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Can electrification reverse the decline? The French automotive industry and the green transition

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The French automotive industry continues to be one of the country's leading sectors in terms of economic activity and employment. Before the Covid-19 crisis, it accounted for around €50 billion in exports (CCFA, 2023), generated €21.4 billion in added value and provided for around 400,000 indirect jobs in manufacturing (Fogelman and Didioui, 2022). However, the French automotive industry has been in steady decline for the past twenty years, due to a process of relocation of vehicle assembly and component production to countries in the « integrated periphery » (Pavlínek, 2020), reinforced by a « premiumisation » of vehicles, to the disadvantage of French generalist manufacturers (Pardi, 2022). In practice, this means a fall in production in France, a reduction in the workforce and an increasingly negative trade balance (Pardi, 2020, Frigant and Julien, 2018).

Since a significant amount of these shrinking production and workforce is concentrated in the manufacturing of internal combustion engines, the fast electrification dictated by European Union's regulations represents a major threat for the French automotive industry. At the same time, however, electrification is also presented as a hope of reversing the sector's decline and relocating some of the tens of thousands of jobs lost in recent years. In other words, while the « fit for 55 » package decided by the European Union in July 2021 implies a major challenge for the automotive industry, it is also seen as an opportunity for a national industry that is losing ground to its foreign competitors. In May 2023, French President Emmanuel Macron declared that he wanted to develop a « battery valley » in the north of France, where several gigafactories would be integrated into a battery electric vehicle (BEV) production ecosystem (*Le Monde*, 11 May 2023).

Things are far from simple, however, as recent efforts to reverse the decline have been unsuccessful (Schulze-Marmeling and Palliet, 2023). For example, the Covid-19 crisis was an opportunity for the state to provide financial support to the automotive industry. In 2020, it set up the €8 billion « Plan de soutien à la filière automobile », one of the conditions of which was the partial relocation of activities. The government earmarked €200 million in 2020 and €600 million over the following three years for initiatives to digitalise and automate plants, as well as €150 million for R&D projects in battery, hydrogen and electronics technology. However, the promises of relocation were not kept, and a large part of the money (500 million euros) went to a programme to manage the negative effects of electrification through re-skilling (Lechowski et al., 2023). Today, everything seems to indicate that electrification is having a negative impact on employment in France: rather than reversing the ongoing restructuring of the sector over the last twenty years, it is accelerating it. One of the risks is

that France will cease to be one of the main vehicle-producing countries in the medium term, with numerous negative effects on employment in the regions that depend on this activity. Nonetheless, a number of important efforts have been made by manufacturers to maintain some electric vehicle production in France and it remains to be seen whether they will pay off or not.

In this report we present the current implications of the electrification of the automotive industry for employment in France. Firstly, we will review the general context in which this industry is evolving, in particular its structural decline over the last twenty years. We cannot understand the specific challenges of electrification unless we place it in the context of the decline and de-industrialisation that began in the early 2000s. Secondly, we will look at the strategies of different stakeholders of the industry, mainly the automotive groups and trade unions. Thirdly, we will look at the new industrial projects around battery manufacturing and mechanical production, and the issues at stake for autoworkers in terms of employment and working conditions. Finally, we will conclude by discussing the various implications for automotive workers in France.

1. Twenty years of de-industrialisation

1.1. An administered decline

As mentioned in the introduction, the automotive industry still occupies an important place in the French economy. However, the sector has been in steady decline for the past twenty years, which can be described in terms of « permanent restructuring » (Fayolle, 2005, Bouquin 2006, Siemiatycki, 2012, Lomba, 2018). This refers to a permanent reduction in the workforce and production capacity, which goes beyond cyclical crises and does not always involve plant closures. Even though the few closures of assembly plants or equipment manufacturers, which have taken place during this period, gave rise to industrial conflicts and significant media coverage (PSA Aulnay-sous-Bois in 2013, PSA Saint-Ouen in 2021, Renault Choisy-le-Roi in 2022, GM&S in 2017, and SAM in 2021, to name but a few).

This decline can also be described as « administered », insofar as it results from a conscious strategy by carmakers. It can be explained by at least two factors. Firstly, and primarily, by the relocation of vehicle and parts production to low-cost countries, especially in the low-end and low-cost segments. The first wave of relocations took place in the 1990s and 2000s in order to conquer new markets, and then, when this policy failed, production was relocated to the countries of the « integrated periphery » (Pavlínek, 2020) in order to sell vehicles in the affluent markets of Western Europe (Pardi, 2018). The enlargement of the European Union to include the CEEC countries in 2004 accelerated this process, encouraging greater mobility for auto companies within the European custom union (Krzywdzinski, 2014). For example, the whole French production of high-volume vehicles in the A

and B segments was transferred outside France, mainly to low-wage countries such as Slovakia, Slovenia and Turkey. The successful production of new low-cost products initially developed for Central and Eastern European markets, but then massively re-imported to France and other Western European markers, such as the Dacia brand, has been exclusively made in Romania and more recently in Morocco (Pardi, 2018, Pardi, 2019). At the same time, the French OEMs' Western European factories have been concentrated in Spain and to a lesser degree in France and Italy, where the medium-high models are manufactured. In France, both manufacturers are modernising their factories, while reducing their production capacity (Carbonell, 2020), as well as intensifying work with the introduction of just-in-time production and a reduction in platforms to achieve economies of scale and variety (Frigant and Jullien, 2014). Finally, more recently, French automotive firms have invested in the creation of new assembly plants in the Maghreb countries (Benadbdejlil, Lung &

