. Even when redeployment works, automation and new operating models compress headcount and shift profiles towards monitoring/maintenance and control.

At EMMA, the approach is less about job cuts than gradual functional redeployment. The company has chosen to anticipate the decline in its gas activities by reassigning the employees concerned to electrical services. This strategy is based on skills development supported by training programmes, some of which have been developed jointly with the social partners. Technical employees must now master smart systems, intermittent flow management and remote monitoring tools. The creation of an innovation subsidiary, while allowing for differentiated management of risky projects, also raises questions about the sustainability of the jobs created and the protection of contractual status. This case shows us that redeployment can preserve employment but reallocate risk and status when activities move into subsidiaries with different coverage.

The case of NuclearCity shows the opposite trend. While the initial trajectory led to a planned reduction in the workforce, the announcement of the extension of the reactors' lifespan led to a rapid reconfiguration of staffing requirements. The company had to remobilise rare skills in a short period of time, while rehiring some recently departed employees. Recruitment campaigns have been launched but are struggling to attract young workers to a sector perceived as uncertain. The agreement with the government also includes long-term commitments through a public-private joint venture responsible

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

for operating the two reactors concerned. Policy reversals can invert employment trajectories overnight, making skills availability and timing the binding constraints.

Taken together, the three cases point less to 'job destruction versus job creation' than to asynchronous adjustments in timing, status and skills requirements, with uneven redistribution of risk across organisational boundaries. Crucially, employment continuity depends not only on redeployment mechanisms, but also on the portability and recognition of qualifications across sites, units and subsidiaries. This makes coordinated skills planning a central issue for unions, companies and public authorities and sets the stage for analysis of work organisation and working conditions in the next section.

Work Organisation and Working Conditions

The energy transition is profoundly transforming work organisations in the three cases studied, but according to specific patterns. Across cases, three recurring trends stand out: a higher technical content of tasks, more cross-functional organisational modes, and the redefinition of job profiles and schedules.

At EnergyCo, the new gas-fired power plant is based on a highly automated technological architecture, reducing the need for operators and concentrating functions on remote monitoring, maintenance and control tasks. This technical change has been accompanied by a redefinition of the qualifications required, a reduction in the number of jobs and a change in work patterns and schedules, with more on-call duty and standby time.

EMMA is seeing its work structure evolve towards greater integration between departments. Work is becoming cross-functional: employees must collaborate across departments, manage interfaces between infrastructures, and learn to use supervision software. The company is focusing on cross-functional skills and adaptability. However, this versatility is viewed with ambivalence by employees, with some seeing it as a valuable opportunity to develop their skills and others as an increased workload without a corresponding pay rise.

At NuclearCity, the impact on work organisation is all the greater because it results from a twofold movement: decommissioning on the one hand and restarting operations on the other. These two approaches are subject to different regulatory and operational requirements, creating internal tensions over team allocation, production targets and safety standards. Getting operations back up and running requires updating procedures, investing in technical documentation, and rebuilding operational teams. These changes have an impact on the mental workload and individual responsibilities, particularly for field operators.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353617786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

Taken together, the cases converge on a shared direction of change: work becomes more digital, more interdependent and more tightly scheduled, while support functions (back-up staffing, technical assistance, time for training and handovers) remain unevenly organised. Job quality therefore hinges on a limited set of concrete parameters: how on-call/standby arrangements are planned and compensated; whether upskilling/reskilling is delivered in time and formally recognised; and how accountability is defined when tasks sit 'between' units, departments or subsidiaries. These observations provide a basis for assessing how, and how far, social dialogue can anticipate and regulate such changes.

Social Dialogue and Industrial Relations

The role of social dialogue in supporting the energy transition is proving particularly crucial, although it varies depending on the organisational context and underlying employer strategies. At first glance, EnergyCo appears to be an example of structured, proactive and institutionalised social dialogue. The company, which historically has had a strong union presence, has long been engaged in formal consultation with employee representatives to organise the closure of site A and prepare for the transition to site B. This process resulted in the signing of collective agreements governing internal mobility, voluntary departure schemes, redeployment, and training programmes. Trade union representatives were also consulted on the industrial project for site B, although their influence on technological choices and design specifications remained limited.

