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ING  
PAPER  
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***ENERGY FOR A JUST AND GREEN  
RECOVERY DEAL: THE ROLE OF THE  
INDUSTRIAL RELATIONS IN THE ENERGY  
SECTOR FOR A RESILIENT EUROPE***

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## LIST OF ACRONYMS

- **FEPEG:** Belgian Federation of Electricity and Gas Companies
- **UNFCCC:** United Nations Framework Convention on Climate Change
- **NCC:** National Climate Commission
- **CIE:** Interministerial conference for the Environment
- **CCPI:** Coordination Committee for International Environmental Policy
- **DGE:** Directorate General for European Affairs
- **OPEC:** Organization of the Petroleum Exporting Countries
- **FGTB:** Fédération Générale du Travail en Belgique
- **CSC:** Confederation of Christian Trade Unions
- **CGSLB:** General Center of Liberal Trade Unions of Belgium
- **SETCA:** Trade Unions of Employees, Technicians and Executives
- **CNE:** National Central of Employees
- **CCPT:** Committee for Prevention and Protection at Work
- **CEC:** Central Economic Council
- **SMEs:** Small and medium-sized enterprises

## REJEnerAXION Project National Report Belgium

### Abstract

*Belgium is a federal state composed of regions and communities, the matters that concern the energy sector and the energy transition are divided between these different levels of competence. Energy affects all areas of society's functioning. In addition to the involvement of the federal and regional levels, the energy sector is also very much influenced by European and international directives but is also at the intersection of various other sectors such as the industrial, building and transport sectors.*

*Belgium has for a long time been able to rely on the extraction of coal from its mines located mainly in the south of the country. Since the closure of these mines in 1992, Belgium produces little energy and is dependent on third countries. In order to meet the 0-carbon objectives, the federal government and the regions are implementing various policies aimed at promoting and expanding renewable energy.*

*This transition requires a strong social dialogue on all issues related to the transformation of work in the energy sector, but also in the other sectors impacted by the transition. According to the social partners in the electricity sector, social dialogue has become more complex since the liberalization of the gas and electricity market. Indeed, these major transformations have impacts on the various components of the economy, including employment and training, and require the protection of certain work groups.*

*JEL Classification:*

*J50; Q30; Q40; Q42*

*Keywords:*

*social dialogue, energy transition, energy sector, nuclear transition.*

## 1. THE ENERGY SECTOR IN BELGIUM<sup>1</sup>

Faced with the climate emergency, the Belgian federal government has set itself the goal of achieving climate neutrality by 2050. The transition to climate neutrality requires the implementation of numerous measures to reduce greenhouse gas emissions in all sectors that will undergo certain transformations in terms of employment and working conditions.

Belgium is a federal state composed of regions and communities, the matters that concern the energy sector and the energy transition are divided between these different levels of competence. Energy affects all areas of society's functioning. In addition to the involvement of the federal and regional levels, the energy sector is also very much influenced by international (global and European) directives but is also at the intersection of various other sectors such as the industrial, building and transport sectors. As we will see later, this great complexity leads to difficulties in developing a holistic vision of the subject at the Belgian level. It also raises specific issues of coordination of the different actors involved.

As far as the energy mix is concerned, Belgium has for a long time been able to rely on the extraction of coal from its mines located mainly in the south of the country. Since the closure of these mines in 1992, Belgium produces little energy and is dependent on third countries. In order to meet the 0-carbon objectives, the federal government and the regions are implementing various policies aimed at promoting and expanding renewable energy. Wind and solar power are the main renewable energy vectors invested in the country. The planned nuclear phase-out (closure of one reactor in 2022 and closure of a second one planned for the end of January 2023) and the recent energy crises reinforce this trend so that, as of 2020, the rate of investment in solar and wind power has risen sharply according to the FEBEG report of 2021.

This transition requires a strong social dialogue on all issues related to the transformation of work in the energy sector, but also in the other sectors impacted by the transition. According to the social partners in the electricity sector, social dialogue has become more complex since the liberalization of the gas and electricity market. Indeed, these major transformations have impacts on the various components of the economy, including employment and training, and require the protection of certain work groups. The arrival of new players such as new electricity suppliers, who do not have a tradition of social dialogue at the negotiating table, is causing,

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<sup>1</sup> This paper is part of the project “REJenerAXion - Energy for a just and green recovery deal: the role of the industrial relations in the energy sector for a resilient Europe”, a European Union co-funded research project (101052341/SOCPL-2021-IND-REL) aimed at analyzing and strengthening the role of innovative industrial relations structures, including social dialogue, to respond in a socially fair and balanced way to the main challenges and opportunities offered by a clean-energy transition at national and European level.

The project partners are: Fondazione Di Vittorio (Italy, project coordinator); Federazione Italiana Lavoratori Chimica Tessile Energia Manifatturo – FILCTEM CGIL (Italy); Fundacion 1º de Mayo (Spain); Association travail emploi Europe société-ASTREES (France); wmp consult – Wilke Maack (Germany); Laboratoire d'Etudes sur les Nouvelles formes de Travail, l'Innovation et le Changement, LENTIC, Université de Liège (Belgium); Instytut Spraw Publicznych (Poland); Central European Labour Studies Institute CELSI (Slovakia (and Hungary). Supporters are: European Federation of Public Service Unions- EPSU (EU); European Trade Union Institute – ETUI (EU). Website: <https://www.rejeneraxion.com/>.

The aim of the paper is to provide the main results of research reports at a national level based on desk analysis and qualitative research (in-depth interviews with stakeholders) considering the transformations taking place in the energy sector oriented towards clean energy and their impacts on the world of work and the role of industrial relations and social dialogue for a just transition.

according to the social partners we interviewed, a more tense negotiating climate than in the past. The trade unions are calling for a just transition by protecting the most vulnerable workers and offering them access to decent jobs, notably through training<sup>2</sup>.

## 2. NATIONAL POLITICAL FRAMEWORK FOR ENERGY TRANSITION

### 2.1. Overview of relevant policy and legal framework

The Belgian political context is very complex, and matters are often divided between several administrative and geopolitical levels. Belgium is a federal state composed of communities (Flemish, French and German speaking) and regions (Flemish, Walloon and Brussels-Capital). As for the sharing of matters related to renewable energy, an important responsibility is left to the regional level : rational use, promotion of renewable energy sources, public transport, urban and rural planning, agriculture and waste management. The competences of the federal state, on the other hand, are oriented towards fiscal policy, product policy, security of energy supply of the country, nuclear energy, supervises territorial waters and therefore is responsible for the development of offshore wind farms<sup>3</sup>.

The 6th state reform in 2014 put forward three elements in order to optimize and guarantee measures for the fight against climate change by the different levels of power<sup>4</sup>:

1. Climate accountability mechanism: *"This bonus/malus incentive mechanism aims to encourage regions to take positive action to reduce greenhouse gas emissions in the buildings sector. The mechanism is based on a reference trajectory established for the period 2015 to 2030, broken down into annual targets for each region. A region receives a bonus or pays a penalty depending on whether it has reached the target for the year in question."*<sup>5</sup>
2. Right of substitution: *"The federal state is the guarantor of the international or European law obligations of the federated entities. The reform of the state has specified the conditions for the application of the right of substitution in the case of non-compliance by a community or region with the United Nations Framework Convention on Climate Change (UNFCCC) or one of its protocols, or with a European obligation to reduce greenhouse gas emissions. The State is therefore responsible if the region does not comply with the directives."*<sup>6</sup>
3. Reform of the National Climate Commission (NCC): The function of the National Climate Commission is to ensure good coordination between the different levels of power in climate matters. Its role is to monitor and evaluate the National Climate Plan and the transposition of European and international obligations at the Belgian level. The functioning of the NCC should be optimized, and its role strengthened, according to the institutional agreement on the 6th State reform<sup>7</sup>.

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<sup>2</sup> Implications of the climate transition on employment and skills in Belgium, 2022.

<sup>3</sup> [https://ec.europa.eu/clima/sites/lts/lts\\_be\\_fr.pdf](https://ec.europa.eu/clima/sites/lts/lts_be_fr.pdf)

<sup>4</sup> <https://climat.be/politique-climatique/belge/nationale/reforme-institutionnelle>

<sup>5</sup> <https://climat.be/politique-climatique/belge/nationale/reforme-institutionnelle>

<sup>6</sup> <https://climat.be/politique-climatique/belge/nationale/reforme-institutionnelle>

<sup>7</sup> <https://climat.be/politique-climatique/belge/nationale/reforme-institutionnelle>



### Climate and energy transition decision-making bodies:

As previously mentioned, jurisdictions are shared between the federal and regional levels, so there are numerous climate and energy transition decision-making groups<sup>8</sup>:

-The Interministerial Conference for the Environment (CIE): A working group at the federal level that deals with matters related to the environment. It is composed of the (four !) ministers (3 regional ministers and the federal minister for the environment) and is open to the ministers of other jurisdictions, when the issues require it

The Coordination Committee for International Environmental Policy (CCPI): Administrative body composed of the cabinets and administrations responsible for the environment, foreign affairs and development cooperation. Its role is to organize consultation, prepare policy measures and represent Belgium in international organizations.

-The National Climate Commission: Body in charge of the implementation of the federal climate policy and reporting to European and international institutions. It is composed of federal and regional representatives from various departments.

-The interregional environmental unit (CELINE), responsible for compiling regional inventories of greenhouse gas emissions.

-The CONCERE group: its function is to ensure proper coordination between federal and regional matters in the energy sector. It is composed of the administrations and cabinets in charge of the energy sector and represents Belgium at the European Union.

-The Directorate-General for European Affairs (DGE) is attached to the Federal Public Service for Foreign Affairs, which validates Belgium's points of view at meetings of the Council of the EU when dealing with environmental issues.

### **Belgium's National Recovery and Resilience Plan**

At the end of 2019, Belgium notified its national energy and climate plan. This plan aims to follow up on the action lines that define the EU's energy and climate policy.