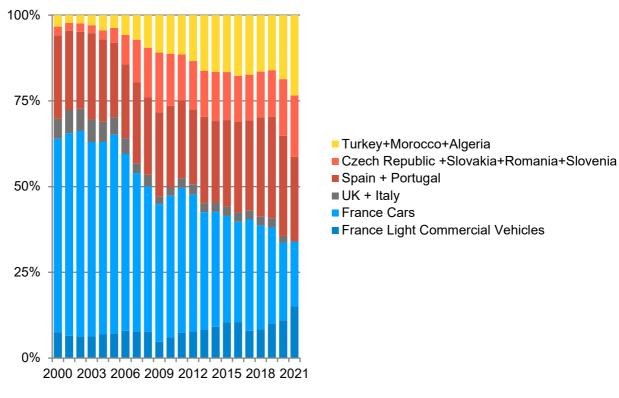


Figure 1. Share of European production of French car manufacturers in Europe by groups of countries (2000-2021) Sources: OICA, CCFA, annual accounts Renault and PSA.

Piveteau, 2017) where production is rapidly increasing. As a consequence, the share of vehicles

manufactured in France by French OEMs declined over the years, in favor of a bigger share of production in peripheral countries (Figure 1).

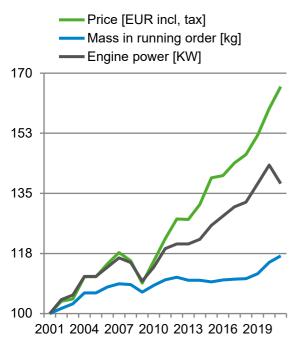
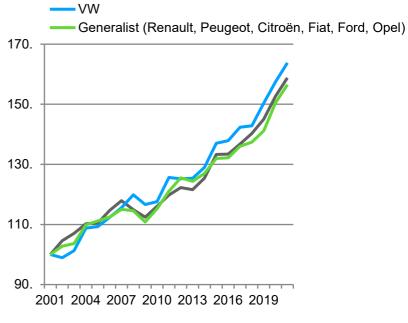


Figure 2. The upmarket drift of the average new car sold in the Single Market (base 100 – 2001). Source: EEA / ICCT.

Premium (Mercedes, BMW, Audi, Volvo)



Premium (Mercedes, BMW, Audi, Volvo)

Figure 3. Price of average car sold by groups of brands (base 100 – 2001). Source: EEA / ICCT.

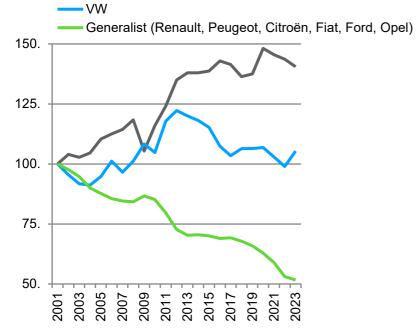


Figure 4. EU27 new cars market share by groups of brands (base 100 – 2001). Source: EEA / ICCT.

The second reason of this decline is the «premiumisation» (Frigant and Jullien, 2018) or the «upmarket drift» (Pardi, 2022), which is unfavourable to generalist French manufacturers. The «upmarket drift» is a trend where the average new car sold in the Single Market becomes heavier, bigger, more powerful and more expensive year after year (see Figure 2 and 3). This trend has been shaped by European regulations that pushed for more powerful (and heavier) vehicles and also gave weaker CO₂ targets to the manufacturers of such vehicles (*Idem*). It resulted in generalist car manufacturers being squeezed: on the one hand, by moving upmarket they suffered from competition from German manufacturers in the mid-range and premium segments and lost market shares and production volumes (figure 4); on the other hand, it became increasingly difficult for them to manufacture entry range (lighter and cheaper) cars, where also foreign competition was increasing via Korean and more recently US (Tesla) and Chinese imports and/or direct production via foreign investments mostly in low-wage European countries (figure 5).

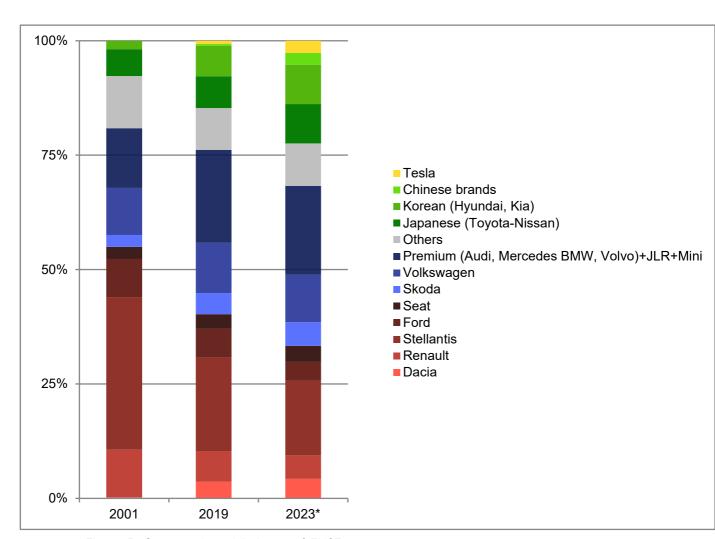
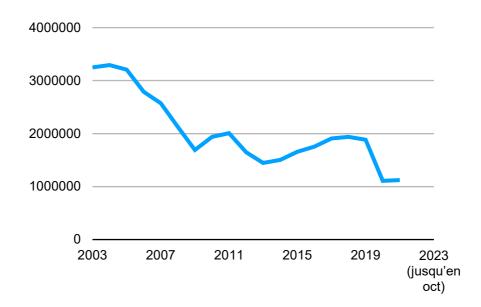


Figure 5. Group or brands' shares of EU27 sales of cars (2001, 2019, 2023)
Sources: OICA. CCFA and INOVEV.