However, a more critical reading of this trajectory highlights an ambivalent dimension of the process. EnergyCo's strategy of completely closing site A before launching a new facility at site B, rather than gradually transforming the existing infrastructure, can be interpreted as a lever for social restructuring. This sequence enabled the company to break away from the conventional framework previously negotiated at site A, which was characterised by historically very favourable social benefits for workers in terms of bonuses, career prospects, working hours and working conditions. By starting afresh as a separate legal entity, the company was able to redefine a more flexible and potentially less restrictive contractual framework from the employer's point of view. Thus, while social dialogue was conducted in an orderly and formal manner, it took place within a framework strongly guided by a corporate strategy aimed at reshaping social relations in the context of energy transition. This tension between organised consultation and the implicit reconfiguration of social balances highlights the limits of social dialogue when it is unable to influence structural choices upstream of the industrial process.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

Conversely, at EMMA, social dialogue takes a more informal and responsive form. While union representatives are informed of broad strategic directions, they do not always have a forum for discussing innovation projects or structural changes. The creation of the green subsidiary, in particular, raised questions about the scope of consultation, the conditions for transferring employees and the maintenance of collective guarantees. The unions saw this as an attempt to circumvent the existing framework, even though adjustments were negotiated after the fact. Despite these limitations, the quality of local labour relations, marked by a tradition of pragmatic dialogue, has helped to avoid major deadlocks.

In the case of NuclearCity, social dialogue was abruptly disrupted. Initially, the social partners had supported the gradual closure of the site in a relatively calm atmosphere, negotiating departure conditions, staff retraining and redeployment guarantees. The unexpected announcement of the extension of the reactors' lifespan required an immediate resumption of consultation in a context of strategic urgency. A new round of negotiations began, leading to a comprehensive agreement providing for a rapid ramp-up, the partial rehiring of former employees and the adaptation of training programmes. This case illustrates the ability of representative institutions to adapt to unexpected changes of direction, but also the dependence of social dialogue on the political timetable.

Across the three cases, social dialogue is less absent than unevenly positioned: consultation often follows rather than shapes key industrial choices (as at EnergyCo), reaches its limits when activities move to new subsidiaries with different protections (as at EMMA), and is compressed when political reversals accelerate decision-making (as at NuclearCity). On this basis, three safeguards appear particularly relevant: early-warning information rights linked to transition scenarios; explicit discussions on scope and continuity of collective guarantees when activities are transferred to subsidiaries; and predefined, time-bound bargaining procedures to handle policy shocks. Together, these measures would strengthen social dialogue as a co-regulatory mechanism, rather than confining it to ex post adjustment.

Sectoral and Territorial Dimension

The territorial effects of the energy transitions observed vary according to the nature of the activities, the historical location of the sites, and the capacity for coordination between institutional levels. The three cases show how sectoral trajectories translate differently across places, depending on local industrial fabrics, skills bases and the ability of authorities to align tools and timelines.

At EnergyCo, maintaining energy activity in the same geographical area – thanks to the construction of site B in the immediate vicinity of site A – has

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

enabled a form of territorial continuity. Local authorities supported the project in the hope of preserving jobs and economic activity. However, staff reductions, the transformation of jobs and the loss of ancillary activities (catering, subcontracting, services) have had a negative socio-economic impact on the local community. This 'on-site' transition shows that physical continuity alone does not guarantee social continuity; without targeted measures on local supply chains, mobility and training, value can leak out even when production stays.

EMMA, for its part, operates across a large geographical area covering several employment basins in Wallonia. The company is implementing a differentiated adaptation strategy tailored to local needs: strengthening networks in urban areas undergoing change, gradually reducing gas-related services in rural areas, and cooperating with municipalities to deploy charging stations and decentralised photovoltaic installations. This approach, although fragmented, is based on territorial partnerships and on inter-municipal cooperation (planning permits, public works, local training pipelines). However, the ability to link these dynamics to a coherent regional policy remains limited in the absence of a unifying post-gas strategy – particularly on redeployment pathways for gas-network staff and the long-term maintenance model for legacy assets.