Belgium's National Recovery and Resilience Plan is divided into six strategic axes: (1) climate, sustainability and innovation, (2) digital transformation, (3) mobility, (4) social and living together, (5) future economy and productivity, and (6) public finance. Each of these axes is broken down into components that are consistent with the European climate directives, including reforms and investment projects. All of these components are the Belgian implementation of the European Commission's "*Six Pillars<sup>9</sup> of the Recovery and Resilience Facility* ».

The process of developing this plan has been a source of questioning, because although it is intended to be national, that is at communities and regions levels that it has been negotiated.

It is therefore a pooling of six plans (regional and community) that will form the national

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<sup>8</sup> <https://climat.be/politique-climatique/belge/nationale/reforme-institutionnelle>

<sup>9</sup> Green transition (1), digital transformation (2), sustainable, smart and inclusive growth (3), social and territorial cohesion (4), institutional resilience in health and economy (5) and policy for future generations (6).



plan, which demonstrates the compartmentalization of projects between the various entities. *"This approach reflects the institutional complexity of the country, which has been mentioned many times, but perhaps also a certain inability to overcome it in order to work together to develop coherent and effective instruments that are equal to the challenges presented by the current crisis"<sup>10</sup>.* » (C.Sägesser, D. Van Den Abbeel, J. Faniel, 2022).

## **2.2. Institutional initiatives to support a just energy transition.**

In the Belgian post-covid recovery and resilience plan, 50% of the total expenditure of the Plan will contribute to the transition to a decarbonized economy that is sustainable and resilient to climate change. The main axes concern the renovation of buildings, the development of an economy based on hydrogen and other green gases and the restoration of biodiversity.

The 2021 strategy for sustainable growth highlights seven core initiatives in Belgium that are directly in line with the European objectives:

- Accelerate the development and use of renewable energy with the creation of a hydrogen pilot market and clean technologies.
- Renovate: Encourage the renovation of public and private buildings to improve energy efficiency.
- Development of new technologies, universal and affordable access for all citizens.
- Modernization and accessibility of public administrations.
- Develop and support research and innovation to promote economic development and the implementation of efficient production processes based on emerging technologies.
- Promotion of retraining and upgrading of skills in order to adapt the skills of workers to the current and future needs of the labor market, including energy and digital transition.

Belgium has set a budget of 25 million euros for the year 2023 for the Energy Transition Fund. This Fund aims to encourage and support research, development and innovation in the field of energy, and more specifically in the framework of federal energy competences<sup>11</sup>.

## **2.3. The geopolitical implications on energy transition**

As previously said, Belgium has limited energy resources; its total primary energy production represents about 20% of its total primary energy consumption. It is therefore very dependent on other countries for its supply.

Nevertheless, the country has few supply problems thanks to the strategic geographical position of the port of Antwerp, which can accommodate LNG tankers and oil tankers. Belgium also has a network of onshore and offshore gas pipelines. The country is a gateway and a hub for gas in Central-Western Europe, with Norway and the Netherlands as the two main suppliers,

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<sup>10</sup> Les dialogues de la relance. Quand la Belgique tente de tirer son plan Caroline Sägesser, David Van Den Abbeel, Jean Faniel 2021

<sup>11</sup> Fonds de transition énergétique : appel à proposition de novembre 2022 en vue de l'octroi de subventions en 2023 SPF Economie, P.M.E., Classes moyennes et Energie Direction générale de l'Energie – Fonds de Transition Énergétique

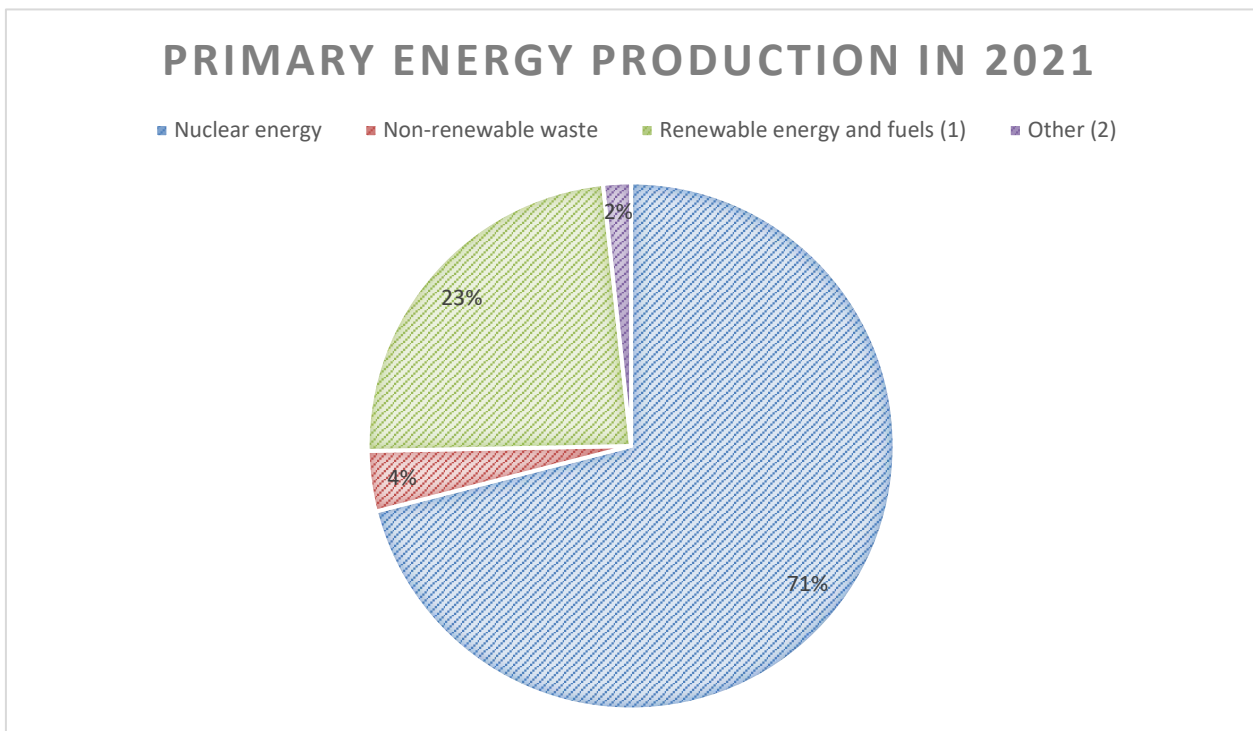
accounting for nearly three-quarters of Belgian imports.<sup>12</sup>.

### 3. MAJOR TRENDS IN THE ENERGY SECTOR

#### 3.1. Main characteristics of the country's energy system

According to the FPS Economy report of 2022, the primary energy production in Belgium in 2021 was distributed as follows:

Figure 1 Primary energy production in Belgium in 2021



(1) "Renewable energy and fuels" includes hydro excluding pumped storage, wind, solar, geothermal, solid and liquid biomass, biogas, renewable waste and ambient heat used by heat pumps. (2) "Other" includes chemical process heat recovery and firedamp (coal mine gas).

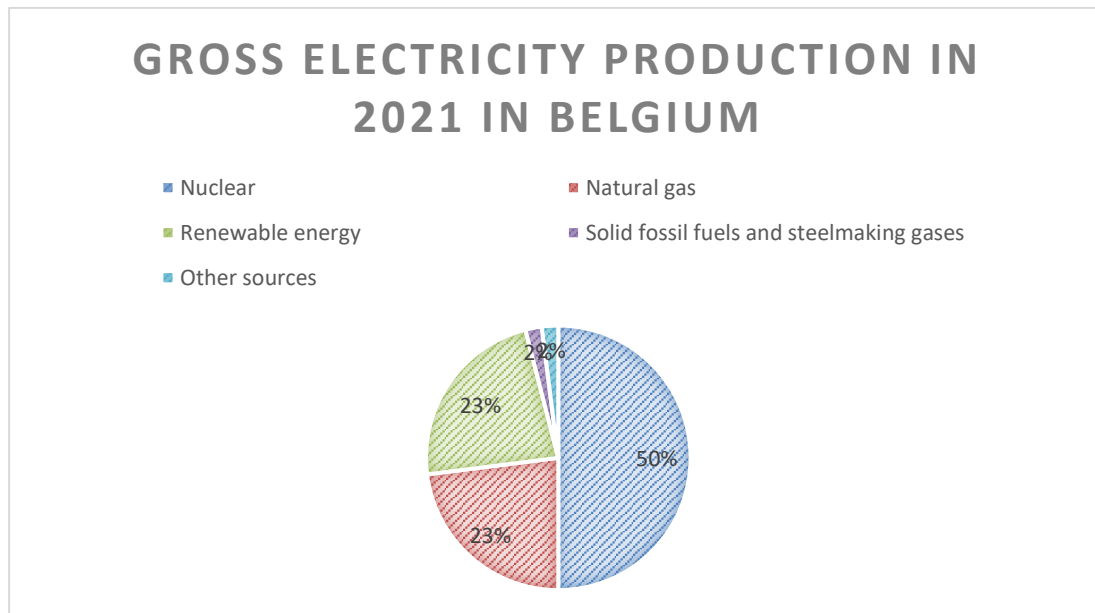
In terms of primary production, nuclear energy remains the most important in Belgium (71%), followed by renewable energy and fuels (23.6%).

