Changing workforce dynamics under the European Union Emissions Trading Scheme: job profiles and the color of the collar

ABSTRACT

After an unexpected policy intervention in 2017, the price of emission permits in the European Union Emissions Trading System (EU ETS) saw an upward trend, rendering polluting activities significantly more costly. Prior literature documents that emission-intensive firms have internalized this cost-increase in part by dismissing employees. Exploiting the unique reporting environment in Belgium, we investigate changes in employment composition in unseen detail. Our findings highlight significant reductions in the number of blue-collar, male employees, largely employed under part-time contracts. Moreover, lower educated employees are affected to a greater extent. Our findings help lay bare employment consequences of climate policy interventions.

JEL classification: J21, Q58

Keywords: Blue-collar, employment, EU ETS, climate policy.

1. INTRODUCTION

Over the past two decades, governments worldwide have adopted emission trading schemes to increase the cost of production-related emissions for firms. The most notable and pioneering of these initiatives is the European Union Emissions Trading System (EU ETS), which serves as the EU's flagship policy in combating climate change. The EU ETS operates through a 'cap-and-trade' system which relies on a decreasing annual amount of total allowed emissions within the system. In turn, firms can trade emission permits to align with their actual emissions output and avoid fines (aus dem Moore et al. 2019; Compagnie et al. 2023). The price of these emission permits has remained underwhelmingly low in the EU ETS' first decade due to an oversupply of allowances– resulting in the scheme being a weak stimulus for subjected firms (see e.g., Ikkatai et al. (2008) and Ikkatai et al. (2011) for anecdotal evidence to this end). To address this surplus of allowances and strengthen market incentives, the European Council (EC) implemented significant and unforeseen reforms midway through the EU ETS' third phase. That is, on February 28, 2017, the EC decided to redirect a greater portion of excess allowances into the Market Stability Reserve. Additionally, a cancellation mechanism was introduced for Phase IV, aimed at permanently removing a substantial share of the surplus allowances from the system (Euractiv, 2017). As a result, carbon prices saw an upward trend (See Figure 1)[1], rising sixfold from an average of about 5 euros per ton of CO2-equivalent emission allowances to about 30 euros per ton at the end of our sample period, making compliance costs under the EU ETS significantly more burdensome for covered firms, while employment levels saw a sudden downward trend for more polluting firms (see Figure 2). One of the EU ETS' architects, Ian Duncan, described the unexpected nature of the intervention as follows: "*Just that morning I had declared to the Argus Emissions Conference in Prague that Council agreement was unlikely before summer at the earliest. By the time I disembarked from my flight, twitter was*

[1] The rise in carbon market value for stationary installations corresponded to an increase from €8.12 billion on January 1, 2017, to €39.90 billion by December 31, 2020.

ablaze with the news that Council had done a deal. Hereafter I will retire my crystal ball" (Euractiv 2017). Several scholars further acknowledge that this decision constituted an important tipping point in the history of the EU ETS. Exploiting 2017 as pivotal year, De Jonghe et al. (2020) document that firms render their business greener though strategic acquisitions, whereas Compagnie et al. (2023) show that firms increased corporate tax avoidance activities, while Dutordoir et al. (2024) find that firms increasingly appointed women to their corporate boards in response. Also using this policy intervention and more relevant to the scope of this work, Boeckx et al. (2025) study the general employment, emission, and productivity outcomes of this carbon price shock, and document corresponding downsizing and divestment practices of EU ETS compliant firms. In this paper, we hone in on this phenomenon and provide new insights into the workforce dynamics after the EC's intervention by exploiting unique administrative data from Belgium. In addition to our academic contribution, these insights are also of importance to policymakers interested in understanding the social consequences of implementing and intervening in environmental policies in general, and emission trading schemes in particular. Given the production-intensive nature of EU ETS firms, it is plausible that specific labor profiles are more substantially impacted by workforce adjustment practices in the post-intervention period. Our analyses help shed some light on the specific dynamics employed by firms in changing their workforce composition. Understanding and mapping these characteristics also allows regulators to develop appropriate retraining and reactivation programs such as targeted employment-related subsidies, which may help prevent social inequality and long-term unemployment.

