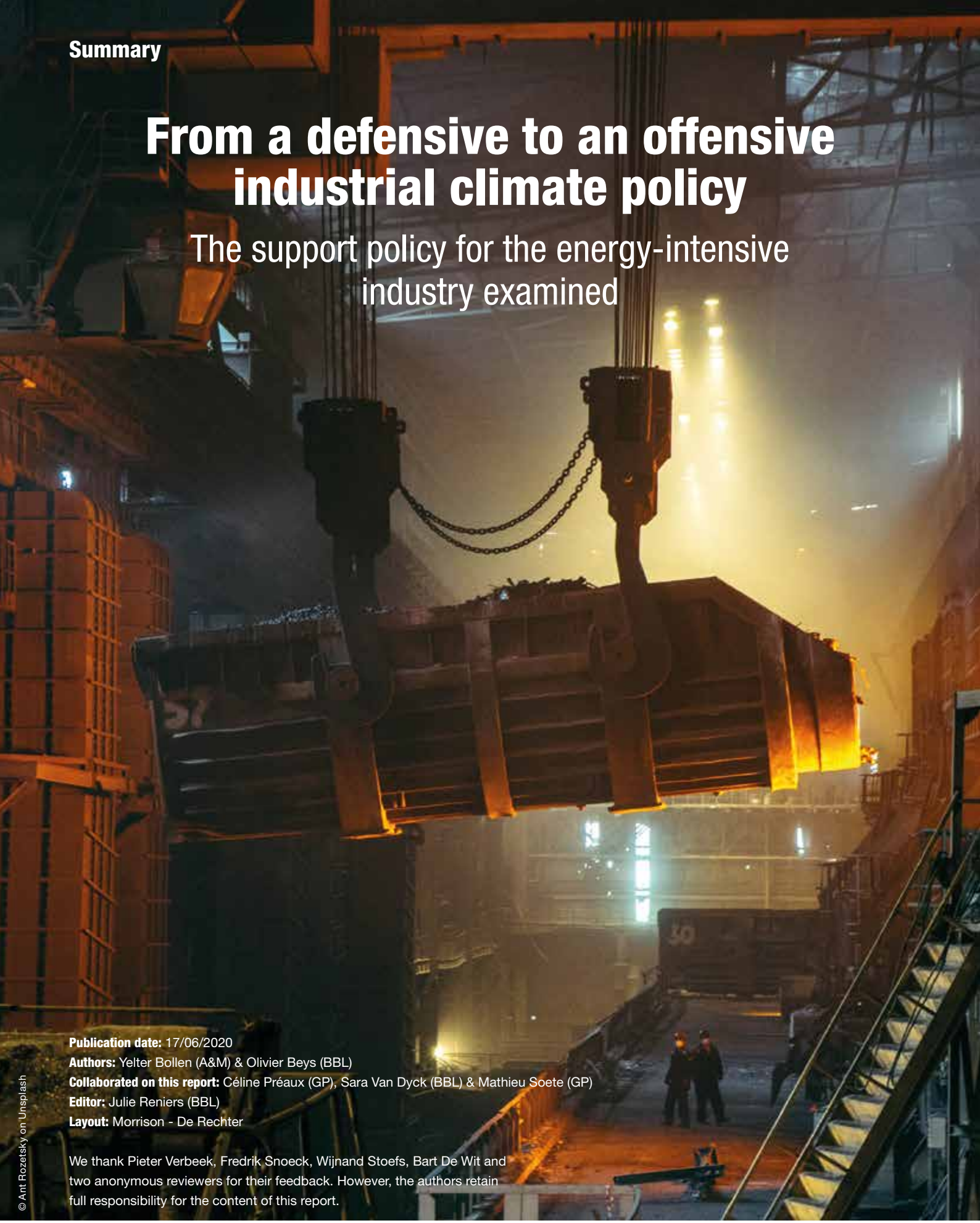
Summary

From a defensive to an offensive industrial climate policy

The support policy for the energy-intensive industry examined



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Publication date: 17/06/2020
Authors: Yelter Bollen (A&M) & Olivier Beys (BBL)
Collaborated on this report: Céline Préaux (GP), Sara Van Dyck (BBL) & Mathieu Soete (GP)
Editor: Julie Reniers (BBL)
Layout: Morrison - De Rechter

We thank Pieter Verbeek, Fredrik Snoeck, Wijnand Stoefs, Bart De Wit and two anonymous reviewers for their feedback. However, the authors retain full responsibility for the content of this report.

