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# The French CO<sub>2</sub> Pricing Policy: Learning from the Yellow Vests Protests

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## BACKGROUND

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27 March 2019

## Dear reader,

On the 17<sup>th</sup> of November 2018, over 250,000 demonstrators descended upon more than 2,000 locations throughout France in what was seen as an unprecedented challenge to the French government. This coalition of diverse and politically independent individuals commonly referred to as Yellow Vests was born in opposition to the increase in petrol and diesel prices resulting from the planned increase in CO<sub>2</sub> pricing. Today this movement's demands have evolved to encompass wider questions of social justice and greater consideration for the interests of lower income groups in rural areas.

What mistakes did the French government commit when it comes to CO<sub>2</sub> pricing? After all, CO<sub>2</sub> taxation

is recognised as one of the most important and efficient instruments for climate protection and is recommended to governments by economists of all kinds. But the example of France shows that the redistribution effects associated with CO<sub>2</sub> taxation must be taken into account from the outset. In this background paper, we explore the reasons that led to the situation in France and the lessons that can be drawn from it.

I wish you a stimulating read!

Patrick Graichen

Director Agora Energiewende

## The results at a glance:

1

**The Yellow Vests protests were triggered by the confluence of four factors: a general perceived injustice in French society, rising oil prices, an increasing CO<sub>2</sub> price and a lack of redistribution of CO<sub>2</sub>-related revenues.** The Yellow Vests protests are primarily directed at upward social redistribution and not climate protection.

2

**The ongoing protests of the Yellow Vests are of the Macron government's own making.** Over the last 18 months, the French government has abolished the wealth tax, increased flat-rate social security contributions, reduced housing subsidies and increased the tobacco tax. Taken together with the energy tax increase and a lack of compensation, these measures have contributed to the widening of economic inequalities in French society.

3

**CO<sub>2</sub> taxation is regressive in nature and necessitates the compensation of lower income groups to ensure political stability.** Like any consumption tax, the CO<sub>2</sub> surcharge on energy consumption has a greater effect on low-income households than high-income households in percentage terms. This was also the case in France. A per capita redistribution of revenue or other redistribution mechanisms are necessary to balance this.

4

**For CO<sub>2</sub> taxation to be widely accepted, it must be implemented in a revenue-neutral manner.** In France, most of the revenue from the CO<sub>2</sub> surcharge on energy taxes was used for consolidating the budget. The *contribution climat énergie* was therefore not recognised by large parts of the population as a climate protection measure. In addition to social compensation, it is therefore necessary to use the revenues for climate protection measures which are transparent and easily accessible.

## 1 Introduction

The recommendation of economists of all kinds for efficient climate protection is clear: correctly pricing CO<sub>2</sub> will disincentivise the emission of this climate damaging gas. Internalising the cost of CO<sub>2</sub> will then lead to the increased use of the most economically competitive abatement technologies. Thus, once the damage caused by CO<sub>2</sub> emissions is properly accounted for, economically rational decisions made in the free market will contribute to the achievement of climate goals and climate protection at the lowest economic cost.

At the beginning of 2019, more than 3,000 economists, including over 20 Nobel Prize winners, jointly declared in the Wall Street Journal: "Global climate change is a serious problem calling for immediate national action. (...) A carbon tax offers the most cost-effective lever to reduce carbon emissions at the scale and speed that is necessary."<sup>1</sup>

Accordingly, a large number of scientists as well as energy companies and associations in Germany are calling for a reform of the existing energy taxes, levies and surcharge as well as their revaluation on the basis of the respective CO<sub>2</sub> emissions. The overwhelming opinion of experts is that unless the German government does this it will not be able to achieve its climate protection targets in the sectors not covered by European emissions trading (above all building heat and transport). And since these targets are binding under European law, their failure would entail considerable costs to the federal budget.<sup>2</sup>

France was exemplary here: in 2014, the government introduced a levy for climate and energy (*contribution climat énergie*) in the form of an indirect CO<sub>2</sub> price component in energy taxes. At seven euros per tonne of CO<sub>2</sub>, the surcharge on the existing energy taxes was still low in the first year. However, when initially announced, the CO<sub>2</sub> price was designed to

grow steadily from year to year by around ten euros per tonne of CO<sub>2</sub> and in this way reach 100 euros per tonne of CO<sub>2</sub> by 2030. In 2018, the CO<sub>2</sub> surcharge in France was thus around 45 euros per tonne of CO<sub>2</sub>, and by 1 January 2019 it should have risen to 55 euros per tonne of CO<sub>2</sub>.