In the case of NuclearCity, the territorial issue is central. The power plant is an economic pillar of the region concerned, both in terms of direct and indirect jobs. Its planned closure had given rise to discussions on industrial conversion or territorial transition projects, which are now on hold. The extension of the site gives an immediate economic boost, but postpones the question of the region's long-term future. Trade unions are insisting on the need to relaunch a territorial planning process, linked to the public investments planned in the joint venture with the state. The territorial dimension of the energy transition appears here both as an opportunity to strengthen energy sovereignty and as a point of vigilance in terms of equitable territorial planning.

In sum, the territorial lesson of the three cases is that employment and value do not automatically 'stay' where infrastructure is maintained. Spatial continuity (EnergyCo) can coincide with social loss through reduced headcount and weaker local spillovers. Multi-basins adaptation strategies (EMMA) remain difficult to consolidate without a coherent post-gas regional pathway. And life extension (NuclearCity) provides time and income while risking the postponement of conversion planning. These patterns underline the need to connect company-level transition choices with territorial policy instruments on training, supply chains and investment

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

CONCLUSION

A joint analysis of the Belgian national framework and the trajectories of companies engaged in the energy transition reveals the contours of a process that is ambitious, fragmented and socially ambivalent. At the institutional level, Belgium is distinguished by a uniquely complex federal architecture, which hinders the definition of a unified energy strategy. The absence of centralised governance, the coexistence of distinct regional logics and the juxtaposition of uncoordinated mechanisms weaken the state's ability to steer the ecological transition in a coherent manner (Collectif, 2023). This fragmentation is also reflected at the sectoral level, with an increasingly fragmented value chain affected by outsourcing, financialisation and organisational hybridisation.

In the face of this complexity, industrial relations provide a structuring point of support. The Belgian system remains one of the most institutionalised in Europe, with proven consultation mechanisms, particularly in the traditional energy sectors. The case studies of EnergyCo, EMMA and NuclearCity confirm that, when anticipated, energy transitions can be accompanied by organised social dialogue capable of securing career paths, negotiating retraining and managing professional tensions. These cases also illustrate the limits of reactive social support when political decisions are taken in haste or imposed without prior consultation.

In terms of employment, the energy transition appears less as a direct substitution of jobs than as a profound restructuring of occupations, qualifications and statuses. The jobs that are lost and those that are created differ in nature, location and degree of protection. The increasing technicality of tasks, the intensification of work rhythms and the precariousness of certain segments weaken the promise of an inclusive greening of the labour market. Training programmes, although available, are struggling to respond to the speed and scale of change due to a lack of strategic coordination between public actors, companies and social partners.

Case studies also highlight that territorial anchoring is a key variable in the success of the transition. The effects of a single measure – such as the closure of a site, the construction of a power plant or the conversion of a network – vary considerably depending on the local context, the capacity for coordination between actors and the support instruments available. However, the territorial dimension remains marginalised in national policies, which risks amplifying spatial inequalities if corrective mechanisms are not introduced in a proactive manner.

Finally, the analysis as a whole highlights a structural shortcoming: the absence of an explicit environmental framework in industrial relations. The transition is mainly addressed from the perspective of its economic and social

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

consequences, while the ecological dimension remains in the background, both in collective bargaining and in corporate strategies.

In this context, Belgian social dialogue is an essential but incomplete lever. It faces several challenges: extending its scope to new segments of the transition economy, integrating environmental issues into negotiations and, above all, recognising its role in the strategic governance of the transition. Responding to these challenges requires a reassessment of existing institutional balances and a strengthening of the social partners' capacity to intervene at every stage of the transformation process, from structural energy choices to the fine-tuning of their social effects.

Belgium has real assets to make its energy transition a vehicle for social cohesion: a strong tradition of consultation, proven technical expertise, an organised civil society, and a still-structured industrial fabric. However, these resources will only be fully effective if they are mobilised in a truly integrated approach based on anticipation, territorial justice and environmental inclusion. A just transition cannot be reduced to a normative principle: it must become an operational governance framework at the intersection of climate, social and industrial policies.