BOND BETER LEEF VOOR DE TOEKOMST MILIEU

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Summary

Purpose of this study

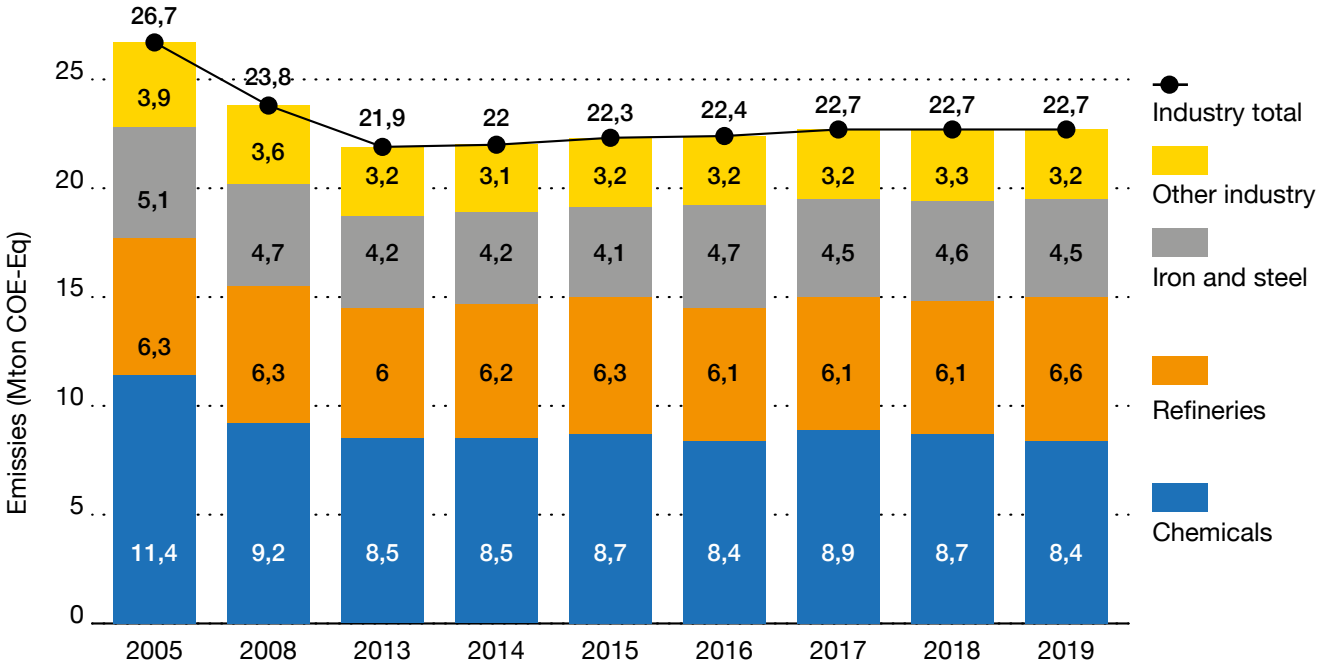
In order to address the urgent climate crisis, the European economy needs to become carbon neutral before 2050. **That means there should be no net greenhouse gas emissions by this point**. There have been positive signals. For instance, the transition towards a system based on renewable energy in the electricity sector is gaining speed. However, this is not the case for the energy-intensive industry, in particular petrochemistry and the iron and steel sector.

Over the last 10 years, we have not seen a further decrease in greenhouse gas emissions from the energy-intensive industry. The added value generated by these companies has increased, demonstrating that companies are producing more efficiently. Nevertheless, these gradual improvements are nowhere near enough to achieve a complete decrease in emissions. For this to happen, **radical changes in terms the circular economy, production processes and materials are required**.

To this day, a policy framework to make this possible does not exist. European, federal and Flemish policy has aimed at a **compromise between societal interests** (emission reductions, energy saving) **and economic interests** (competitiveness, employment) for quite some time. This 'climate compromise' has led to a **long series of support measures for the energy-intensive industry that have delivered billions of euros in benefits in recent years**.