This upmarket strategy is now incorporated in both Renault's and Stellantis's profit strategy. Both French car manufacturers have been moving in recent years from a volume strategy to one focused on the production of fewer premium vehicles, in particular in France. This is for instance what Luca de Meo, CEO of Renault, said to the trade union representatives at a Central Social and Economic Committee meeting on 7 September 2020 where the consequences of the Covid 19 crisis and the forthcoming electrification were also discussed: « *I'd rather produce 50,000 premium vehicles than 200,000 vehicles that don't make any money* »¹. This upmarket orientation was later embodied in the « Renaulution » plan, launched in January 2021, after the company had gone through major economic difficulties, made considerable losses, announced a profit warning, against the backdrop of a crisis in corporate governance, and eventually eliminated more than 5,000 jobs in France (Carbonell, 2023), closing *de facto* the Flins assembly plant, transformed into a « refactory » for retrofitting vehicles. This new plan involved abandoning a « volume » strategy in favour of a « value » strategy focused on profit margins.

1.2. The manifestations of industrial decline

The relocation of « volume » production to the semi-periphery of Europe and the upmarket drift of the automotive market played a major role in an industrial decline that manifests itself in three ways. Firstly, the decline in vehicle production in France. The data presented here clearly show that the decline in production did not start with the Covid-19 crisis or the 2008 economic crisis, but well

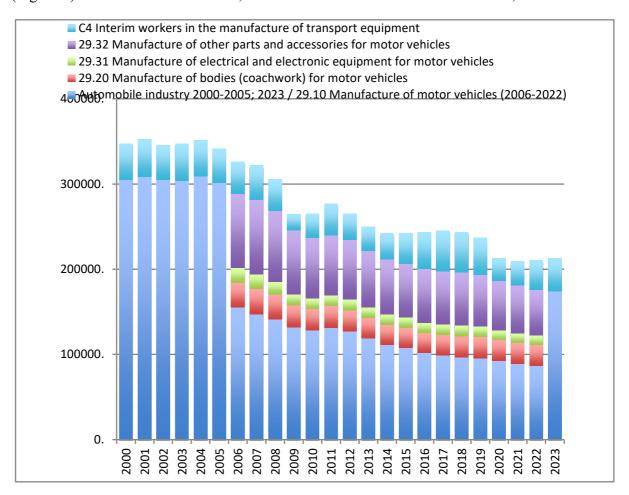


[Figure 6] Passenger car production in France (Renault and Stellantis) between 2003 and 2021. Source: CCFA

¹ Renault Group, Comité central social et économique extraordinaire, September 7, 2020.

before, and that it corresponds to a long-term strategy on the part of carmakers (Figure 1 and 6). In particular, we can see that production has been declining since 2004, from 3.3 million passenger cars a year to 1.7 million in 2009, then rising to 1.9 million, only to fall rapidly immediately afterwards as a result of Covid-19. Instead of a slow recovery, provisional figures for 2023 show that production remains at a low level, at around 1.2 million vehicles a year. In figure 1 we can see that most of this decline was due to the relocation of production from France to low-wage countries, with the share of France in the total European car production of both Renault and PSA falling from 52% to 26% between 2001 and 2019.

The decline in the number of employees in the automotive sector closely follows the decline in production (Figure 7). Between 2004 and 2022, the automotive sector has lost almost 134,000



[Figure 7] Workforce trends in the automotive sector in France (2000-2023). Source: ACOSS - number of employer establishments and workforce in the private sector France / workforce and wage bill in the private sector France na88; Dares - Temporary employment monthly data

permanent employees, or 44% of the workforce. We can also see that the increasing use of temporary workers relative to the permanent employees (from 14% in 2004 to 22% in 2019 and 2023) allows car manufacturers and suppliers to deal with peaks of production while keeping reducing permanent employment. This regular downsizing is mostly due to the policy of relocating production mentioned

above. But productivity gains obtained with capital/labour substitution, organisational innovations from the 1980s onwards such as lean and modular production also contribute to this trend (Carbonell, 2020, Frigant and Jullien, 2014).