We focus our efforts on Belgium as it provides a well suited, yet unique, setting to investigate our research question for several reasons. To begin with, Belgium has a rich corporate disclosure environment, as both private firms and publicly listed entities provide their annual report to the National Bank of Belgium, which are subsequently made publicly available. Particularly relevant to the scope of this paper, the Belgian reporting environment also uniquely requires the disclosure of a social balance sheet that contains information on a vast array of granular employee characteristics such as gender, educational attainment, and employment type (i.e. blue-collar vs. white-collar[2]), allowing us to analyze whether and how firms have internalized the 2017 EU ETS emission permit price hike through changes in their workforce composition in unseen detail[3]. Besides having these unique characteristics with regards to the level of fine-grained data, Belgium's total share of emissions under the EU ETS falls in the top ten participating member states, making it a representative economy to gauge corporate responses with.[4] In addition, Belgium has a high concentration of firms operating in energy intensive industries, covering a significant share of Belgium's employment.[5] Finally, Belgium's level of employment protection—especially concerning collective dismissals—is closely aligned with the EU average. According to OECD indicators[6], Belgium's regulation around collective and temporary contract termination falls well within one standard deviation of the EU average, indicating broad comparability. While Belgium does exhibit higher trade union density than many EU countries, prior research (e.g., Acharya et al. 2013) shows that firm-level outcomes are primarily shaped by statutory employment protection (i.e. wrongful dismissal law) rather than union presence. Given that our focus is on organizational responses to cost shocks, notably in areas governed by collective dismissal law, Belgium offers a representative and policy-relevant setting for drawing broader insights within the European context.

Using a sample of 67 polluting Belgian firms during the third phase of the EU ETS (2013-2020), we document a linear relationship between firms' pollution intensity (i.e. their total emissions relative to their sales) and various characteristics reflecting a changing

[2] Blue collar workers can be defined as employees that perform predominantly physical rather than mental intensive jobs, whereas white-collar workers predominantly require mental rather than physical effort (Dierynck et al. 2012).
[3] Other studies exploiting this granular data consist of Dierynck et al. (2012), De Meulenaere et al. (2021), De Winne et al. (2019), and Sels et al. (2006).
[4] See https://www.capturemap.no/key-learnings-from-the-latest-eu-ets-emission-data-for-2022/.
[5] Leveraging data from the National Bank of Belgium, we find that around 17% of employees are active in Mining, Energy sectors (i.e. Electricity and Gas supply), and Manufacturing.
[6] https://www.oecd.org/en/data/datasets/oecd-indicators-of-employment-protection.html.

workforce composition. In particular, we report a statistically significant reduction in blue-collar workers, while the number of white-collar workers remains unaffected. We further document a significant reduction in male employees, those with lower education levels, and a particularly pronounced reduction of part-time jobs.

2. DATA AND METHODS

We start our data collection procedure from the European Union Transaction Log (EU ETL). This log contains all the emission-related information at the installation-level as well as information on the account holders. We follow the procedure laid out in Boeckx et al. (2025) and require that the name of the account holder for any installation is the same one as during the 2012 register change.[7] Using Orbis Global data, we match the different installations to company names. In so doing, we aggregate the emission data across installations to gauge the total emission exposure for each firm. In total, we obtain emission-relevant information for 67 Belgian EU ETS-covered firms throughout phase III[8], which together account for about five million tonnes of CO2-equivalent emissions annually. Since we are interested in understanding how firms responded to the sudden increase in carbon costs from an employment perspective, as well as the characteristics of the affected workforce, we add detailed information from both the social balance sheets and the firms' accounting balance sheets from the Bel-first database. In case of missing observations, the annual report was manually consulted through the website of the National Bank of Belgium.

To answer our research question, we construct a model in line with Filatotchev et al. (2000). Specifically, we take the natural logarithm of a specific workforce characteristic as the dependent variable and regress it on a set of controls, alongside the lagged natural logarithm of that variable as an additional control variable, resulting in the following specification:

[7] We accessed the EU ETL on December 1, 2022.
[8] While we focus on Phase III of the EU ETS, we omit 2020 due to potentially distortive effects from Covid-19.

$$WORKFORCE_{it+1} = \alpha + \beta \times INTENS_{it} \times POST_t + \rho \times INTENS_{it} + \delta \times POST_t + WORKFORCE_{it} + Controls_{it} + \gamma_i + \varepsilon_{it}. \quad (1)$$

In this model, *WORKFORCE* is one of the following twelve characteristics, measured as the natural logarithm of one plus the total number of: (i) white-collar employees in the firm (*W_COLLAR*), (ii) blue-collar employees in the firm (*B_COLLAR*), (iii) male employees (*MEN*), (iv) female employees (*WOMEN*), (v) fulltime employees (*FT*), (vi) part time employees (*PT*), (vii) employees with indefinite-term contracts (*INDEF*), (viii) employees with definite-term contracts (*DEF*), (ix) employees with primary education (*EDU_PRI*), (x) employees with secondary education (*EDU_SEC*), (xi) employees with a university college education (*EDU_COL*), and (xii) employees with university education (*EDU_UNI*).