<sup>12</sup> <https://www.febeq.be/fr/nieuwsbericht/le-gaz-naturel-en-belgique-en-faits-et-en-chiffres>

### Gross electricity production in 2021

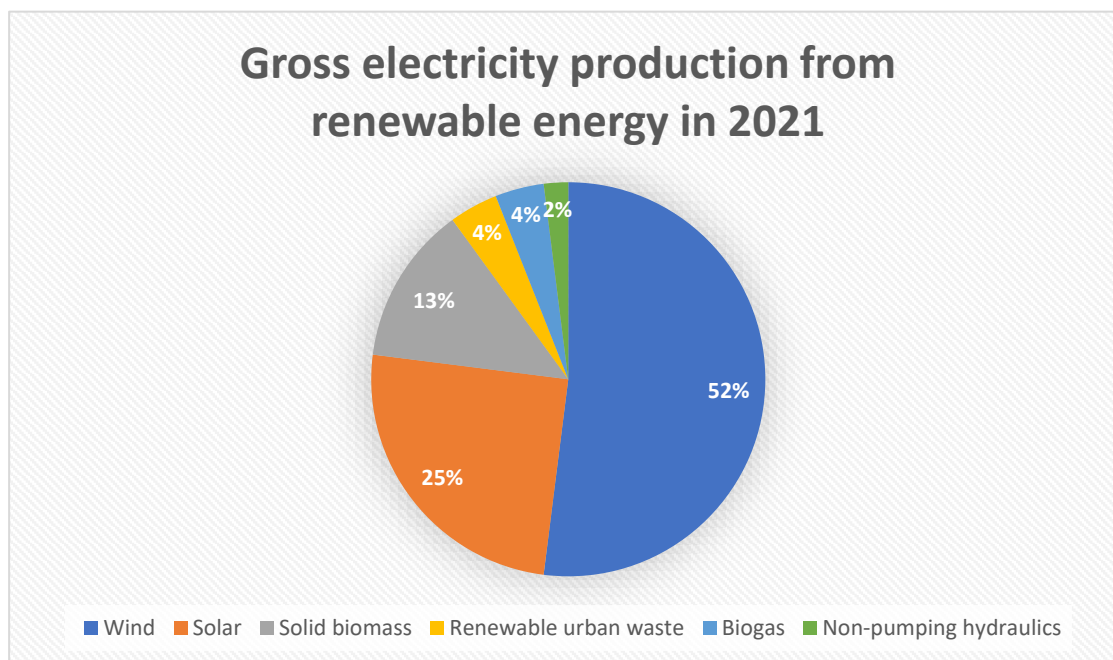
Gross electricity production in 2021 will come mainly from nuclear power plants (50.3%), natural gas (22.6%) and renewable energy (22.9%).

Figure 2 Gross electricity production in Belgium in 2021



The gross production of electricity from renewable energy sources in 2020 and 2021 originates from the wind industry (52.2%), followed by solar (24.5%) and solid biomass (13.3%).

Figure 3 Gross electricity production from renewable energy in Belgium in 2021



Source: FEBEG, 2022

Since 2011, the production of renewable electricity has risen sharply, thanks in particular to the marked growth in the use of solar energy (+17%) and wind power (32.3%). For illustration: offshore wind farms generated in 2020 the equivalent of the consumption of about 1,990,000 households. The year 2021 was marked by a decrease in renewable energy production, mainly due to weather conditions (not very windy)<sup>13</sup>.

Figure 4 Gross electricity generation by renewables in Belgium

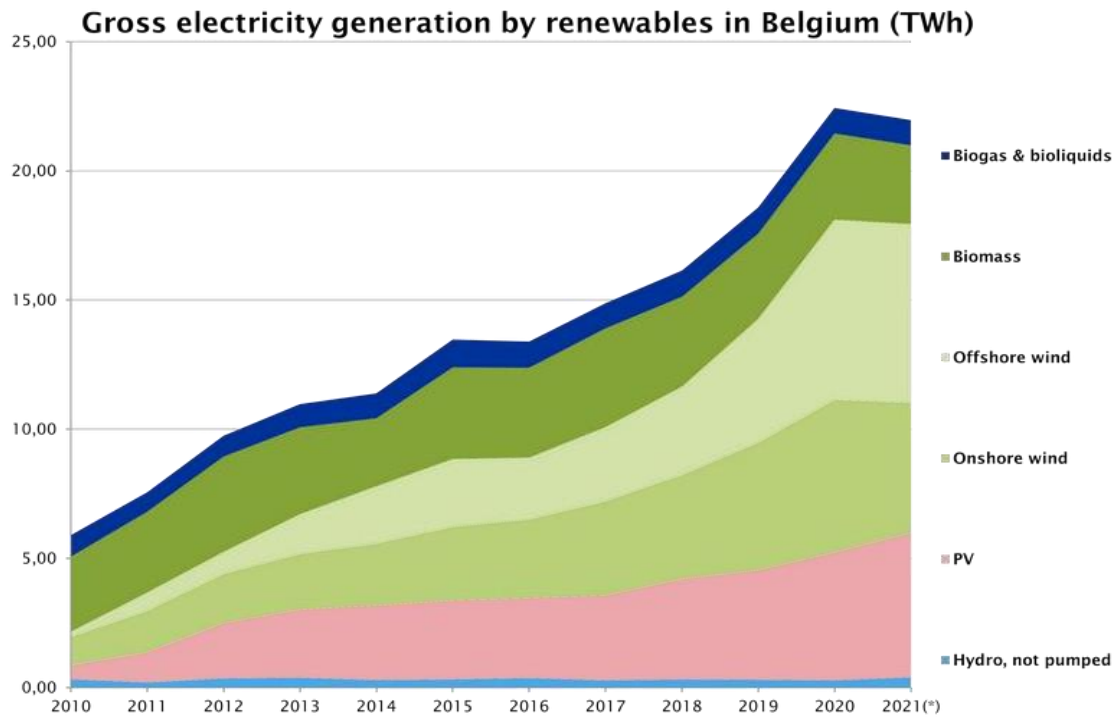
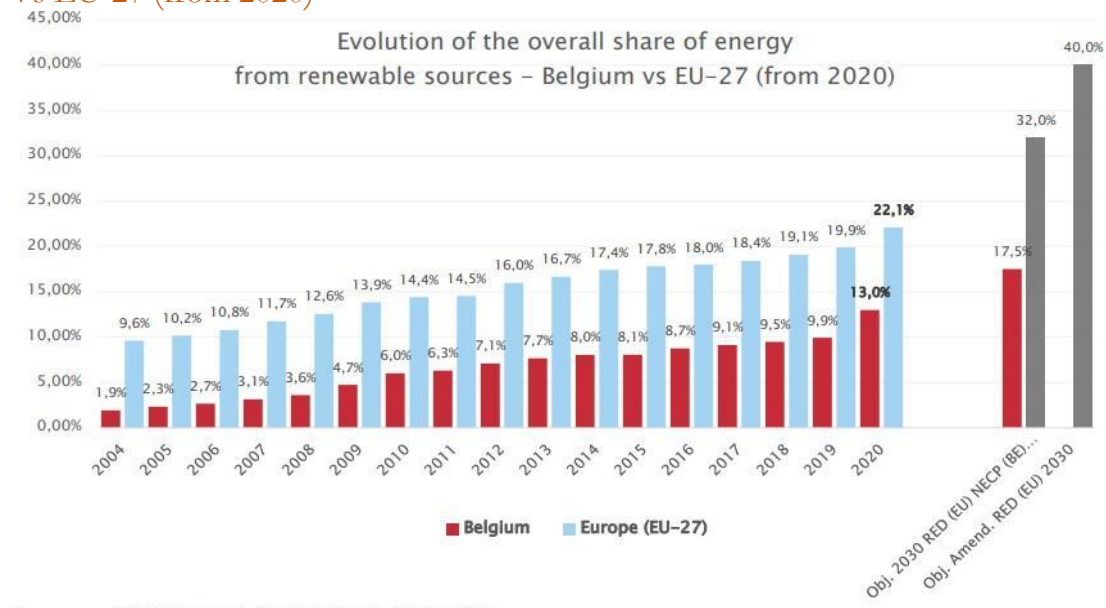


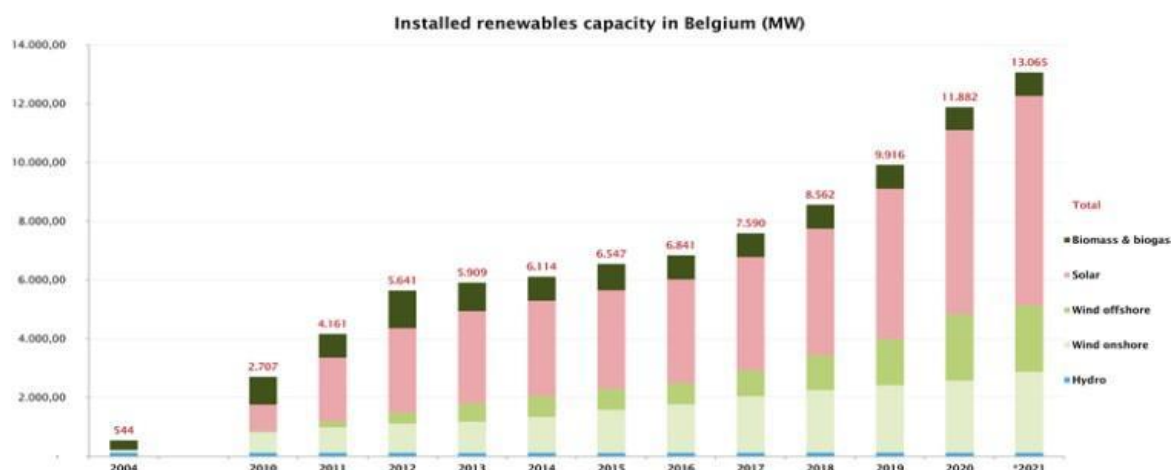
Figure 5 Evolution of the overall share of energy from renewable sources - Belgium Vs EU-27 (from 2020)



25 08/06/2022 - FEBEG - Rapport annuel 2021 - Source : Eurostat

<sup>13</sup> <https://www.febeg.be>

Figure 6 Installed renewable energy capacity from 2004 to 2021 in Belgium



Source: FEBEG, 2022

The various policies aimed at encouraging the installation of renewable energy sources seem to be bearing fruit, since, as shown in this graph produced by FEBEG, an increasing evolution of new installations, mainly of the solar type, can be observed in Belgium.