A final sign of the decline in the French automotive industry is an increasing negative trade balance. Figure 8 shows that the share of French exports in extra-european trade of motor vehicles has been

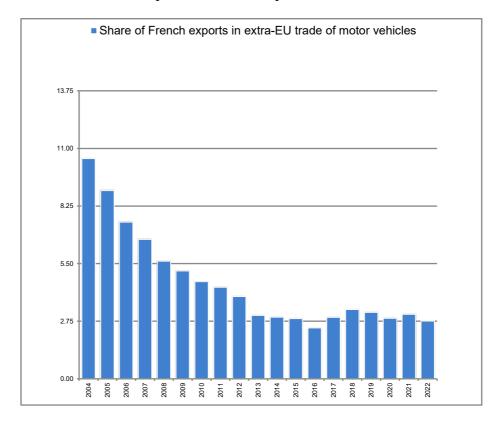
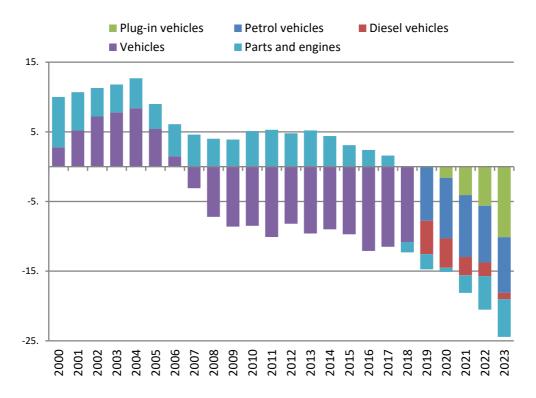


Figure 8. Source: Eurostat, EU trade since 1999 by SITC [ds-018995__custom_9879763]. Author's own calculations

steadily dropping, from 10,52% in 2004, to 2,8 % in 2022, behind countries like Belgium, Czechia, Spain, Italy and Sweden. Figure 9 shows also how the automotive industry's trade deficit has widened over the years, with imports increasingly exceeding exports. But we can also see how the substitution of internal combustion vehicles (ICEVs) by BEVs is widening this deficit even further. This can be explained not only by the relocation of assembly plants in the integrated periphery, where cars are made that are then bought in France, but also by the penetration of foreign brands in the premium segment (German brands, but also Tesla) and in the entry-level segment (notably Chinese), mentioned before. This competition is all the tougher in the EV segment, where Tesla and Chinese brands have a historic advantage over French manufacturers and do not have to carry the burden of phasing out their ICEV production.

We have shown in this section that the structural decline of the French automotive industry continues despite electrification. We will show in the next section that this decline is likely to accelerate as ICEVs are phased out. On the one hand, a continuation of the upmarket drift would mean lower



[Figure 9] French automotive industry trade balance (2000-2023) - € billion. Source: French customs

production volumes of increasingly heavy and powerful electric vehicles aimed at affluent households, which would have a negative impact on employment and on French car manufacturers' market shares (Pardi, 2022). On the other hand, the high costs associated with the production of EVs could lead manufacturers to pursue their policy of relocating to low-cost countries. Finally, competition from foreign brands in the EV segment is reducing the market share of French generalist carmakers even further, weakening their position in the European car market.

2. Administrating the decline or reversing it?

In this section we will detail the strategies of French OEMs and trade unions in the face of this structural decline. We will see that electrification is an opportunity for OEMs to further restructure their plants in France. For the trade unions, the green transition is an opportunity to formulate alternatives that envisage a «just transition». Finally, we'll look at how these two seemingly opposing approaches work together to administer the decline.

2.1. OEMs strategies: institutional innovation or business as usual?

One of the first strategies adopted by carmakers in France was to form subsidiaries to create « pure players » devoted entirely to the manufacture of EVs, through the use of existing instruments of social dialogue. This was the choice made by Renault, which decided to group together three sites in the north of France within a subsidiary called Electricity to develop an « electric division ». This includes the passenger car assembly plant in Douai (2,700 employees), the light commercial vehicle assembly plant in Maubeuge (1,660 employees) and the mechanical constructions plant in Ruitz (470 employees). Before the creation of the subsidiary, the three sites were in a situation of over-capacity. Douai could produce 300,000 vehicles a year, but was only producing 51,000, Maubeuge was only producing at half capacity, while Ruitz was producing just over half of its gearbox capacity².

The creation of the Electricity industrial complex was accompanied by the negotiation and signing of an ambitious collective agreement in June 2021, the aim of which was to maintain production at the three threatened sites, while lowering labour costs. The idea behind the agreement was to offer the unions the allocation of a B-segment vehicle at Electricity, the installation of a battery housing production workshop in Ruitz, the installation of a battery factory in Douai and 700 new hires (half in Maubeuge, and half distributed between Douai and Ruitz), in exchange for concessions on wages and working conditions. This agreement, signed by all six representative unions in the three plants (CFDT, CFE-CGC, CFTC, CGT, FO and Sud), involved the introduction of compulsory overtime, an increase in the number of working days per month and a harmonisation of pay between the different sites – which indirectly implied a reduction in annual pay.

There is nothing new about this type of agreement, it is in line with the collective agreements negotiated in the automotive sector from 2012 onwards, which are intended to be « job preservation agreements ». The rationale behind these agreements is to obtain concessions from the unions in exchange for maintaining production and not closing plants (Carbonell, 2019). What lies behind this « preservation » is relatively ambiguous, as it rarely refers to employment levels, but rather to the non-closure of sites, industrial investment or production volumes. The aim of these agreements is therefore less to halt the decline than to accompany or administer it, since the production and employment curve in the automotive industry continues to fall, despite the signing of numerous « job preservation » agreements. Finally, it should be added that these agreements are also instruments of competition between workers in different countries, since the allocation of new models, volumes or investments is conditional on unions signing the agreement, under the threat of relocating production to countries in the integrated periphery (Carbonell, 2018).