In Equation (1), our main variable of interest is the interaction between the number of verified emissions at the firm-level scaled by the total sales of the firm (*INTENSITY*) and an indicator variable equal to one for years after the unexpected EC's intervention in the EU ETS (i.e., from 2017 onwards) (*POST*). We include various controls at the firm-level. To measure the firm's profitability, we include the return on assets (*ROA*) and the year-on-year sales growth (*GROWTH*). We control for the maturity of the firm by controlling for the logarithm of the total assets (*SIZE*) as well as the difference between the current year and the firm's year of incorporation (*AGE*). We further include some financial structure information: the ratio of fixed assets to total assets (*TANGIBILITY*), the ratio of long-term debt to total assets (*LTD*), and the short-term debts relative the current assets (*CURRENT_RATIO*). At the employment-level, we control for the asset intensity by dividing the natural logarithm of the total assets by the total number of employees (*ASSETS_PER_EMPLOYEE*) and take the ratio of the total employee costs relative to the total revenue of the firm (*COST_OF_EMPLOYMENT*). Finally, we control for the firm's potential to bank emission allowances by taking the difference between the freely allocated allowances and the verified emissions, scaled by the verified emissions (*ETC*). In Equation (1), we account for unobserved heterogeneity by including firm fixed effects. Detailed variable definitions and data sources can be found in Appendix A.1.

Collectively, the firms in our sample employ around 25,000 employees. In Appendix A.2, we provide a sample breakdown per industry and observe that most of the firms in our sample are in the manufacturing sector. We report the descriptive statistics of our full sample in Table 1. The average firm in our sample tends to employ more blue-collar workers, men, and people with at most a high-school diploma, through fixed-term contracts. Yet, there is a large heterogeneity in terms of these characteristics, particularly for blue-collar workers, as indicated by the sizeable standard deviations. The average firm in our sample is profitable (mean ROA of about 4.5%), growing (mean sales growth of 1.8%) and has an employment cost of about 15% relative to their revenue. We further find no evidence of multicollinearity issues among our variables.[9]

< Insert Table 1 about here. >

3. RESULTS

Table 2 displays the results of Equation (1). In Models (1) and (2), we examine the levels of white-collar and blue-collar workers. While we find no significant association between emission intensity in the post-intervention period (*INTENSITY×POST*) and the number of white-collar workers, the coefficient loading on the interaction term in Model (2) suggests a significant reduction in the number of blue-collar workers. This effect is economically sizeable as a one standard deviation increase in emission intensity is associated with a 4.76% reduction.[10]

[9] The correlation matrix shows no correlations above the traditional 0.8 cut-off among the independent and control variables and is available upon request.
[10] This is calculated as the standard deviation of *INTENSITY* (1.762) multiplied by the coefficient loading on *INTENSITY×POST* (-0.027).

In Models (3) and (4), we report the results for the gender distribution of the workforce, where we document that male employees are laid off significantly more as firms' emission intensity increases.

Models (5) through (8) provide us with insights into changes in the hours and contract type of the Belgian employees after the intervention. We first document that both full-time and part-time employees are affected in the post-intervention period with increasing emission intensity. Yet, in terms of their economic effect, part-time employees are affected substantially more with a reduction of about 3.88% vs. 1.23% for full-time employees.[11] We further find statistically insignificant reductions in temporary workers, and for individuals with indefinite-term contracts. Finally, when studying the education level of the employees in Models (9) through (12), we observe a negative and statistically significant effect only for employees with at most a secondary education (Model 10), while those with either primary or tertiary education are not affected in a statistically different manner.[12]

Upon closer examination, untabulated results (available upon request) show that these employment shifts tend to be most pronounced in non-leakage sectors which benefited to a lesser extent from favorable allocation of free allowances, and thus were more exposed to the cost increase.