### Net energy imports for 2020 and 2021:

In 2020, the energy dependency of Belgium, calculated as the ratio of net imports to energy consumption, stood at 78.1%. The year 2021 was marked by a decrease to 70.9% but is still well above the European average (55.6%)<sup>14</sup>.

### Origin of imports:

In 2020, almost 30% of imported crude oil came from Russia. Among the OPEC countries, Saudi Arabia and Nigeria are the countries from which Belgium imports the most (18.5% and 8.5% respectively)<sup>15</sup>.

*« As regards gas, 34.5% of the gas consumed in Belgium entered the country via a pipeline from the Netherlands, 41.0% via a pipeline from Norway and 2.0% via a pipeline from the UK. Respectively 11.8% and 6.6% of the gas consumed in Belgium arrived by ship (as LNG) from Qatar and Russia. In practice, only gas from Norway (and imported LNG) really comes entirely from the country of extraction. Gas entering through a pipeline from the Netherlands, the UK, Germany or France contains, at least in part, gas from other countries. "Other" countries include Angola, France, Germany and the United State<sup>16</sup> ».*

The year 2021 is marked by a strong decrease in net electricity imports thanks to a very high load rate of nuclear and gas generation units.

**The end of nuclear power:** In 2003, Belgium passed a law to organize the gradual phase-out of the use of nuclear energy for industrial electricity production in Belgium. This law was

<sup>14</sup> [https://ec.europa.eu/eurostat/databrowser/view/sdg\\_07\\_50/default/table?lang=fr](https://ec.europa.eu/eurostat/databrowser/view/sdg_07_50/default/table?lang=fr)

<sup>15</sup> Energy key data Edition juillet 2022 SPF Economie PME

<sup>16</sup> Energy key data Edition juillet 2022 SPF Economie PME

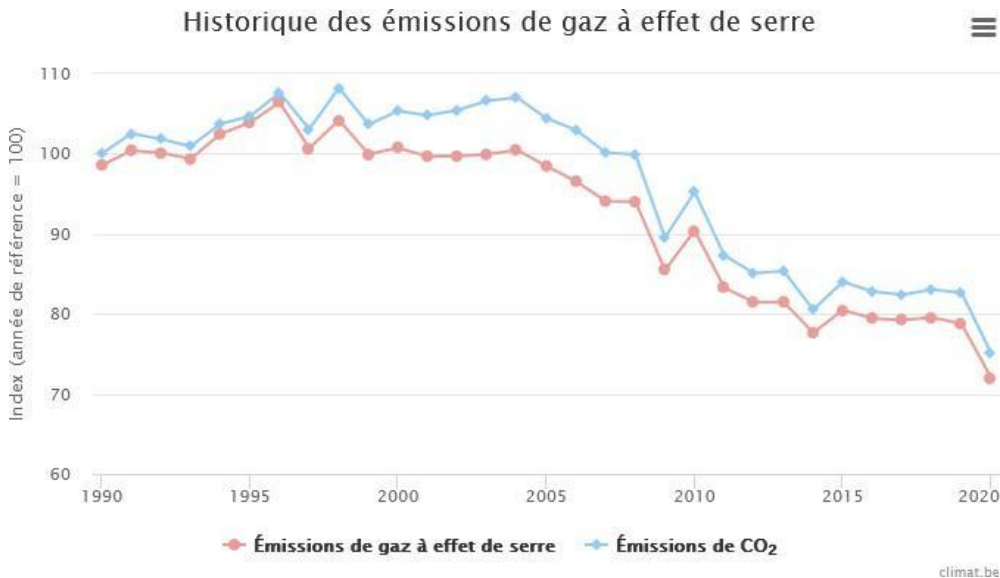
amended in 2013 and 2015 to extend the deadlines and the 10-year operating period of three reactors. The first reactor (Doel 3) was definitively shut down on September 23, 2022, the Tihange 2 reactor will be shut down at the end of January 2023.

Reactor	Planned shutdown date of the reactor
Doel 1	February 15, 2025
Doel 2	Decembre 1, 2025
Doel 3	October 1, 2022
Doel 4	July 1, 2025
Tihange 1	October 1, 2025
Tihange 2	February 1, 2023
Tihange 3	September 1, 2025

### 3.2. Environmental trends in the energy sector

In 2020, total greenhouse gas emissions in Belgium amounted to 106.4 Mt CO<sub>2</sub><sup>2</sup>, which is 26.9% lower than in 1990 or 28.0% lower than the base year GHG emissions<sup>3</sup>. From 2019 to 2020, there is a large decrease (8.60%) very largely attributable to the health crisis.

Figure 9 Evolution of greenhouse gas emissions from 1990 to 2020 in Belgium



Source: Climact.be

"The residential sector is the main consumer of primary energy (32.2%), followed by industry (25.8%) and transportation (21.5%). Natural gas is the leading fuel in the industrial and residential sectors (35% and 38%

respectively in 2015). In the transport sector, consumption is dominated by oil products (95%)<sup>17</sup>.

Total greenhouse gas emissions, after falling by 8.6% in 2020 due to the decline in economic activity, rebounded by 3% in 2021. Total emissions amounted to 106.4 million tons of CO<sub>2</sub> equivalents (Mt CO<sub>2</sub>-eq) in 2020 and are estimated at 109.6 Mt CO<sub>2</sub>- equivalents. Energy related emissions represented 72% of total greenhouse gas emissions in 2020. They fell by 9.9% in 2020, but would have risen again. Industrial process emissions come mainly from the chemical industry, the manufacture of mineral products (such as lime and cement), the iron and steel industry, and refrigeration and air conditioning equipment<sup>18</sup>.

Table 1: Evolution of total greenhouse gas emissions by sector (In Mt CO<sub>2</sub> equivalents) from 1990 to 2021.

	1990	2005	2019	2020	2021
<b>Energybound</b>	103,8	105,7	85,5	77	80
<b>A. Fuel combustion</b>	102,5	105	84,8	76,4	79,4
A.1. Processing industry	29,7	29	20,9	19	17,8
A.2. Industry	23,5	18,9	13,9	13,1	13
A.3. Transport	20,9	26,8	26	21,7	24
A.4. Services, households and agriculture	28,2	30,1	23,9	22,5	24,5
A.5. Others	0,2	0,2	0,1	0,1	0,1
<b>B. Volatile emissions</b>	1,2	0,7	0,7	0,6	0,6
<b>Industrial processes</b>	26,1	27,1	20,3	18,9	19,2
<b>Agriculture</b>	11,5	9,7	9,4	9,3	9,3
<b>Waste</b>	4,3	3	1,3	1,2	1,2
<b>Total</b>	145,7	145,5	116,4	106,4	109,6

Source: Regionale economische vooruitzichten 2022-2027

### 3.3. Economic trends in the energy sector

Belgium's geographical position is strategic in terms of gas supply, with 20 border interconnection points that allow gas to be transported from the Netherlands, Norway, United Kingdom and Germany<sup>19</sup>.

In Belgium, the largest electricity producer is ENGIE (formerly ENGIE Electrabel). The company has a production park spread over approximately 85 sites and 200 production units.

<sup>17</sup> Regionale economische vooruitzichten 2022-2027

<sup>18</sup> Regionale economische vooruitzichten 2022-2027

<sup>19</sup> <https://economie.fgov.be/fr/publications/commerce-international-du-gaz>



The aim is to diversify them as much as possible to guarantee customers a continuous supply of energy. Today, there are about fifteen different suppliers in Belgium. A large number due to the opening of the energy market to competition.

Among the best-known companies, we find the designated or historical suppliers (present directly after the liberalization): ENGIE and Luminus. Other suppliers have gradually appeared on the market: TotalEnergies, Eneco, Dats24, Mega, as well as alternative suppliers such as cooperatives offering only green and Belgian energy.

Since the liberalization of the market, many companies share the supplier market in terms of gas and electricity<sup>19</sup>. Here too, the regional difference is apparent. While Engie has the largest market share in all three regions. In the Walloon region and in Flanders, Luminus has the second largest market share, while in Brussels-Capital it is TotalEnergie.

Energy intensity has been on a downward trend since 1990, reflecting the decoupling of economic growth and primary energy consumption.

**The energy sector in the pandemic:** The coronavirus crisis has highlighted the weak points in the energy sector. Instantaneous electricity consumption has dropped nearly 20% below its average for the past 6 years (2014-2019). The closure of entire sectors due to containment has had a negative impact in terms of energy consumption and although household energy consumption has increased, this does not compensate for the loss due to the closure of businesses.

*« The effects on demand affected the supply of electricity, not only in terms of level, but also in terms of composition. First, nuclear reactors provided about 50% of domestic electricity generation during the containment period. The operator of the nuclear plants opted for the "no touch" policy: nuclear generation was not altered during the study period. The "no touch" policy limits the risk of maintenance and thus the risk of coronavirus infection of additional personnel at the nuclear sites; but it is also explained by other technical constraints. In addition, the weather conditions in March and April 2020 were particularly favorable for renewable electricity generation. Solar and wind provided a significant portion of the territory's electricity generation, with their share increasing by 10 percentage points compared to the same period in 2019. Natural gas, on the other hand, was in decline: there was a sharp drop (of some 30%) in the output of Belgian gas-fired power plants.<sup>20</sup> ».*

With electricity production outstripping demand, this has resulted in negative prices, reaching.

-90€/MWh.

**The energy sector during the war in Ukraine:** As mentioned earlier, Belgium is dependent on third countries, including Russia, for gas and oil. Since the start of the war in Ukraine, the Belgian sector has been organizing itself to find alternatives to crude oil imported from Russia, and the Antwerp refineries have been adapted to be supplied with several types of crude. Crude oil imports are likely to come mainly from the Persian Gulf region (United Arab Emirates, Saudi Arabia, Kuwait) and from Norway, although Norway has limited capacity<sup>21</sup>.