The lack of progress in terms of further emissions reductions merits the question to what extent societal interests have been addressed in equal measure. In this study, Arbeid en Milieu, Greenpeace and Bond Beter Leefmilieu examine a broad range of these support measures. The report reviews the support measures based on **three key questions**:

1. Do they succeed in encouraging companies to move towards climate neutrality?
2. Do they promote the necessary technological breakthroughs and innovative, circular production processes?
3. Do they lead to a balanced and fair distribution of the burden and/or benefits of the climate transition among citizens, SMEs and energy-intensive companies?



Emissions from industrial ETS sectors in Flanders between 2005 and 2019 (in million tonnes of CO_2). Emissions have not decreased over the last 10 years, and have even increased slightly in the past years.

Method and scope

This report looks at the Flemish, Belgian (federal) and European support measures.

- **Firstly, we assess the European Emissions Trading Scheme**. We discuss the distribution of free emission allowances and the over-allocation of these allowances, the extent to which these allowances are passed on to consumers, and the subsidies that compensate for the 'indirect emission costs' in companies' electricity bills.
- **Secondly, we investigate the maze-like set of exemptions and tax reductions with regard to energy**. We explain how the energy bill is structured and then discuss the measures embedded in federal and Flemish energy prices that benefit the energy-intensive industry.
- **Thirdly, we look at several specific subsidies for investments relating to climate and energy**. We also take the Flemish Public Investment Fund's financing tools into account and the broader framework of tax exemptions that industrial companies can benefit from.

We provide an overview of the **support granted in Flanders** on the basis of available information. We illustrate these numbers in detail by examining the support provided to **six of the biggest industrial and energy-intensive companies** active in Flanders and elsewhere: the petrochemical companies ExxonMobil, Total, BASF, Borealis and Ineos and the steel producer ArcelorMittal.

	In million euros (rounded)				
	SUPPORT MEASURE	Total - 2018	Total (period)	Six companies - 2018	Six companies (period)
ETS	Free emission allowances (at annual price)	371	1600 (2013-2019)	265	1176 (2013-2019)
	Surplus (at annual price)	11	691 (2008-2019)	45	225 (2013-2019)
	Surplus (cumulative at current price)	-	1888 (2008-2019)	-	583 (surplus of 2013-2019 at 2019 price)
	Cost pass through (average)	not examined	2000 (2008-2014) (Be, CE Delft)	174	774 (2013-2019)
	Compensation for indirect emissions	32	147 (2015-2018)	14	66 (2015-2018)
	Of which overcompensation	25	114 (2015-2018)	11	51 (2015-2018)
Estimate based on different data sources (see full report)					

Summary table of the advantages and compensations for the Flemish energy-intensive industry and the six selected companies linked to the ETS scheme, in millions of euros.

Compensation for the European Emissions Trade Scheme: a defensive climate policy

The amount of annual free emission allowances for Flemish companies are worth a lot of money: in 2018, it was valued at **371 million euros**, of which **265 million euros** went to the six big companies in our study. In 2019, the amount for Flemish companies increased to **563 million euros**, the result of a recent increase in the carbon prices. In the last seven years, Flemish industry received **1.6 billion euros in free allowances**, of which **1.1 billion** went to the six big companies.

Not all of the free allowances were necessary to cover the companies' emissions. Especially at the start of the European Emissions Trade Scheme (ETS), a big surplus of allowances was given. If the companies sold their **surplus allowances** each year, then they **would have gained 691 million euros in total**. If each company kept the surplus allowance as a reserve, then this cumulative surplus was worth nearly **1.9 billion euros** in 2019.

Since the recent reforms to the ETS, the surplus of free allowances given to companies has sharply decreased. In 2018, the value of these surplus allowances distributed to Flemish companies was only **11 million euros**. The compensation for indirect emission costs, a subsidy that

makes up for the additional cost of the carbon price in the electricity bill, has increased, on the contrary. Between 2015 and 2018, Flemish companies received nearly **150 million euros** in subsidies this way.

The majority of these subsidies are overcompensating for actual indirect emission costs. This means that companies systematically receive more money than the actual extra costs borne by electricity producers and passed through to industry. Between 2015 and 2018, **overcompensation amounted to 114 million**. If we also include the budgeted subsidies for 2019 and 2020, then over a six-year period **274 million euros** was given out in subsidies, of which 216 million in overcompensation.