< Insert Table 2 about here. >

4. DISCUSSION AND CONCLUSION

In this paper, we investigate the workforce impact of the increase in carbon prices triggered by an unexpected intervention in the EU ETS. To this end, we focus on the Belgian context, allowing us to exploit granular workforce data drawn from the social balance sheet. We

[11] This is calculated as the standard deviation of *INTENSITY* (1.762) multiplied by the coefficient loading on *INTENSITY*×*POST* (0.022 for PT and 0.007 for FT).
[12] We estimate a dynamic model in line with Nguyen and Phan (2020) using the natural logarithm of total employees as dependent variable, supporting the absence of pre-trends (results are available upon request).

document a significant reduction in blue-collar workers, and particularly those with at most a secondary educational degree. White-collar employees, women, and those with a higher education, are not affected in a statistically significant manner by the intervention.

Altogether, our paper nuances the employment related responses of firms subject to the EU ETS as initially documented in Boeckx et al. (2025), by documenting that mostly undereducated, blue-collar workers are affected by EU climate policy. These findings are even more relevant in the context of the required skills in the green economy, and Belgium's lack of preparedness to specifically transition people into green jobs. According to ManpowerGroup, in a survey with 510 Belgian employers, finding qualified workers is the single biggest challenge firms face when integrating green profiles into their workforce (ManpowerGroup 2023). Yet, there is no clear mechanism currently set out in achieving these skills. Barslund et al. (2024) identify that, in Belgium, the skills mismatches for potential transitions between the current workforce and green shortage jobs are large and that the majority of unemployed or inactive individuals do not possess the necessary skills needed to effectively complete these tasks. Similarly, the High Council for Employment in Belgium warned that "initiatives should be introduced to allow people to retrain for technical roles easily" (Brussels Times 2025). Our paper may thus be of particular relevance to policy makers interested in constructing targeted programs for lower-educated workers in the nascent green economy.

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Table 1. Descriptive statistics

The table shows the descriptive statistics of the main variables used in this study. All continuous variables are winsorized at the 2.5^{th} and 97.5^{th} percentile. Q1 and Q3 represent the first and third quartile, respectively. $^{+}$ indicates that logarithmic versions of the variables are used in the regression analyses but are untransformed here for interpretation purposes. Detailed variable definitions are provided in Appendix Table A.1.

	Mean	Std	Q1	Median	Q3
W_COLLAR^{+}	128.229	140.997	33.000	76.000	152.000
B_COLLAR^{+}	233.000	364.430	47.000	129.299	246.153
MEN^{+}	462.966	720.695	165.500	266.000	455.000
WOMEN^{+}	90.562	151.238	18.000	43.500	80.500
FT^{+}	444.243	691.303	137.000	264.000	441.000
PT^{+}	69.820	134.493	16.000	35.000	61.000
INDEF^{+}	358.715	439.404	114.000	229.000	406.000
DEF^{+}	9.740	14.065	0.000	3.000	16.000
EDUC_PRI^{+}	39.398	90.779	1.000	10.000	37.000
EDUC_SEC^{+}	190.025	207.947	54.000	130.000	229.000
EDUC_COL^{+}	50.793	55.280	14.000	32.000	66.000
EDUC_UNI^{+}	29.455	40.340	6.000	12.000	36.000
POST	0.414	0.493	0.000	0.000	1.000
INTENSITY	0.649	1.762	0.070	0.225	0.567
SIZE	11.750	1.442	10.984	11.633	12.807
ETC	0.237	1.750	-0.302	-0.111	0.213
LTD	0.109	0.145	0.000	0.036	0.170
GROWTH	0.018	0.215	-0.107	-0.020	0.118
ROA	4.593	7.352	0.680	3.381	7.119
EMPLOYMENT_COST	14.884	9.378	6.485	13.653	20.552
ASSETS_PER_EMPLOYEE	6.371	0.943	5.586	6.284	6.964
AGE	33.765	22.975	15.000	28.000	45.000
TANGIBILITY	0.431	0.206	0.290	0.405	0.553

Table 2. The relationship between emission intensity in the post-intervention period and employment characteristics