As far as energy costs are concerned, the bill of the Belgians has exploded. This leads to various difficulties, especially for companies and hospitals, which are faced with very high energy

<sup>20</sup> [https://www.plan.be/publications/article-2006-fr-le\\_coronavirus\\_secoue\\_le\\_secteur\\_electrique\\_belge](https://www.plan.be/publications/article-2006-fr-le_coronavirus_secoue_le_secteur_electrique_belge)

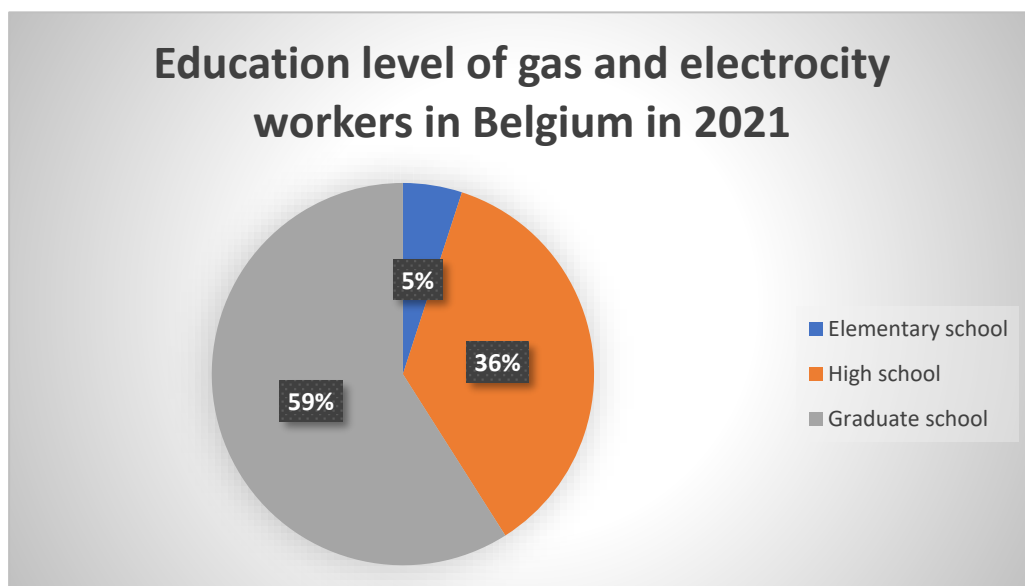
<sup>21</sup> <https://economie.fgov.be/fr/publications/analyse-dependance-energetique>

bills. At the household level, the average electricity bill has risen from €1,017.50 in September 2021 to €2,119.72 in September 2022, a difference of €1,102.22<sup>22</sup>. This increase is a consequence of the post-covid recovery and especially of the war in Ukraine.

### 3.4. Employment trends in the energy sector

In total, the sector is composed of 45.535<sup>23</sup> workers (production, extraction and transport of gaz, électricity and oil) for the year 2021. With regard to the production and transport of gas and electricity, there are 28.926<sup>24</sup> workers. The sector is predominantly composed of male workers 75,2%<sup>25</sup> and 24,8%<sup>26</sup> of workers are female. In terms of education, 4.5% of workers have a low level of education, 36.2% have a medium level of education and 59.4% have a high level of education (bachelor's degree and above)

Figure 10 Education level of gas and electricity workers in Belgium in 2021



Source: Statbel: Statistics Branch-statistics Belgium

Of these workers, 79.0% are white collar workers, 16.7% are blue collar workers, and 4.3% are civil servants/self-employed.

<sup>22</sup> <https://www.comparateur-energie.be/blog/prix-electricite-belgique/#evolution>

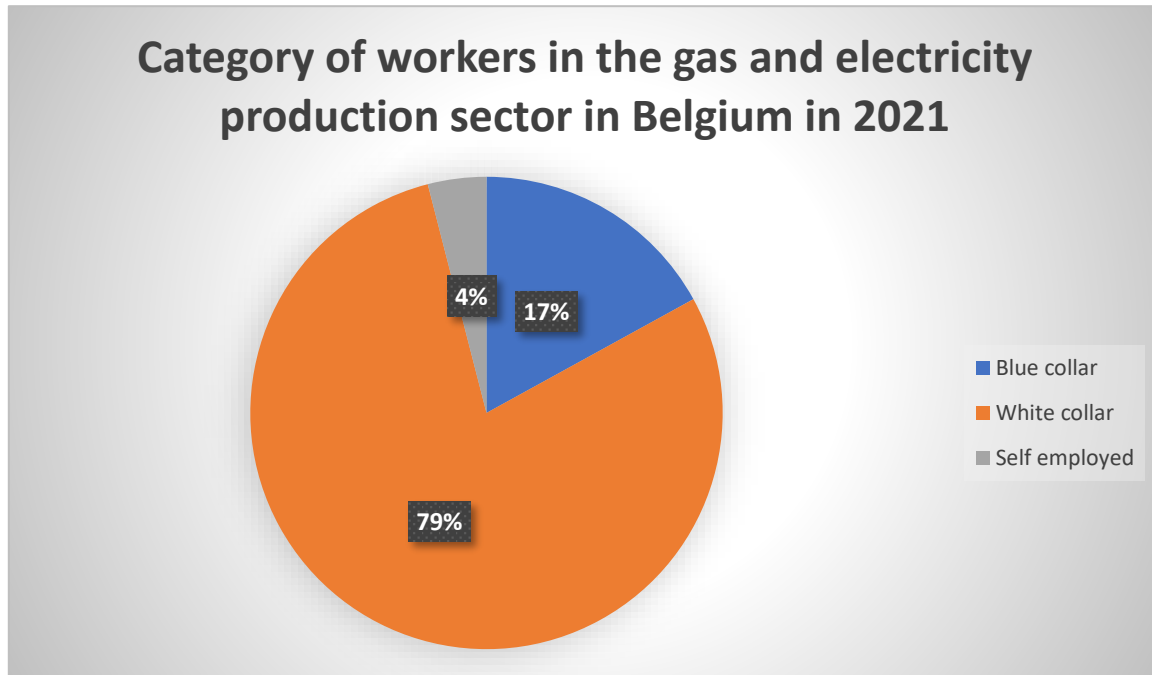
<sup>23</sup> Statbel: Direction générale statistique-statistics Belgium

<sup>24</sup> Statbel: Direction générale statistique-statistics Belgium

<sup>25</sup> Statbel: Direction générale statistique-statistics Belgium

<sup>26</sup> Statbel: Direction générale statistique-statistics Belgium

Figure 11 Category of workers in the gas and electricity production sector un Belgium in 2021

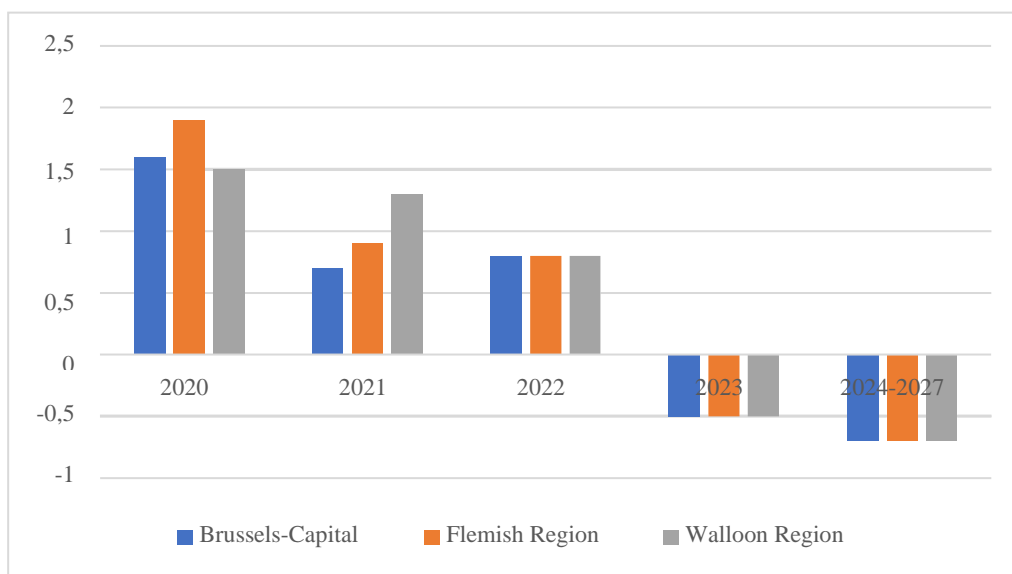


Source: Statbel: Statistics Branch-statistics Belgium

The impacts of the energy transition on employment (direct and indirect)

The employment rate in the energy sector is declining overall, with forecasts for 2023 and 2024- 2027 reinforcing this decline.