This system has been described as « managerial social dialogue » (Groux, 2010), or « concession bargaining » (Sallaz, 2004) in which collective bargaining is based more on economic imperatives, and becomes an instrument for cost-cutting and competitiveness, to the detriment of workers in central and peripheral countries. Trade unions mainly adopted defensive postures in the face of these

² Renault Group, Accord pour l'avenir des sites Renault dans les Hauts-de-France, 8 June 2021.

agreements, systematically presented by management as a *sine qua non* condition for « saving » companies from bankruptcy in the post-crisis context of 2008. Then, in the mid-2010s, once the situation of French OEMs had improved, they negotiated agreements that aimed to strengthen the « competitiveness » of the company. In this context, the unions managed to obtain some demands. However, the trend continued to be one of deterioration in working and employment conditions.

Two years after the creation of Electricity, Renault pursued this policy of transferring its activities into subsidiaries, with this new structure being further divided into several business units at the end of 2023. On the one hand, Electricity became Ampère, a subsidiary dedicated 100% to electric vehicles. The scope of this subsidiary has been extended to include Electricity's three plants, plus the Cléon plant, which will manufacture electric engines, and part of the R&D centre in the Paris region. Renault's aim is to produce 400,000 electric vehicles in France by 2024, and thus compete with Chinese manufacturers and Tesla in the electric vehicle segment. Employees at the Renault Cléon site, the R&D centre and Electricity will be transferred to the new entity without any change to their employment contracts. On the other hand, Renault is creating « Power », a subsidiary based outside France dedicated to internal combustion and hybrid vehicles. It is through this subsidiary that it is creating « Horse », a joint venture with the participation of Geely and Aramco, but in which Renault is likely to be a minority shareholder with only 40% of the capital. Finally, none of the sites in France should belong to the « Horse » subsidiary, while the plants that are not part of Ampère will remain Renault Group sites. The spin-off strategy adopted by Renault would therefore represent a change from the strategy adopted previously favouring the production of premium vehicles in France. This is what Luca de Meo said on 8 November 2023, a few days before the launch of Ampère: « Making small vehicles accessible is something of a speciality for us at Renault. I think we've found a good solution: the small electric vehicle gives us this opportunity. Our idea is to do this in Europe, with a competitive offer 3 .

It is true that the Renault agreement of June 2021 is in line with previous « job preservation » agreements, since it involves negotiating concessions from the unions in exchange for industrial investment and recruitment. However, the agreement negotiated in 2021 at Renault also introduces new elements, since it initiates a transition towards the electric vehicle by changing the company's structure through the creation of a subsidiary and joint ventures. The importance of the agreement is also due to the fact that in France, there is little or no collective bargaining on technological change (or on work organisation or product architecture) or on the company's economic strategy. At most, the Social and Economic Committees are consulted and informed of major decisions taken by company management. The only bodies that could influence work organisation were the Health, Safety and Working Conditions Committee (Carbonell, 2020), but these were suppressed in 2017. Trade unions themselves rarely formulate positions on technological change, work content or product

 $^{^3 \ \}underline{\text{https://www.ifri.org/fr/debats/gagner-pari-industriel-de-mobilite-electrique-france-europe-presence-de-luca-de-meo-directeur} \ (\text{translated by us})$

architecture, preferring to confine themselves to negotiating on the issues that are compulsory under Labour law: pay, bonuses, working time, job preservation, skills and gender equality (Béthoux and Laroche, 2021). Given this absence of negotiation on company strategy, the negotiation of the agreement to create Electricity appears to be an institutional innovation. A paradoxical innovation though, since, as we said earlier, electrification appears to be more a tool in the hand of OEMs for managing the decline of the French car industry, rather than a tool for reindustrialisation. It is nonetheless still too early to measure the real scope of these innovations, and to know whether they announce a change in the role of social dialogue in business strategy, or whether they are simply an additional instrument to the decline of French factories.

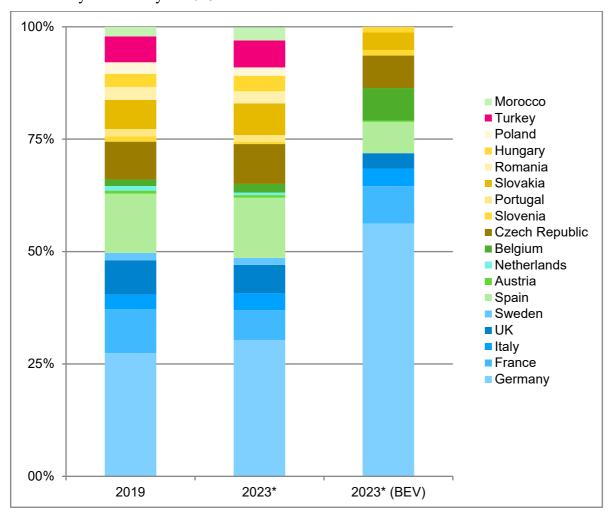
In the case of Stellantis, for the moment, there is no real change in the strategy towards French assembly sites. The remaining plants after the closure of PSA Aulnay-sous-Bois in 2013 will keep manufacturing the higher-end models of Peugeot, Citroën and DS brands (DS3, DS7, Citroën C5, Peugeot 308/3008, Peugeot 408/4008 and Peugeot 508/5008) progressively shifting toward 100% BEV production by 2030. Since the electrified versions of these models are substantially more expensive than the ICEV versions they replace and in direct competition with German and Tesla premium models, such an approach entails a further reduction of French production and headcount, which is already visible in 2023.