The table presents the results of the relationship between emission intensity (*INTENSITY*) in the post-intervention period (*POST*) on a host of different employment characteristics through a fixed effects: within estimator. Columns (1) and (2) examine the effect on the type of labor (*W_COLLAR* and *B_COLLAR*, respectively). Columns (3) and (4) examine the impact on gender (*MEN* and *WOMEN*, respectively). Columns (5) and (6) examine the impact on the hours worked per week (*FT* and *PT*, respectively). Columns (7) and (8) examine contract types (*INDEF* and *DEF*, respectively). Columns 9 through 12 examine the education levels of the workforce (*EDU_PRI*, *EDU_SEC*, *EDU_COL*, *EDU_UNI*, respectively). Detailed variable definitions are provided in Appendix Table A.1. Standard errors are reported between parentheses and are clustered at the industry level. *, **, and *** represent significance at the 10%, 5% and 1% level respectively.

	Type of labor		Gender		Hours		Contract Type		Education			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	W_COLLAR_{t+1}	B_COLLAR_{t+1}	MEN_{t+1}	$WOMEN_{t+1}$	FT_{t+1}	PT_{t+1}	$INDEF_{t+1}$	DEF_{t+1}	EDU_PRI_{t+1}	EDU_SEC_{t+1}	EDU_COL_{t+1}	EDU_UNI_{t+1}
$INTENSITY{\times}POST_t$	0.002	-0.027***	-0.009**	0.001	-0.007***	-0.022**	-0.002	-0.056	0.029	-0.019***	-0.000	0.013
	(0.006)	(0.006)	(0.004)	(0.005)	(0.002)	(0.010)	(0.007)	(0.052)	(0.056)	(0.006)	(0.007)	(0.019)
$INTENSITY_t$	0.017	-0.068	0.028*	0.057**	0.033*	-0.093**	0.011	-0.703***	0.348	-0.084	-0.176	0.184
	(0.073)	(0.053)	(0.015)	(0.020)	(0.017)	(0.033)	(0.048)	(0.216)	(0.282)	(0.119)	(0.109)	(0.122)
$POST_t$	-0.022	-0.030	-0.001	-0.027	-0.026	-0.016	0.013	-0.001	0.110	-0.071	-0.020	-0.011
	(0.019)	(0.018)	(0.033)	(0.015)	(0.053)	(0.018)	(0.104)	(0.195)	(0.104)	(0.043)	(0.034)	(0.018)
$SIZE_t$	-0.156	0.442***	-0.000	0.056	-0.037	-0.002	-0.177	-0.108	0.049	0.136	0.173	-0.079
	(0.118)	(0.077)	(0.035)	(0.061)	(0.064)	(0.097)	(0.141)	(0.286)	(0.255)	(0.139)	(0.145)	(0.185)
ETC_t	0.003	0.014**	-0.008	0.005	0.009	0.015	-0.005	-0.055	0.017	-0.005	0.054***	-0.000
	(0.005)	(0.006)	(0.012)	(0.012)	(0.012)	(0.026)	(0.003)	(0.034)	(0.032)	(0.013)	(0.016)	(0.019)
LTD_t	0.156	0.028	0.050	0.030	0.055	-0.189	0.140**	-0.774	0.983	-0.241	0.376*	0.185
	(0.140)	(0.042)	(0.063)	(0.169)	(0.065)	(0.254)	(0.065)	(0.557)	(0.778)	(0.241)	(0.210)	(0.286)
$GROWTH_t$	0.023	0.079**	0.084***	0.039	0.081***	0.096	0.010	-0.195	-0.119	-0.097*	0.114*	0.117
	(0.045)	(0.032)	(0.021)	(0.039)	(0.017)	(0.070)	(0.018)	(0.165)	(0.154)	(0.052)	(0.059)	(0.068)
ROA_t	0.002	-0.003***	-0.001	0.000	-0.000	-0.000	0.001	0.007	0.012*	0.005	0.001	-0.002
	(0.001)	(0.001)	(0.001)	(0.003)	(0.001)	(0.003)	(0.001)	(0.006)	(0.006)	(0.005)	(0.003)	(0.002)
$EMPLOYMENT\_COST_t$	0.003	0.004*	0.002	-0.000	0.002	-0.003	0.002	-0.002	-0.001	0.012*	0.004	-0.004
	(0.004)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.007)	(0.012)	(0.006)	(0.005)	(0.006)
$ASSETS\_PER\_EMPLOYEE_t$	0.186	-0.343***	0.050	-0.008	0.097	-0.043	0.216	-0.093	-0.463*	0.096	-0.187	0.132
	(0.133)	(0.085)	(0.042)	(0.089)	(0.073)	(0.099)	(0.136)	(0.329)	(0.246)	(0.074)	(0.136)	(0.191)
AGE_t	0.018	0.008	0.013*	0.014	0.013*	0.034**	0.013	0.039	0.048	-0.038	0.021	0.021
	(0.012)	(0.009)	(0.007)	(0.011)	(0.007)	(0.014)	(0.010)	(0.033)	(0.048)	(0.047)	(0.022)	(0.017)
$TANGIBILITY_t$	-0.091	-0.110	0.007	-0.020	-0.000	-0.123	-0.074	-0.396	0.019	-0.044	-0.195	-0.215
	(0.097)	(0.113)	(0.051)	(0.163)	(0.056)	(0.171)	(0.102)	(0.407)	(0.432)	(0.143)	(0.135)	(0.213)
W_COLLAR_t	0.682***											
	(0.069)											
B_COLLAR_t		0.041										