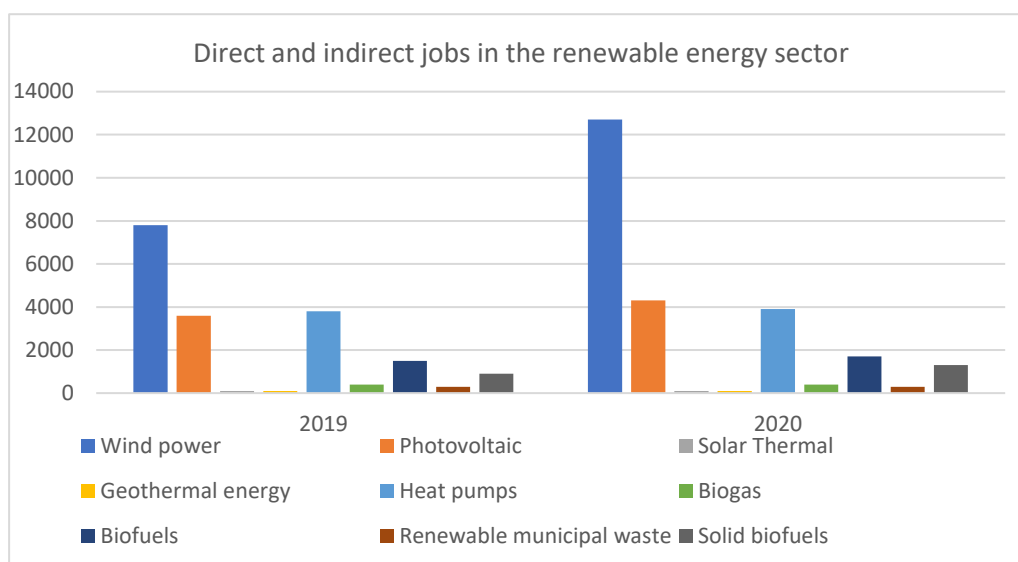
Figure 12 Percentage change on the previous year of the employment in the energy sector in Belgium from 2020 to 2021, with a forecast for 2022 to 2027



Source: Regionale economische vooruitzichten 2022-2027

As far as employment related to renewable energy is concerned, the figures are on the rise, mainly due to the increase in employment in the wind energy, and to a lesser extend, in the photovoltaic industry.

Figure 13 Evolution of direct and indirect jobs in the renewable energy sector in Belgium from 2019 to 2020



Source : EurObserv'sER report 2021

« At the level of Belgium and the EU, the climate transition, if properly managed, is expected to have a small net positive impact on total employment levels. The net positive impact for Belgium by 2030 is estimated at between 1% (Eurofound, 2019) and 1.7% (Climact et al., 2016). Such a gain is explained by the increased investment required to cope with low-carbon transformations, concomitant with a decrease in spending on fossil fuel imports (de Ridder et al., 2020; Eurofound, 2019). »

### Skill needs and training

At this stage, it is difficult to obtain consolidated data concerning the needs in terms of skills and training in the energy sector based on the three joint commissions that manage the sector (see below). Indeed, the theme of the energy transition transcends various industries, and the issues are at different levels, both at sectoral and at company levels.

As mentioned in the National Recovery and Resiliency Plan, the federal state highlights that much of the policy actions are focused on labor, training and worker skills for just transition.

In the Climact (2022) report, which focuses on the cross-sector level, "experts identified five emerging trends in the education and skills ecosystem:

- The digitization of learning and teaching
- Knowledge transfer between experts via digital tools
- Transfer of skills through interdisciplinary projects and levers

- Increasing connections between the labor market and education stakeholders to match training and skill needs
- An increase in lifelong learning (upskilling and reskilling)<sup>27</sup>

The energy and climate transition requires workers' adaptation capabilities and interdisciplinarity. Currently, it is mainly the private training actors that meet the innovative needs on the market. For example, public training courses do not train in heat pump installation techniques, so it is the private training sector that meets this demand<sup>28</sup>. According to the climact report<sup>29</sup>, the risk is that if this private offer expands, the State will lose the vision and control in terms of long-term management.

New jobs are emerging, others must evolve to include green skills, and some jobs will remain unchanged:

« Job creation in the context of transition can be divided into three categories:

- Emerging jobs specifically created for the climate transition (e.g., deep energy renovation coordinator),
- existing jobs whose skills need to evolve to include green skills (e.g., architects),
- existing jobs whose skills do not need to evolve (for example, a bus driver)<sup>28</sup>».

The territorial and regional impacts of the energy transition (also in an intersectoral perspective)

According to the report “Implications of the climate transition on employment and skills in Belgium” in 2022, the three regions (Flanders, Wallonia and Brussels-Capital) have set up various strategic plans linked to regional and territorial characteristics

<b>Federal Level</b>	<b>Flemish Region</b>	<b>Walloon Region</b>	<b>Bruxelles-Capital Region</b>
<ul style="list-style-type: none"> <li>• Long Term Climate Strategy 2050 : Reduce carbon emissions</li> <li>• Measures on employmen: construction sector is targeted.</li> <li>• Conversion actions towards green jobs in cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Flemish Climate and Energy Plan 2030 : reduce carbon emissions</li> <li>• Measures on employment: “making work sustainable and keeping skilled and competent workers”</li> </ul>	<ul style="list-style-type: none"> <li>• The regional plans, including Get Up Wallonia!, aim to reduce greenhouse gas (GHG) emissions by 55% in 2030 and to support decarbonization and the development of sustainable industries and resources</li> </ul>	<ul style="list-style-type: none"> <li>• The recovery plan is integrated into GO4Brussels 2030, the regional sustainable development plan, the Good Move plan and the integrated air, climate and energy plan.</li> </ul>

<sup>27</sup> Implications of the climate transition on employment and skills in Belgium, HIVA, LENTIC, CLIMACT, 2022

<sup>28</sup> Implications of the climate transition on employment and skills in Belgium, HIVA, LENTIC, CLIMACT, 2022

<p>with the Communities and Regions</p>	<ul style="list-style-type: none"> <li>• Main objectives is to identify unskilled people and initiate skills improvement</li> </ul>	<ul style="list-style-type: none"> <li>• The various training and qualification centers will be reorganized to update tools and infrastructure and adapt them to the expectations of the labor market.</li> <li>• Vocational training and digital training (reskilling and upskilling) the development and updating of skills for emerging and technical professions, professions of the future and those in shortage</li> </ul>	<ul style="list-style-type: none"> <li>• One of the main axes of the recovery plan for Brussels concerns economic transition: this involves reinforced support for self-employment and training actions for the development of quality jobs.</li> </ul>
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**The impact of the energy transition on work organization and working conditions**

Although the various studies mentioned above predict a positive evolution in terms of employment, the unions remain vigilant about the working conditions in the renewable energy sector. Indeed, according to the two union representatives we already met, the working conditions, wages and various benefits that have been obtained in the conventional energy sector are more favorable to workers than those in the renewable energy sector. "It is much more advantageous at all levels to work in a nuclear power plant than to install photovoltaic panels," according to a union delegate we met.

**Drivers, Barriers and dilemmas to the energy transition obstacles and limits for a just energy transition considering:**

The main issues related to the energy transition concern employment, to the shortage of

manpower but also to the qualification and training of workers. Faced with this, regional governments are implementing various training strategies and are also relying on private trainers to complete the training offer.

The decommissioning and the dismantling of Belgian nuclear power plants is also an important issue within the kingdom. Beyond the simple shutdown of the reactors, this also requires the management, dismantling and evacuation of the radioactive components. The gradual shutdown of reactors will require the retraining of nuclear workers. While the program to close nuclear power plants has been the subject of public debate, the energy transition and its impact on employment (transformation of jobs, working conditions, etc.) are little or not present in the public sphere in Belgium.

One of the pillars of the energy transition on which the Belgian government relies is the renovation of buildings, but the shortage of qualified personnel is also present in the construction sector and in particular in the context of energy renovation.

## **4. SOCIAL DIALOGUE, INDUSTRIAL RELATIONS AND INNOVATIVE PRACTICES IN SUPPORT OF THE ENERGY TRANSITION**

### **4.1. Industrial relations systems in the energy sector**

The energy sector transcends various other sectors; therefore, many issues are discussed in the cross-sectoral field of social dialogue.

#### **The intersectoral level**

-At the intersectoral level, social dialogue takes place mainly in these social dialogue bodies:

- The national labor council: It is a national and interprofessional joint body competent in social matters, it will issue opinions or proposals concerning general social problems for employers and workers. It can also play the role of a joint commission when the joint commission is not functioning.
- The central economic council: Joint consultative committee established at the federal level and competent in economic matters. This council provides advice on a variety of matters including energy-related issues. The subject of the last recommendation issued by the Central Economic Council was the revision of the National Energy-Climate Plan 2030.

#### **The sectoral level**

The energy sector in Belgium is divided into three joint committees:

- 326 : Joint Committee of the Gas and Electricity Industry
- 117 : Joint Committee for blue collar workers in the Petroleum Industry and Trade
- 211 : Joint Committee for white collar workers in the Petroleum Industry and Trade



At the company level, the social dialogue has various characteristics depending on the joint committee to which the company belongs and the number of employees it employs. In large companies such as ENGIE, this dialogue is strongly established, and social dialogue has led to the signing of numerous company agreements. In other small structures, social dialogue may be much more limited, or even practically non-existent.

### **Gas and electricity**

The gas and electricity sector is attached to the Joint Committee 326. This commission is competent for companies that concentrate their activities in the production, transport, metering and sale of gas and/or electricity as well as for laboratories of these same activities. Each party holds 21 seats and the Joint Committee is presided over by a Chairman assisted by a Secretary who are federal officials of the Ministry of Employment.

The workers are represented by three trade unions:

- FGTB-GAZELCO (10 seats)
- CSC (10 seats)
- CGSLB (1 seat)

The employers are represented by FEBEG, which is the employers' federation of non-regulated companies (11 seats) and by Synergrid, which is the employers' federation of regulated companies in the sector (10 seats).

In 2022, FEBEG's member companies directly employ nearly 7,850 people. To this must be added indirect jobs such as temporary workers, but also the personnel of subcontractors who periodically carry out maintenance on electricity and gas production sites.<sup>29</sup>

The regulated part of the sector that deals with the transport of gas and electricity (represented by Synergrid) has a total of 9,800 employees in 2022.<sup>30</sup>

### **Petroleum Industry and Trade**

The petroleum sector is divided into two partial commissions:

#### **117: Joint Commission for blue collars in the Petroleum Industry and Trade**

The workers are represented by three unions that hold 5 seats: FGTB : 2 seats, CSC: 2 seats And CGSLB: 1 seat.

ENERGIA represents the employers' bench (16 companies) (5 seats)

The committee is chaired by a President assisted by a secretary who are public officials attached to the cabinet of the Ministry of Employment

#### **211: Joint Committee for white collar in the Petroleum Industry and Trade**

The workers are represented by three unions that hold 5 seats: SETCA : 2 seats, CNE: 2 seats and CGSLB: 1 seat.