The more affordable electrified models in the B segment have been allocated mainly to Spain and Slovakia, but also to Italy, Poland and Serbia for the former FCA's brands, with evident consequences on the French trade balance for BEVs, whose deficit has grown from 1,6 to 10,1 billion euros between 2020 and 2023 (see Figure 8). Furthermore, most of the new post-Covid-19 investments in car production has gone to the ultra-low cost locations of Morocco and Algeria where the capacity of the Kenitra and Oran plants has been doubled in 2022/2023 to accommodate the production of the Peugeot 208 and the Fiat 500 (see Figure 1 and 9).

Stellantis has also started in 2023 a strategic partnership with the Chinese BEVs car manufacturer Leapmotor via a 20% equity stake participation. Carlos Tavares, CEO of Stellantis, has stated that one of the objectives of the new joint venture, called Leapmotor International and controlled by Stellantis (51/49), is to import and distribute in Europe entry-range BEVs manufactured in China, starting from the second half of 2024. This bold move confirms a generalised trend that sees European car manufacturers increasingly importing from China entry-range BEVs, such as the Daimler Smart 1, the BMW iX3, or the Renault Dacia Spring. In 2023, BEV imports to France were highest from China (101,710), well ahead of Germany (47,668), the main European manufacturer of BEVs (56% of the total EU BEVs production in 2023).

Finally, concerning battery production, Stellantis has taken a different approach from Renault and from most of the other European car manufacturers. Rather than relying on joint ventures with Asian partners (Envision for Renault), Stellantis has joined forces with Total, BASF and more recently Daimler to set up its own production of batteries. Called Automotive Cells Company (ACC), the new joint venture opened its first gigafactory in France in 2023, in Douvrin. It will reach a full capacity

of 40 GWh in 2030 when it will employ about 2000 workers. Two more ACC gigafactories will open in Germany and in Italy in 2025.



[Figure 10]. National shares of European car production (including Turkey and Morocco)

 $\left(2019$ - $2023\right)$ / National shares of BEV 2023

Sources: OICA, INOVEV

Code: Core (blue), semi-peripheral (green), peripheral (yellow) and distant peripheral

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As we will see in section 3, the jobs that will be created in the new gigafactory — as well as in electric powertrain lines in Renault's joint ventures — will absorb only a relative small proportion of the workers « phased out » in the engine and transmission factories of Douvrin, Tremery and Metz (and probably Ruitz). We will also see that jobs in these new industrial projects have lower salary grids and worse employment conditions for new employees by comparison with those in existing powertrain factories.

All in all, despite this new wave of investments in EV production by French car manufacturers, the net result is going to be a sharp fall in total car production and a continuous decline in employment. The comparison with other main European producers of cars illustrates well this recent trend: while in 2023 vehicle production at Europe's major car producers was still below 2019 (pre-Covid) levels - Italy (-5%), Germany (-10%) and Spain (-20%) -, France is still 45% below that level. As a result,

the French share of European car production has further fallen from 10% to 7% and is now below those of Germany (30%), Spain (13%), Czech Republic (9%) and Slovakia (8%) (see Figure 10).

2.2. Union strategies for a « just transition » in the automotive sector

Fast-track electrification has been an opportunity for several trade unions to formulate alternative proposals to those put forward by the management of OEMs. In relation to the « twin transition » in the Belgian and German automotive industries, Pulignano et al. (2023) refers to trade unions as organisations with « knowledge regimes ». In other words, they develop industrial projects, plans and strategies in order to influence the running of companies or national industrial policy. They often formulate these projects internally, but also with the support of external players, such as consulting firms or academics (Cini et al., 2022). This was the case with CGT Renault, which developed an « industrial project » in 2020. This was drawn up by the union's national officers and member engineers or sympathisers. The project advocates the reindustrialisation of the automotive sector through the manufacture of one million electric vehicles a year and the recruitment of 4,000 employees in France⁴. To achieve this, Renault should concentrate its efforts on the production of a « small » electric vehicle produced in France, based on the Twingo, weighing 800 kg, with a range of 150 km, a 15 kWh battery and selling for less than 15,000 euros, excluding subsidies. The union also defends the fact that ICEVs and BEVs are not opposites, but complementary. BEVs would be intended for daily short-distance travel, while plug-in hybrid vehicles would meet long-distance mobility needs. The union also proposes to develop a range of gas and bioethanol thermal vehicles, without mentioning for how long. Finally, the CGT Renault points to the fact that the group's vehicles that are sold in France are manufactured abroad. This is why, according to the CGT's industrial project, there needs to be a « rebalancing » of production volumes between the group's plants in Europe, while at the same time harmonising upwards working conditions of all Renault workers, for example by extending the 32-hour working week to all the group's plants worldwide.

The CFDT Métallurgie, for its part, has also formulated an industrial project for the automotive sector in a report with the Nicolas Hulot Foundation advocating a « just transition » scenario. This should help to halt industrial decline and create jobs in the battery and retrofit industries⁵. Unlike the CGT, which is defending a project based on an accessible vehicle and the maintenance of a part of the internal combustion engine production, the CFDT is defending a policy of « conversion » of the sector with a three points roadmap: first a « deal » between the companies and the government, with the latter guaranteeing public purchases for 'Made in France' vehicles, second a system for retraining employees through training, and third an ambitious and open industrial policy involving the various stakeholders in the sector.

⁴ The full industrial project can be viewed here: https://www.cgt-renault.com/notre-projet-industriel

⁵ Fondation Nicolas Hulot et CFDT Métallurgie, 2021, *Automobile. Comment relever le défi d'une transition juste ? Note scénario pour l'emploi et le climat*, Rapport, June 2021.