This is not about to change any time soon: in the coming decade, more than 90% of industrial emissions remain covered by free emission allowances. These compensations aim to prevent companies moving their production to countries where carbon pricing has not been introduced. **The billions of free allowances and compensations, however, are an exceptionally expensive tool to protect industry from this 'carbon leakage'**.

Moreover, the risk of carbon leakage has been negligible in the last decade due to the low carbon price. This would change when using real breakthrough technology, however. Production costs would increase an estimated 20–30% for steel, 20–80% for the cement and chemical sector and up to 115% for the remaining tonnes of other types of CO_2 that are hardest to abate. These kinds of additional costs do require a reliable protection mechanism. **Free emission allowances and compensation are not the solution for this**. A system of product standards or border carbon adjustments to be developed at EU level is a better answer to this challenge.

	SUPPORT MEASURE	Total - 2018	Total (period)	Six companies - 2018	Six companies (period)
ENERGY	Degressivity of Federal Contribution Electricity *	71 (Belgium)	n.e.	H: 18 - L: 8	n.e.
	Degressivity of Contribution Offshore Energy *	106 (Belgium)	n.e.	H: 27 - L: 12	n.e.
	Degressivity of Federal Contribution Gas *	11 (Belgium)	n.e.	H: 5 - L: 2	n.e.
	Exemption to Federal Contribution Gas (CHP) ***	Max. 15,8 (Belgium, both CHP and electricity)	i.d.	d.i.	i.d.
	Degressivity of Contribution Green Electricity *	270	930 (2015-2018)	H: 104 - L: 48	H: 381 - L: 178 (2015-2018)
	Degressivity of Contribution CHP *	31	100 (2015-2018)	H: 13 - L: 6	H: 42 - L: 20 (2015–2018)
	Supercap *	13	n.e.	H: 3 - L: n.i.	n.e.
	Uneven cost pass through of public service obligation (Distribution grid operator)	i.d.	i.d.	d.i.	i.d.
	Energy tax	i.d.	i.d.	d.i.	i.d.
	Excise duty reduction for natural gas (EBO) *	12	48** (2015-2018)	H: 8 - L: 4	n.e.
	// (non-energetic) *	10	40** (2015-2018)	H: 17 - L: 9	n.e.
	Excise duty reduction for electricity *	34 (Belgium)	120** (Belgium, 2015-2018)	H: 10 - L: 5	n.e.
	Excise duty reduction for gas oil ***	2000 (Belgium, 2017)	i.d.	d.i.	i.d.
Estimate based on different data sources (see full report)					
n.e. = not examined					
i.d. = insufficient data					
*'H' and 'L' refer to results based on the high or low estimated energy use (one extraction point)					
** extrapolation for 2018					
*** Total amount, no distribution to industrial/other users possible					

Summary table regarding advantages and compensations for the Flemish energy-intensive industry and the six selected companies linked to the energy price, in millions of euros.

Benefits embedded in the energy price: a complex and socially iniquitous system

Energy-intensive companies get **huge discounts and exemptions** from all kinds of contributions that fund the energy system. In 2018, they received an exemption of **71 million euros** in contributions towards the federal tax on electricity consumption, **11 million** for contributing towards gas consumption and **106 million** for funding of offshore wind turbines. In addition, they received another **15.9 million euros** in exemptions for natural gas used in combined heat and power (CHP) installations, though part of this exemption goes to electricity producers. It remains impossible to measure this distinction accurately.

The companies also hugely benefit from the green certificate system and CHP certificates. The higher the company's level of energy consumption, the lower the number of certificates companies are required to account for. The market value of green certificates that they are exempt from paying, amounted to **270 million euros** in 2018 (at €93 per certificate). If we look at the 2015–2018 time period, then the benefit amounts to **930 million euros**.

The benefit in the case of CHP certificates is lower, but it still amounted to **31 million euros** in 2018 and **100 million** between 2015 and 2018. The supercap is a new support measure introduced in 2018 that exempts companies from green electricity contributions in exchange for 0.5% or 4% of their gross added value. Only a few companies made use of this, so the cost for this measure is limited to an estimated **13 million euros**.