ENERGIA represents the employers' bench (16 companies) (5 seats)

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<sup>29</sup> <https://www.febeg.be/fr/ressources-humaines>

<sup>30</sup> <https://www.febeg.be/fr/ressources-humaines>

The committee is chaired by a President assisted by a secretary who are public officials attached to the cabinet of the Ministry of Employment.

The sector employs 6.175<sup>31</sup> people (1.258 blue collar and 4.917 white collar). On December 20, 2021, the draft agreement for the oil sector was approved. This agreement mainly deals with:

- Purchasing power: salary increase and bonus
- End of career, time off, parental leave
- Medical surveillance extended to 5 years after stopping work
- Training extended to all workers in the sector

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<sup>31</sup> [https://www.energiafed.be/sites/default/files/editor/Energia\\_Infographic\\_fr.pdf](https://www.energiafed.be/sites/default/files/editor/Energia_Infographic_fr.pdf)

**Subjects of CLAs signed since 2019**

Commission of the Gas and Electricity Industry	Commission of the Petroleum Industry and Trade	Commission for Employees in the Petroleum Industry and Trade
<ul style="list-style-type: none"> <li>- Bonuses and pensions</li> <li>- Additional pensions</li> <li>- Social programming (bonus and gift vouchers)</li> <li>- End of career employment</li> <li>- Working time arrangements</li> <li>- RTT</li> </ul>	<ul style="list-style-type: none"> <li>- Working conditions</li> <li>- Unemployment</li> <li>- Absence without reason</li> <li>- Permanent welfare monitoring</li> <li>- Salary and working conditions</li> <li>- Arrangement of working hours</li> <li>- Bonuses</li> </ul>	<ul style="list-style-type: none"> <li>- Working conditions</li> <li>- Unemployment</li> <li>- Wages</li> <li>- Scales</li> <li>- Absence without reason</li> <li>- Welfare monitoring</li> <li>- Bonuses</li> <li>- Working time arrangements</li> </ul>

Note that there is no CLA JC 117 and JC 211 during the year 2020

**The company level**

In the company, there are various bodies for social consultation between the employer and the employees. In Belgium, every company with 100 or more employees is obliged to set up a works council. The works council is a joint body composed of employee representatives (trade unions) and employer representatives. This advisory council focuses on the economic, financial and work organization aspects of the company.

The works council is responsible for a number of different issues, such as training, the determination of days off, the organization of work, etc. The decision-making power of the works council consists of amending the work regulations, determining the days off and appointing the auditor.

For companies with 50 or more employees, it is the Committee for Prevention and Protection at Work (CCPT). This advisory council mainly examines issues of well-being and safety in the company.

The composition of the workers' representatives in the Work Council and the CPPT is determined by social elections every four years. Both the elected members (and thus the effective and substitute representatives of the employees) and the candidates for these elections enjoy special protection against dismissal.

If there is no CPPT or trade union delegation in the company (less than 50 workers), the

welfare legislation provides that it is the workers themselves who must be directly involved in dealing with welfare issues. Both the employer and the workers can take the initiative.

#### 4.2 Position of social partners with regard to the energy transition

The report carried out by the CEC in 2015 focuses on the engagement of social interlocutors with energy issues.

The social interlocutors in the framework of the Central Economic Council stress that energy policy must pursue three objectives:

- « *Ensure energy prices that are competitive for businesses (especially energy-sensitive businesses and SMEs) with their foreign competitors and affordable for citizens (especially the poor);*
- respect environmental limits and commitments.*
- guaranteeing the security of energy supply* <sup>32</sup> »

Although the social partners are concerned about the energy transition, the trade unions are mainly advocating a just transition and are concerned about the consequences for employment and working conditions. Indeed, in the interviews we conducted, the trade union bench highlights the fact that market liberalization has brought new players to the energy market and this has had an impact on the dynamics of sectoral negotiation, which is more complex and more conflictual than in the past.

Another element pointed out by the unions is the fear of a deterioration of working conditions. In the “traditional” energy sector, the working conditions are the result of decades of joint negotiations, sectoral but especially local within the large companies of the sector. This dialogue aimed at an equitable redistribution of the profits generated by the industry, which resulted in many social gains (financial but also in terms of well-being and safety at work) favourable to workers. Conversely, the emergence of a new "green" sector, including new enterprises, does not allow workers to benefit from these gains. Unions interviewed believe consequently that the reclassification of traditional jobs into green jobs will will therefore result in less favorable working conditions.

They also point to the fact that there is a dual tension in the labor market: the use of foreign subcontractors in the green energy sector is much more prevalent than before, since the sector is facing a shortage of qualified personnel. The management of this shortage is left to the management of the companies, and it seems that the social dialogue at sectoral level is not seizing this issue.

Finally, there are serious concerns since the war in Ukraine and the surge in prices in the sector. Companies and self-employed workers, already very weakened by the coronavirus health crisis, are very much affected by the rise in energy prices, this crisis has resulted in the closure of some production sites, sometimes even relocation. It should also be noted that the trade unions we met underline the fact that the construction sector is very much impacted by the energy transition and point out that access to housing and property for the most precarious people is even more complicated since the implementation of governmental measures related

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<sup>32</sup> CCE, 2015.

to the energy transition results in a significant increase in the cost of building houses.

### **4.3 Role of the social dialogue in support of a socially just energy Transition**

In the Belgian sector, we find the same ambivalence as that presented by Galgoczi, B. et al. (2020) regarding the role of unions in the just energy transition. Indeed, there is a tension between the national level, which tries to drive change by participating in the development of policies for a just transition, and the local level, which must manage the concrete effects of these measures. Depending on the degree of impact of the energy transition, sectoral unions will be more inclined or more resistant to the implementation of policies. When it comes to measures related to the energy transition and global strategies, the unions recognize the need for the energy transition within the framework of the country's general policies, but when it comes to the more specific negotiations on employment or austerity measures, the debate is more conflictual. Moreover, strategic negotiations related to a just transition seem to fall outside the scope of sectoral social dialogue. Indeed, the issues dealt within the joint committee remain classic (salary, end of career, benefits) and the strategic subjects linked to the energy transition are rather the subject of negotiations in the companies or in the field of government policies at the federal and regional level, in which the unions are involved. The social partners are thus involved in various working groups dealing with the energy transition at the cross-sectoral level, both at the regional and federal levels.

The unions want to follow the Scottish model by creating a permanent Just Transition Commission. The role of this commission is to steer the change by having a global view on the nature of the change and to be able to anticipate the impact on employment and working conditions. In parallel to the intersectoral working groups dedicated to the energy transition, the unions are therefore calling for the creation of a third place that would be dedicated to steering a just energy transition.

## REFERENCES

- <https://climat.be/en-belgique/climat-et-emissions/emissions-des-gaz-a-effet-de-serre/emissions-par-secteur>
- [Plan National pour la reprise et la résilience Belgique Cabinet du secrétaire de l'Etat à la Relance et aux investissements stratégiques en charge de Politique scientifique. Juin 2021](#)
- [Les défis de l'économie belge La transition énergétique vers une économie bas carbone, tout en garantissant la sécurité d'approvisionnement et des prix compétitifs – Conseil Central de l'Economie 2019](#)
- [Projet Plan National intégré Energie Climat Belge 2021-2030](#)
- [https://www.energiafed.be/sites/default/files/editor/ENERGIA\\_Chiffres%20cl%C3%A9s\\_2021\\_3.pdf](https://www.energiafed.be/sites/default/files/editor/ENERGIA_Chiffres%20cl%C3%A9s_2021_3.pdf)
- <https://www.resa.be>
- <https://www.creg.be/fr/consommateurs/le-marche-de-lenergie/qui-fait-quoi-sur-le-marche-de-lenergie>
- [Etude-Dependance-energetique-de-la-Belgique, SPF économie, 2022](#)
- <https://economie.fgov.be/fr/publicaties/concrete-la-concertation-entre-état-Fédéral-et-les-Régions,SPF-Economie,P.M.E.,Classes-moyennes-et-Energie,2016>
- [Plan National Energie Climat 2021-2030](#)
- [Regionale economische vooruitzichten 2022-2027](#)
- [The state of renewable energies in Europe Edition 2021 20th EurObserv'ER Report](#)
- <https://www.plan.be/publications/article-2006-fr-le-coronavirus-secoue-le-secteur-electrique-belge>
- [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>](#)
- <https://www.comparateur-energie.be/blog/prix-electricite-belgique/#evolution>
- <https://bestat.statbel.fgov.be>
- [Implications of the climate transition on employment and skills in Belgium, HIVA, LENTIC, CLIMACT, 2022](#)
- [Diagnostic du parc de bâtiment et des principaux obstacles à la rénovation, CCE, 2021.](#)

- [L'engagement des interlocuteurs sociaux face aux enjeux énergétiques, CCE, 2015.](#)

## LIST OF PEOPLE INTERVIEWED

- Deputy Head of Cabinet of Philippe Henry, Vice-President, Walloon Minister for Climate, Energy and Mobility
- Political Advisor Cabinet of the Vice-President, Minister for Climate, Energy, Mobility and Infrastructure
- Social policy advisor & HR manager FEBEG
- Spokesperson of FEBEG, the Belgian Federation of Electricity and Gas Companies
- Regional Secretary Sector (auxiliary, quarries, glass industry, chemical, paper production, graphic and gas and electricity)
- President of the CSC Building - Industry & Energy
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## APPENDIX 1: INTERVIEW REPORT

### Introduction

This report presents the results of our exploratory work on the role of social dialogue in the energy transition and its implications for work and working conditions. We present the methodology used, then the results with an initial overview of the Belgian situation in terms of energy transition, and focus on the two energy sectors in Belgium, namely the oil sector and the gas and electricity sector, and the impact of the transition on jobs.