These two examples show that the trade unions in France are attempting, slowly but firmly, to move away from the reactive position in which they have found themselves in recent years, administering the decline. They are taking a more long-term view of employment. However, the absence of codetermination or any other means of influencing company strategy reduces the unions' ability to participate in decision-making. They continue to intervene « from the outside » (Pulignano et al., 2023) and their industrial projects remain, so far, a dead letter.

3. New industrial projects in electric powertrain and battery production

We have described the strategies by OEMs and unions regarding the transition to BEV. We will see how this is materialized in the creation of new business units which only partially compensate for the loss of jobs linked to electrification. Here again, we see the determining role of social dialogue in managing the emergence of these new industrial projects, with collective agreements concerning the transfer of workers from OEMs' mechanical sites dedicated to combustion engines manufacturing to these new sites. These projects are of two types: mechanical assembly plants for electric powertrains and gigafactories for vehicle batteries. These are joint ventures with multinational companies that are contributing their expertise in the electrical domain. However, most of these sites are still at the planning stage or are under construction, although some projects have already come to fruition.

3.1 Gigafactories in battery production

France has developed significant skills in the production of internal combustion engines. In 2019, the engine industry still employed around 85,000 people⁶ (44% of the direct employment in automotive manufacturing), which is why the transition to battery-powered vehicles represents such a challenge for employees in the automotive sector. In order to manage the drop in labour requirements linked to the electrical transition in the mechanical electric powertrain plants, OEMs have resorted to another relatively new mechanism in labour law, the *Ruptures conventionnelles collectives* (RCC – collective voluntary departures). This is a new type of collective agreement introduced in 2017 that encourages voluntary departures, enabling companies to avoid the social and political cost of « economic layoffs », otherwise forced departures.

PSA Automobiles (Stellantis) negotiated with trade unions an initial RCC in February 2022 to implement a scheme to transfer group employees to the ACC gigafactory in Douvrin, still in construction. This collective agreement, signed by CFTC, FO and CFE-CGC (and rejected by the CGT), was negotiated in the context of the closure of Française de Mécanique, an engine manufacturing joint venture between Renault and PSA, which was subsequently taken over 100% by

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⁶ Ibid.

PSA in 2013⁷. The site was hit hard by the crisis in the automotive sector in the early 2010s. In response, the company negotiated a « job preservation agreement » agreement in July 2013 with the aim of preserving employment⁸. However, this did not prevent the plant's decline: while in 2003 around 6,300 people were employed at Française de Mécanique, only 1,200 were left at the time of its closure.

The aim of the February 2022 RCC agreement is to avoid a situation of « overstaffing » and to guarantee the redeployment of certain employees as part of the transition to electric vehicles. This is an external mobility scheme, accessible to almost all the group's employees in France, with a training program to facilitate their employability and preserve their purchasing power. More specifically, ACC would have cumulative needs for 60 employees in 2022, 278 in 2023 and 620 in 2023 (according to the agreement, the scheme would only concern 400 PSA employees). The company is also setting up an « energy reconversion pathway » consisting of an individualized training program, organized by PSA, ACC and training agencies, lasting an average of 400 hours over 4 months, to ensure the employability of PSA employees within ACC⁹.

On joining ACC, employees are guaranteed their basic salary and a 13th month for manual, technical and administrative staff. Employees also receive a sum of money intended to compensate for the loss of several thousand euros in seniority. However, the CGT and CFDT Stellantis did not sign this agreement because it would only allow the redeployment of 400 people out of some 1,200 workers and because workers will see their pay fall by between 20 and 25% due to the loss of bonuses and seniority.

3.1. Joint-ventures in mechanical production

The other institutional innovation in the context of the green transition is the setting up of joint ventures by Renault and Stellantis to produce parts for electric motors. Here again, the RCCs have shown themselves to be a privileged tool in the hands of the OEMs to manage the green transition for sites that produce parts for ICEVs.

This applies first and foremost to two Stellantis plants, at Tremery and Metz, both of which manufacture gearboxes and employ around 3,000 people between the two of them. Stellantis has set up two joint ventures, EMotors at Tremery with Nidec, a Japanese manufacturer of electric motors, and ETransmissions with Punch Powertrain, a Belgian manufacturer of gearboxes for electric vehicles, but these would employ only 1,000 workers. PSA Automobiles negotiated a general RCC agreement in March 2023 (which partly includes elements of the February agreement for ACC) in

⁷ PSA Automobiles SA, Accord PSA Automobiles SA Portant sur la mise en oeuvre d'un dispositif d'accompagnement sécurisé des salariés vers ACC dans le cadre d'une rupture conventionnelle collective, February 2022.

⁸ Française de Mécanique, *Accords d'entreprise du 25 juillet 2013 relatif au développement de la performance industrielle économique de française mécanique*, July 2013.

⁹ However, ACC retains the final say on who is recruited.

order to reduce its workforce and gradually transfer some of its employees to the two joint ventures ¹⁰. This « employment and career management » collective agreement – signed by all representative unions, except the CGT – builds on a previous agreement of December 2020. The terms and conditions of the RCC are specified in the March 2023 agreement: employment contracts would be terminated between 1 April 2022 and 31 March 2024, affecting 2,800 jobs, 2,600 under the general scheme and 200 under the « energy gateway » to ACC.