Furthermore, there are reductions in excise duties for natural gas and electricity providing a benefit to industry of **tens of millions** of euros. There is also an excise duty reduction for gas oil amounting to 2 billion euros. However, it is not possible to allocate these to the energy-intensive industry based on the available data, because heating is also used for commercial purposes.

Most of the support measures have been set up to be degressive. Take the example of green electricity certificates, which the biggest companies pay **roughly 20 times less for than the average household**. The same applies to the offshore contribution, which the biggest companies **contribute up to 30 times less** for per MWh than a typical household. The **costs of energy policy are largely transferred to households and SMEs** through the energy bill.

Much like the ETS compensation mechanisms, worries about competitiveness form the main argument in favour of this degressive nature: not against competitors outside the EU, but to remain competitive with neighbouring countries. This leads to a vicious circle of competition, whereby each country takes even more measures to transfer the policy costs from the industry onto families and SMEs.

Moreover, the **current tariff structure is detrimental to electrification and the transition towards a carbon-neutral energy system**. On the one hand, in order to make the transition, policy needs to evolve from levies on electricity to taxes on fossil fuels, and on the other hand, existing exemptions and discounts need to be redirected towards transition-orientated investments without penalising companies pursuing ambitious CO_2 reductions. Finally, **funding of energy policy** should no longer happen through the energy bill, but should instead be organised in a transparent way through the general budget.

Subsidies and other advantages: stronger direction towards a just climate transition needed

	SUPPORT MEASURE	Total - 2018	Total (period)	Six companies - 2018	Six companies (period)
SUBSIDIES AND OTHERS	**Strategic transformation support**	38,7	199 (2015-2018)	-	7 (2015-2018)
	Ecology premium+	19	50 (2015-2018)	-	7 (2015-2018)
	Strategic ecology support	10	31 (2015-2018)	-	12 (2015-2018)
	Support CHP / Renewable energy (without PV)* **	520	n.e.	19	n.e.
	Increased investment deduction * **	510 (2017, full deduc-tion)	1850 (2014-2018, full deduction)	i.d.	i.d.
	Property tax exemption * **	400 (exemption cadastral income)	2300 (2015-2018, exemption cadastral income)	i.d.	i.d.
	// cost pass through withholding tax * **	2867 (Belgium, 2017)	n.e.	i.d.	i.d.
	Deduction for risk capital * **	1700 (Belgium, 2016)	n.e.	i.d.	i.d.
	Capital participations/loans	n.e.	n.e.	i.d.	i.d.
	Guarantees (>1,5 million)* **	213	621 (2015-2018)	i.d.	>250
Estimate based on different data sources (see full report)					
n.e. = not examined					
i.d. = insufficient data					
*** Total amount, no distribution to industrial/other users possible					

Summary table of the subsidies and other advantages for the Flemish energy-intensive industry and the six selected companies, in millions of euros.

There are many possibilities for energy-intensive companies to use additional subsidies, rebates and guarantees. Especially the increased investment deduction, the subsidies for co-generation and renewable energy, the exemption from property tax, exemption from paying withholding tax on earned income and the deduction for risk capital, together consist of huge amounts every year. It is, however, not possible to find or show these figures per individual sector.

Nevertheless, it is **quite likely that these benefits to industry largely exceed many of the other support measures identified in this study** (such as the strategic ecological support, ecology premium+ and strategic transformation support). Based on the yearly financial statement, ExxonMobil and BASF Antwerp benefited from €1.2 billion and €0.7 billion respectively in tax reductions in 2018, for example. Note that the limited data available only makes it possible to provide estimations in this study.

The difficulty in establishing a clear picture of this flow of money illustrates the **lack of transparency** of data based on which policy should be evaluated. The Belgian Court of Auditors and the Social and Economic Council of Flanders (SERV) have raised this problem several times (in 2016 and 2019). This makes it unclear as to whether the numerous support measures and subsidies actually led to investments in emission reduction that would not have happened otherwise.

Based on the available data and the emission reduction results, the **support measures do not lead to the large-scale breakthroughs that we need**. It is clear that the government's toolbox needs to be thoroughly redesigned so that tax reductions are made dependant on proven social and environmental performance and investment plans. Moreover, we should not lose sight of the distribution effects. These can be mitigated by setting up public-cooperative investments through which both government and citizens gain a share in the profits in exchange for support measures.