### Methodology

We interviewed 11 key players involved in the energy sector and the energy transition:

5 representatives from two Belgian trade unions (CSC and FGTB)

3 representatives from 2 employers' organizations (FEBEG and EDORA)

2 ministerial cabinet representatives

1 expert (climact project)

These interviews were conducted using the Rejeneraxion interview guide. We addressed several major themes:

The sector's ongoing energy transition

Impact on employment and working conditions

Training needs in the sector

The role of social dialogue and social partners in the energy transition.

Our results are also based on literature reviews, in particular a Belgian report co-produced by our research center, which came out in June 2023 and deals with this subject (Climact 2023).



## **Results**

### **Overview of the situation in Belgium**

In this section, we present the different levels at which the energy transition is considered in Belgium. As Belgium is a federal state, various levels of reflection and negotiation are involved in issues linked to the energy transition and its impact on work and working conditions.

#### **At federal level**

Belgium is a federal country, made up of communities and regions. This specificity complicates access to statistical data for the country as a whole. Indeed, we have few reports at federal level on the impact of the energy transition on employment and working conditions.

A trade union representative from the construction sector, for example, told us that they were taking inspiration from German and French reports to see what impact they could have on the sector's energy transition.

This federalism also implies a multitude of negotiation forums, working groups and other places of reflection on the subject at different levels of power, with little coordination between these bodies. In the context of our project, it is important to note that these initiatives often aim to include all stakeholders in the discussions. This weakens the traditional players in social dialogue, since they are no longer the main interlocutors of the political authorities. They are now just one voice among many: NGOs, citizens' groups, etc., which does not encourage them to take up this issue in cross-sectoral social dialogue bodies.

#### **At sector level**

As we discussed in our first report on the Belgian situation, the energy transition is a broad issue that goes beyond the traditional boundaries of sectors in Belgium, since it covers the extraction, transformation, transport and sale of energy products (coal, gas, oil, electricity, etc.).

We also feel it's important to note a certain dynamism among players in the energy sector. This can be seen in two opposing trends. On the one hand, the sector's traditional players are tending to move part of their business into other sectors, either as a strategy - for example, by creating a subsidiary focused on customer relations and belonging to the service sector - or out of necessity, when they can't find workers available on the market and are forced to subcontract sometimes significant parts of their business to external companies and/or freelancers, once again falling under the purview of sectors other than energy. On the other hand, the liberalization of the sector imposed by Europe has led to the arrival of new players in the energy sector, competing with (para-)public companies previously in a monopolistic position. What these new players have in common, according to the people we interviewed, is that they are not very sensitive to the "sectoral traditions" aimed at involving workers' representatives in the organizations' strategic thinking, and that they

are not concerned by the social gains made by these traditional players.

### **At company level**

The changing regulatory framework is leading energy companies to consider the energy transition as a highly strategic issue, which in many cases remains the exclusive prerogative of the employer.

## **Overview of impact on employment, working conditions and workforce requirements**

### **Impact on employment**

At present, the experts interviewed indicate that they do not perceive any major impact of the energy transition on the volume of employment. Looking to the future, they believe that a possible negative impact could occur, but probably not within companies traditionally active in the energy sectors, for whom maintaining employment is part of a moral or contractual commitment (social agreements) with workers' representatives. In their view, if there were to be a contraction in employment, it would be more likely to affect companies or self-employed people to whom many activities are currently outsourced, and which would be re-internalised in order to reclassify company employees threatened by the energy transition.

According to the Climact report, general and cross-sectoral trends point to a slight net gain in employment in the sectors most affected by the energy transition, which account for around 50% of all Belgian jobs (between 1% and 2% more jobs by 2030). However, this finding needs to be qualified, as forward-looking studies on the subject show that the impact would be unevenly distributed between Belgian sectors (in 2030 compared to 1990)

- Energy sector: -13%
- Agriculture: +6
- Transport and communications: +3%
- Manufacturing industry: + 2%
- Construction: +12%

According to the experts we met, such “positive” employment projections could be hampered by the shortage of jobs already present in these sectors.

### **Impact on working conditions**

In Belgium, the traditional energy sectors offer favorable working conditions in terms of wages, vacations, working hours, etc., thanks to the many social benefits negotiated over the last few decades within sectoral joint committees.

As the energy transition is likely to lead to a transfer of jobs from large companies in these

traditional sectors (e.g. oil refining) to smaller companies under less favorable joint committees (e.g. photovoltaic panel installation, which falls under the electricians' joint sub-committee), one of the major issues raised by workers' representatives is that such a shift in jobs would have a significant impact on the working conditions, including incomes, of the workers concerned.

To deal with this risk, union representatives negotiate the opening of sector or company-specific funds to compensate for any deterioration in working conditions. For example, in the nuclear sector, which is very advantageous for workers, the forecast closure of nuclear power plants was the subject of such a social agreement. Workers transferred to another sector would receive a monthly allowance to compensate for the deterioration in their working conditions.

### **Impact on profile and training requirements**

Training needs remain high in various sectors affected by the energy transition. According to those interviewed, there is a need for appropriate support to be put in place so that certain skills employed in carbon-intensive activities are adapted to suit positions available in low-carbon activities. The Climact report lists three possible situations:

Existing jobs whose skillset does not need to change : ex. Bus drivers

Existing jobs whose skillset need to evolve : ex. Heating system installers

Emerging jobs: e.g. Deep climate renovation coordinator in the building industry

It should be noted that the Climact report stresses that all levels of qualification can benefit from the transition, albeit at different timescales:

Today: initially high skilled labour

In 2030: bottom and middle-skills and wage levels

In 2050: higher skills

### **Social dialogue**

As we have said, one of the particularities of the energy transition is that it transcends the traditional division of sectors. As social dialogue is structured around these sectors, the energy transition is the subject of social dialogue in many different places, with little discussion between the players involved, resulting in a wide variety of social dialogue dynamics.

In Belgium, the energy sector is divided into two "sub-sectors", each with its own parity commission:

The joint gas and electricity commission

The joint oil commission

The situation was even more complex previously, since until March 2023, the joint oil commission was divided into two joint commissions: one for blue collars and one for white collars.

At local and sectoral level, energy transition is seen by the company's social partners as a prerogative of the employer, who will set the general strategy in terms of jobs and training. Trade unions seem to have little involvement in these issues. According to our interviewees, there are two main reasons for this.

The main reason is undoubtedly that, for the time being, these strategic choices do not have a negative impact on the level of employment or the conditions of the company's workers. Union representatives therefore prefer to focus on issues they consider more important, such as the arduous nature of work, the risk of redundancy, etc.

The other reason given is that shop stewards in the field feel ill-equipped to deal with energy transition issues in the context of corporate social dialogue. For the union representatives we met, it's important to train trade unionists so that they can be pro-active on these issues. In fact, some trade unions have recently added energy transition to their training courses for union representatives. One of the people we met also pointed to the need for awareness-raising work, especially among the most senior field delegates, as they would be less sensitive to ecological issues.

At cross-industry level, the social partners are regularly consulted on the action plans that the various levels of government put in place to meet European guidelines. However, it seems that their opinion is little taken into account by the decision-making authorities. For example, in February 2023, the Central Economic Council issued an opinion on the revision of the national Energy-Climate 2030 plan. The document we consulted deplores the fact that their previous opinion - dating from 2019 - was not sufficiently taken into account by the governments of the various levels of Belgian power.

### **In the oil sector**

Overall, the oil sector seems little affected by the energy transition, according to the people we interviewed.

Despite the closure of a small refinery, the energy transition has had little impact on jobs or working conditions.

Some companies are selling their brown energy business and transferring workers on other sectors like chemical sector. There is also a certain amount of competition between the two sectors in terms of attracting highly qualified profiles.

Regarding reskilling needs, there is no sector-wide approach. It's up to companies to guarantee training and organize training for their workers.

As far as social dialogue is concerned, we note that the trade unions are beginning to address this

issue and to consider the employment opportunities it offers. Since the beginning of the year, the trade union federations have been proposing to train trade unionists in the field on the energy transition and its impact on employment. According to the union representative we interviewed, there is a certain amount of resistance on the part of trade unionists in the field to tackle these issues and take an interest in them, noting that it is above all the New Generation of delegates who are learning about these issues, hence the important need to train unions at grassroots level.

### **In the gas and electricity sector**

For the year 2022, statistics show that the employment rate in this sector is falling. The players we interviewed put forward various reasons for this decline:

Shortage of manpower: As in many other sectors, the gas and electricity sector is facing a shortage of workers with a variety of profiles. As in many other sectors, the gas and electricity sector is facing a shortage of workers with a variety of profiles. These workers are generally those with specific qualifications: electricians, maintenance workers, sales representatives, etc.

New sourcing strategies: We have also seen that although there is a shortage of manpower and that this could have an impact on jobs, we also observe that the sector is also calling on new methods of recruitment, such as freelancers and other independent contractors. These workers are not included in the statistics, nor are they covered by sectoral collective agreements. This explanation was put forward by the trade unions when we asked about the reasons for the decline in employment in the sector.

Or the shift of workers to other sectors, such as call centers. Call center workers in the gas and electricity sector used to be part of the parity commission, but then moved to another sector.

The impact of the nuclear power plant closure program is not very significant, since a reorientation plan has been created for workers under 45, and those over 45 will keep their jobs since the nuclear phase-out process is very long and requires manpower throughout. Here too, there is little thought given to training needs at sectoral level, and thinking is carried out by the company itself. Some have their own training centers. As far as social dialogue is concerned, the energy transition remains more of an employer's prerogative. Trade unions seem to have little training in these issues. And since the liberalization of the market, the arrival of new companies has challenged the dynamics of social dialogue at sector level, since these new companies do not have the same tradition of social dialogue as the old ones and don't share the same history of social achievements. The unions we interviewed told us about the difficulties involved in negotiations.