		(0.025)										
MEN_t			0.657***									
			(0.053)									
$WOMAN_t$				0.583***								
				(0.067)								
FT_t					0.681***							
					(0.063)							
PT_t						0.394***						
						(0.032)						
$INDEF_t$							0.778***					
							(0.152)					
DEF_t								0.055				
								(0.126)				
EDU_PRI_t									0.506***			
									(0.091)			
EDU_SEC_t										0.588***		
										(0.048)		
EDU_COL_t											0.401***	
											(0.116)	
EDU_UNI_t												0.448***
												(0.118)
Observations	319	319	268	260	301	250	319	319	319	319	319	319
R-squared	0.489	0.419	0.630	0.548	0.629	0.369	0.500	0.043	0.278	0.397	0.283	0.251
Number of firms	67	67	59	58	64	55	67	67	67	67	67	67

Figure 1: EUA Futures Price

The figure presents the EUA futures price from the ICE ECX platform for phase III of the EU ETS. Prices are shown in Euro and dates are reported as MM/DD/YYYY.

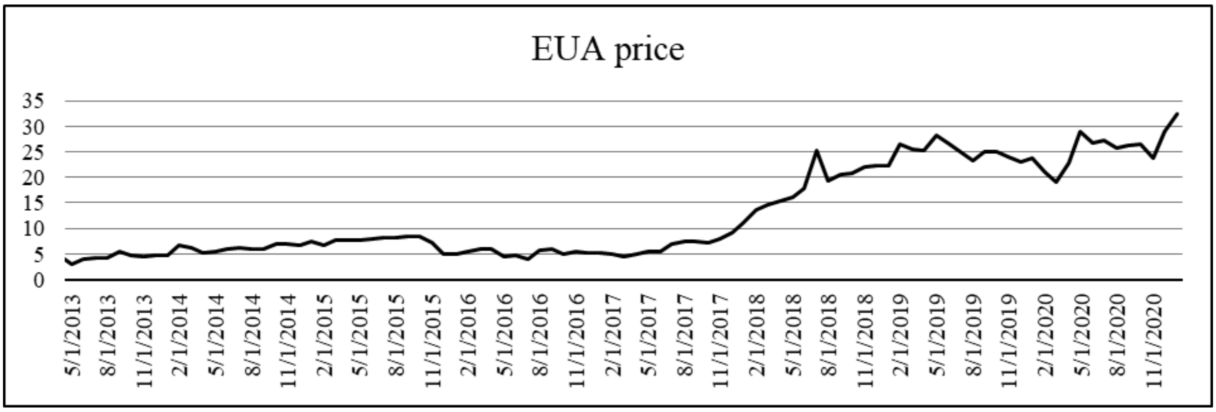
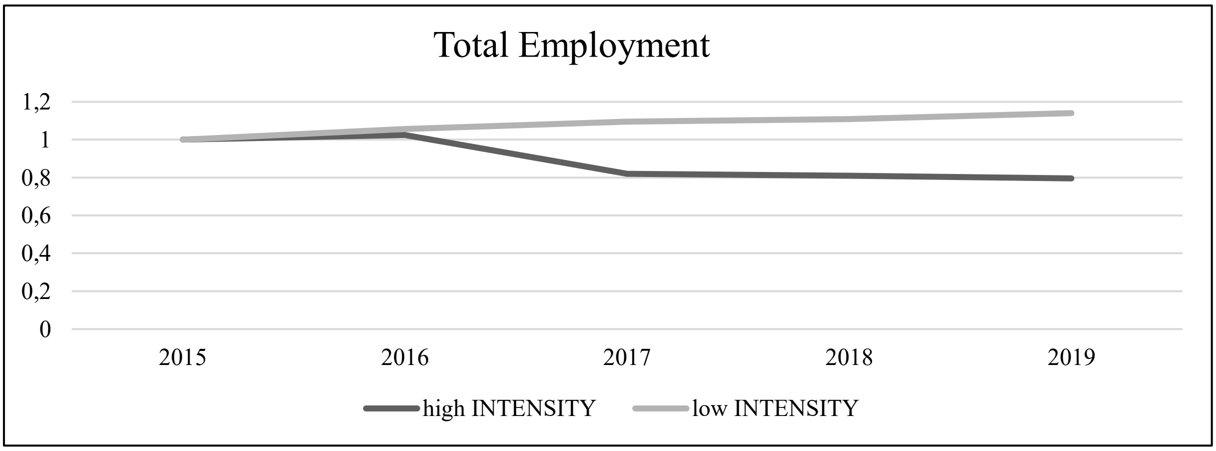