An amendment was then negotiated in July 2023, as the number of contractual terminations during the period from April 2022 to March 2023 was insufficient¹¹. The scheme was therefore extended until August 2024. This new amendment – signed again by all representative unions in PSA, except the CGT – includes an article on specific support for the transfer of PSA employees to EMotors Trémery. To encourage permanent transfers to EMotors, employees will receive an additional bonus of €7,500 until 31 December 2023, then €5,000 from 1 January until 31 August.

Finally, Renault has also set up a joint venture with Minth, a Chinese automotive supplier, at Ruitz to produce battery housings for electric vehicles assembled at the Douai plant, just a few kilometres away. This joint venture was set up within the Renault plant in Ruitz, a subsidiary of the Renault group which used to manufacture gearboxes, but which has seen its activity decline in recent years (today the site only manufactures gearbox pinions for ICEVs). As mentioned above, the site has been integrated into the Electricity perimeter, but this is not the case for the joint venture. Even though the joint venture has not yet started production, the decline in business for ICEVs at Ruitz, and the fact that the joint venture produces battery housings for Douai, raises fears that Renault will follow Stellantis' lead, and that the company will therefore resort to a RCC to cut some of the jobs in Ruitz. All the more so as the two groups have similar industrial relations and collective bargaining practices. The two automotive companies negotiated « job preservation agreements » at the same time (in 2013 for both, then in 2016 and 2017 for PSA and Renault respectively). Finally, a RCC would be justified in Renault's eyes because the future battery housing production plant would only employ some 270 people (compared with 470 at Ruitz in 2023).

We have seen in this section that RCCs have become an instrument for managing employment as part of the green transition in the automotive industry. For OEMs, RCCs are a mean of avoiding the social and political cost of the « economic layoffs » associated with the phasing out of the ICEV, particularly in the mechanical sites dedicated to ICEVs parts production. For unions, RCCs are a way of mitigating (albeit only partially) the negative effects of electrification on employment. However, it should be said that transfers of employees from Stellantis or Renault to the new joint ventures do not guarantee that employees' benefits will be maintained. As said before, the electrification of the French

¹⁰ PSA Automobiles SA, Accord PSA Automobiles SA 2022-2024 relatif à la gestion des emplois et des parcours professionnels et aux ruptures conventionnelles collectives, March 2022.

¹¹ PSA Automobiles SA, Rider to the PSA Automobiles SA 2022-2024 agreement relating to the management of jobs and career paths and to collective severance agreements, July 2023

automotive industry could mean a deterioration in working conditions for employees working in the new mechanical engineering and battery plants.

4. Conclusion

In this report we have shown the implications (and risks) of the electrification of the French automotive industry industry for workers. We showed that the industry is going through an «administered decline» due to the relocation of a large proportion of its production to low-cost countries and the loss of market share by French carmakers to premium and foreign brands.

Instead of reversing this decline, electrification is accelerating it. Firstly, entry-range electric vehicles continue to be produced in peripheral countries, to the detriment of production volumes and jobs in France. This is the case with the future Renault Legend electric vehicle, costing less than €20,000 and the successor to the Renault Twingo, which will be assembled in Slovenia ¹². Secondly, manufacturers will continue to negotiate collective agreements that are unfavourable to workers, using the argument of preserving jobs: in order to compete with premium German car manufacturers, Tesla and new Chinese products, French OEMs claim that they must continue to lower their production costs, which means continuing to squeeze labour costs as much as possible.

Thirdly, the changes in French labour law over the last ten years have become instruments for the administration of the green transition by the OEMs: on the one hand, with the «job preservation agreements», which aim to maintain employment in exchange for concessions from the unions in a context of declining production and employment; on the other hand, with the RCCs, which are a way of both reducing employment without resorting to plant closures or redundancy plans, and degrading working and employment conditions in the new business units.

Fourth, despite the unfavourable balance of power, trade unions have begun to seize the opportunities opened up by the green transition. The unions have realized that they have little influence over this transition, and this prompts them to take a stand in the public arena through their expertise to influence agreements, to negotiate on employment, but also on the structure of the company (as is the case at Renault). But this is not enough to reverse the decline of the French automotive industry. One player relatively absent from this configuration is the State, which has bailed out the industry without conditionality to keep employment levels in France.

Fifth, the issue of employment has become central to the debate on the electrification of the automotive industry in Europe in general and in France in particular. However, this debate has tended to minimise or even overshadow the issue of working conditions. In other words, over and above the question of the number of jobs eliminated by the electrification of the automotive industry, the actors

¹² « Renault présente Legend, sa Twingo électrique », Le Figaro, 15-11-2023. URL: https://www.lefigaro.fr/societes/renault-annonce-le-lancement-prochain-d-une-voiture-electrique-a-moins-de-20-000-euros-20231115

in industrial relations, first and foremost the trade unions, should also be looking at the question of the quality of « green » jobs in the battery industry or in mechanical joint ventures.

Finally, it is worth highlighting the growing importance of Chinese capital in the French automotive industry as part of the green transition. Even though this began with Dongfeng's participation to PSA capital in 2014, we have also mentioned the case of the joint venture between Renault and Minth, the Envision AESC gigafactory in Douai, Geely's participation in the creation of Horse with Renault, intended for the production of ICE vehicles, and the more recent joint-venture between Stellantis and Leapmoto. Therefore, the challenge of the green transition is not just a question of how to save an industry that still employs hundreds of thousands of people in France, but who will control it.

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