Four general conclusions

From our analysis, the following four characteristics of the current policy stand out:

1. Firstly, policy measures are **not transparent and very complex**, which means it is unclear whether public funds are being spent suitably and efficiently. Even administrative departments struggle with a lack of overview and data.

2. Secondly, policy aims at **incremental but insufficient improvements to efficiency** and it is excessively focused on defending short-term competitiveness interests.

3. Thirdly, policy is **predominantly regressive**: for numerous support measures, a reallocation of financial means towards companies (in other words, the energy-intensive companies) is hardcoded into its DNA.

4. Fourthly, Flemish policy largely relies on **voluntary agreements with companies**. The level of ambition of these deals is insufficient, and moreover, they exclude forthcoming climate policy in advance. Worse still is the lack of an absolute decrease in greenhouse gas emissions and energy consumption.

Ten building blocks for an offensive climate strategy

Making the energy-intensive industry carbon neutral is one of this decade's biggest challenges. Industry as a whole is responsible for at least 36% of the total greenhouse gas emissions in Flanders. The energy-intensive sectors account for 80% of this. It accounts for 22,7 Mt CO_2 emissions of the 77,7 Mt CO_2 territorial emissions generated in Flanders.

These sectors will play a key role in the climate transition. They make the basic products and materials needed to produce solar panels, wind turbines, batteries and various other building blocks for a successful climate transition. In addition, they still play an important economic role in Belgium and Flanders. That is why it is **crucial that the industry itself does not become an obstacle for the climate transition, but rather a driving force**.

This report argues that it is **high time we turn the climate compromise around**. Instead of pursuing climate policy on the condition that it does not harm competitiveness, there is **now a need for an ambitious climate policy to ensure that competitiveness remains safeguarded in the future**. Policy makers need to protect industry from its own short-term interests. In order to do this, the support measures need to be completely reset towards a just climate transition.

1. The industrial climate transition puzzle is terribly complex. We know based on experience that a price mechanism from the European Emissions Trade Scheme and voluntary agreements will not cut it. Instead, we need **a common transition framework** based on a substantiated, evidence-based and participatory roadmap.

2. This transition framework needs **comprehensive societal legitimacy**. A comprehensive steering committee of representatives from the relevant parties concerned, including government, industry, academic world and civil society, are required to create, follow-up and fine-tune the transition framework and roadmap in a participatory and open way.

3. This group, but also citizens, need more clarity regarding the impact of the policy measures taken in the past and in the future. An **independent observatory** should monitor and evaluate policies and communicate any evolutions, impacts and trends in an accessible, frequent and transparent way.

4. When creating the transition framework and roadmap, it is imperative to avoid **lock-ins** in fossil technology and infrastructure, to take into account forward compatibility of new technology and infrastructure and, when possible, to choose scalable and circular solutions.

5. To offer the necessary support for radical industrial climate transformation, a multistage support framework is needed. The voluntary agreements need to be replaced by a **climate pact** that offers companies

access to a wide range of existing and new support measures, on the condition that they commit to the climate transition according to the roadmap.

6. In exchange for quantifiable goals in this climate pact, the government should also provide the necessary **infrastructure for a low-carbon industry**, so that the transport infrastructure for CO_2, H2, renewable electricity, etc. is ready by 2030, and create special purpose regulatory spaces to scale up technology and processes in time.

7. Furthermore, the government needs to provide low-carbon and circular product markets and services through public tenders for infrastructure and goods; collaboration at a European level to **strengthen the ETS system**; and contributions to a high-performing system to protect against carbon leakages when carbon prices really do start taking off.

8. In terms of funding, besides the redirection of existing measures, there also needs to be room for **new instruments**, such as 'Carbon Contracts for Difference', a climate contribution on end products, establishing a public investment bank, a stronger role for public investment funds (PMV, SRIW and FPIM) and more.

9. In order to avoid the socialisation of costs and privatisation of benefits, to increase public support and to let citizens and the government share in the profits and positive effects of the climate transition, the reorientation of policy should take into account the fairness of **distributive effects and actively support involvement workers in the transition**.

10. In conclusion, policy coherence is crucial for a fair, cost-efficient and rapid climate transition. Industry can and should fund a big part of their own climate transition. Industry is perfectly capable of doing this, provided that the **principle of the polluter pays** is consistently respected. This should form the starting point for all future policies.

Overview of a new climate compromise