Figure 2: Total Employment

The figure shows the median employment levels of high and low intensity enterprises in the two years leading up to the intervention until two years after the interventions, using 2015 as reference year. The sample is split based on the median value of *INTENSITY*.



APPENDIX

A.1 Variable definitions

This table contains the definitions of the main variables used in this paper.

Variable	Definition	Data source
WHITE_COLLAR	Natural logarithm of one plus the number of white collar workers	Bel-first
BLUE_COLLAR	Natural logarithm of one plus the number of blue collar workers	Bel-first
MEN	Natural logarithm of one plus the number of male workers	Bel-first
WOMEN	Natural logarithm of one plus the number of female workers	Bel-first
FT	Natural logarithm of one plus the number of fulltime workers	Bel-first
PT	Natural logarithm of one plus the number of part time workers	Bel-first
INDEF	Natural logarithm of one plus the number of workers with indefinite term contracts	Bel-first
DEF	Natural logarithm of one plus the number of workers with definite term contracts	Bel-first
EDU_PRI	Natural logarithm of one plus the number of workers with primary education	Bel-first
EDU_SEC	Natural logarithm of one plus the number of workers with secondary education	Bel-first
EDU_COL	Natural logarithm of one plus the number of workers with university college education	Bel-first
EDU_UNI	Natural logarithm of one plus the number of workers with university education	Bel-first
INTENS	Verified emissions over sales.	EUTL
POST	Indicator variable equal to 1 from 2017 onwards.	/
ETC	(Allocated allowances- verified emissions)/verified emissions.	EUTL
LTD	Long-term debt scaled by total assets.	Bel-first
GROWTH	Sales growth.	Bel-first
SIZE	Logarithm of total assets.	Bel-first
ROA	Return on assets, calculated as the net income divided by the total assets.	Bel-first
COST_OF_EMPLOYMENT	Cost of employment as percentage of total revenue.	Bel-first
ASSETS_PER_EMPLOYEE	Natural logarithm of total assets scaled by the number of employees.	Bel-first
CURRENT_RATIO	Current assets scaled by current liabilities.	Bel-first
AGE	Company age.	Bel-first
TANGIBILITY	Fixed assets scaled by total assets.	Bel-first

A.2 Industry distribution

This table contains the median number of employees for the different categories used as dependent variables in our multivariate analyses.

	NACE	N	*MEN*	*WOMEN*	*FT*	*PT*	*INDEF*	*DEF*	*EDU_PRI*	*EDU_SEC*	*EDU_COL*	*EDU_UNI*
1. Agriculture, mining & construction	0–1999	5	454	90	574	28	596	0	38	288	102	24
2. Manufacturing	2000–3999	52	254	31	240	34	223	4	9	129.5	32.5	12
3. Transportation, technology & utility	4000–4999	3	350	33.5	349	28	328	3	5	251	21	34
4. Trade	5000–5999	2	632	134.5	443.5	197	433.5	8.5	33.5	237.5	53	33
5. Finance & services	6000–8999	5	182.5	74	38	2	16	0	0	16	0	0