REFERENCES

Collectif. (2023). Implications of the climate transition on employment, skills, and training in Belgium (p. 172). The Federal Public Service Heath, Food Chain Safety and Environnement.

Commission Européenne. (2025, 21 February). *La Commission autorise une mesure d'aide d'État belge visant à soutenir la prolongation de la durée de vie de deux réacteurs nucléaires*. European Commission. https://ec.europa.eu/commission/presscorner/detail/fr/ip_25_565

Correra Laguna, J., Moglianesi, A., Vingerhoets, P., & Lodewijks, P. (2023). PATHS 2050 – Scenarios towards a carbon-neutral Belgium by 2050 (p. 60). Energy Ville.

Demetriades, S. & Adăscăliței, D. (2023). Supporting regions in the just transition: role of social partners (p. 37). Eurofound. https://doi.org/10.2806/830912

Demetriades, S. & Cabrita, J. (2025). Aligning efforts: how the social partners are driving a green and just transition. Eurofound, online.

Drazkiewicz, A. (2016, 5 April). Belgium says goodbye to coal power use ... . *CAN Europe*. https://caneurope.org/belgium-says-goodbye-to-coal-power-use/

Dunon, F. (2023). Adequacy and flexibility study for Belgium 2026–2036. Elia Transformation Belgium.

Environnement Brussels. (2023, April). Plan Régional Air-Climat-Energie [Plan].

European Economic and Social Committee (EESC). (2022). Social dialogue within the green transition. Exploratory opinion (No. NAT/864-EESC-2022). European Economic and Social Committee.

Federation of Belgian Electricity and Gas Compagnies. (2024). *Annual Report 2024*. Febeg.

Flavius. (2022). Flavius system operator. Annual Report 2022 [Annual report]. Flavius.

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 97810353361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/

Fondation Roi Baudouin, *Baromètre de la précarité énergétique. Analyse et interprétation des résultats* 2022, 2024.
Fransolet, A. & Vanhille, J. (2023). Just transition in Belgium: concepts, issues at stake, and policy levers (p. 177) [Scientific report]. High Committee for a Just Transition.
Galgóczi, B. (2020). Just transition on the ground : Challenges and opportunities for social dialogue. *European Journal of Industrial Relations*, 26(4), 367–382. https://doi.org/10.1177/0959680120951704
Gazier, B. & Bruggeman, F. (2024). Quel dialogue social pour accompagner la transition écologique? *Document de travail du Centre d'Economie de la Sorbonne*. https://shs.hal.science/halshs-04490862
Mouillard, E. (2025). Rapport de synthèse d'Etat d'avancement du plan AIR-CLIMAT-ENERGIE de la Région de Bruxelles-Capitale. Année 2. Environnement Brussels.
Stratec. (2022). Rapport sur les incidences environnementales du second Plan Air-Climat-Energie (PACES 2) en RBC. Rapport sur les incidences environnementales (No. C1375). STRATEC.
Sun, Z., Zhang, F., Wang, Y., & Shao, Z. (2023). Literature review and analysis of the social impact of a just energy transition. *Frontiers in Sustainable Food Systems*, 7. https://doi.org/10.3389/fsufs.2023.1119877
Vanwanseele, M. (2025, 2 January). Electricity mix for Belgium in 2024: Record international exchanges, significant increase in solar generation, and low use of gas-fired capacities. Elia. https://www.elia.be/en/press/2025/01/20250102_electricity-mix
VREG. (2024). *Energiegemeenschappen, energiedelen en energie verkopen*. VREG.
Wijckmans, R. (2022). Du pain sur la planche. Gazelco. https://www.gazelco.be/fr/du-pain-sur-la-planche/

Frédéric Naedenoen, Indira Kuburas, and Clémentine Colmont - 9781035361786
Downloaded from https://www.elgaronline.com/ at 10/29/2026 11:20:20AM
via Open Access. This is an open access work distributed under the Creative
Commons Attribution-NonCommercial-NoDerivatives 4.0 International
(https://creativecommons.org/licenses/by-nc-nd/4.0/) license.
https://creativecommons.org/licenses/by-nc-nd/4.0/