In October 2018, the Yellow Vests protest movement was launched in France, initially against the increase in gasoline and diesel taxes and later on addressing comprehensive social issues. As a result, French policy reacted with social concessions and a moratorium on the CO<sub>2</sub> price increase originally planned for 1 January 2019. In January 2019, in response to the national crisis, the French government also launched a so-called "national debate" as a public consultation of the population in which citizens can express criticism and make reform proposals. A decision by the French government is expected by summer 2019 – and will also encompass the subject of CO<sub>2</sub> pricing – with the Environment Minister wanting to stick to the policy of CO<sub>2</sub> pricing.<sup>3</sup> At present, there is also discussion as to whether a referendum should be held on the government's central reform projects, although it remains to be seen whether this would also include the issue of CO<sub>2</sub> pricing.

German politicians have been somewhat frightened by protests of the Yellow Vests.<sup>4</sup> While a large number of economists and players in the energy industry are also demanding for the introduction of a CO<sub>2</sub> price in Germany, the Federal Economics Minister Peter Altmaier has rejected the introduction of a CO<sub>2</sub> price in this legislative period. Many politicians in the grand coalition also reacted cautiously to this issue.<sup>5</sup> Nevertheless, the debate on CO<sub>2</sub> pricing in

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1 Climate Leadership Council (2019)

2 Agora Energiewende, Agora Verkehrswende (2018)

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3 France's Environment Minister François de Rugy stated that the CO<sub>2</sub> tax was "one of the most important and effective levers for mitigating climate change". The discussion would focus on "how quickly and drastically the tax adjustments take place, but not the basic principle of the tax". (Euractive 2019)

4 "Such Yellow Vests also lie in the trunks of German motorists." Sigmar Gabriel, former Minister of the Environment and Economy (Tagesspiegel Background 2019)

5 "A CO<sub>2</sub> price that is to have a steering effect would make mobility extremely more expensive and would be at the expense of

Germany continues unabated, with the question of distribution effects and a possible social restructuring taking centre stage.

This background paper therefore addresses two central questions:

- How was carbon pricing implemented in France?
- And what flaws does the policy design exhibit?

As this analysis shows, an assessment that attributes the cause of the Yellow Vests protests solely to the planned increase in the petrol and diesel tax within the framework of the French CO<sub>2</sub> pricing policy is too reductive. On the contrary, the need to reduce CO<sub>2</sub> emissions is recognised by a large majority of the French population - but it insists that implementation goes hand in hand with economic justice. In addition, the demonstrations are fundamentally directed against high living costs and social injustice through redistribution from country to city and from low to high incomes.

## 2 Background and implementation of CO<sub>2</sub> pricing in France

### 2.1 The different false starts for a CO<sub>2</sub>-taxation

The discussion on CO<sub>2</sub> pricing has a long history in France. In the early 1990s, attempts at the EU level to introduce a Europe-wide carbon tax failed because of Germany. In 2000, the first attempt was made in France to introduce a carbon tax and to extend the scope of the general tax to polluting activities (*taxe générale sur les activités polluantes*, TGAP) including electricity, natural gas and coal. The draft law was rejected by the Constitutional Council (the French Constitutional Court), on the grounds that it infringed the principle of equality before tax, as the exemptions provided for were considered to be in breach of the objective of reducing CO<sub>2</sub> emissions. At

the end of 2007, a new attempt was made to tax carbon following the round table debates of the Grenelle Environment Forum (*Grenelle de l'environnement*). The aim was to encourage companies and citizens to adapt their behaviour - and thus achieve the French climate protection targets. A commission set up by the Ministry of Environment and Finance and chaired by former Prime Minister Michel Rocard recommended the introduction of the "*contribution climat énergie*" in 2009. The report envisaged introducing a CO<sub>2</sub> tax from 2010 on fossil fuels used in transport and the heating of buildings (gas, oil, coal). It proposed a tax of 32 euros per tonne of CO<sub>2</sub>, rising by five percent per year to reach 100 euros in 2030. Sectors already covered by the European Emissions Trading System (EU ETS) were to be excluded. The Rocard report recommended that the introduction of the climate and energy contribution be accompanied by redistribution. In particular, the funds would be redistributed by a "green cheque" to those households that are dependent on their car for lack of public transport and to companies competing internationally. According to the report, three conditions needed to be met in order for the *contribution climat énergie* to be accepted: firstly, the participation of everyone in the measure with a balanced burden between companies and households; secondly, no compensation for the company tax (*taxe professionnelle*) which ceased to apply in 2010 through the new 'contribution to climate and energy'; and thirdly, the transparency and relevance of the system.<sup>6</sup>

The government largely followed the Commission's recommendations, with the surcharge finally set at 17 euros per tonne of CO<sub>2</sub> when it was introduced in 2010. The draft budget provided for various exceptions for companies and a flat-rate redistribution of income to households. The law never entered into force, however, as it was once again rejected by the Constitutional Council, on the same grounds as in

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low-income earners and rural areas." Georg Nüßlein, Deputy Chairman of the CDU/CSU Group (Handelsblatt 2019)

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6 Direction de l'information légale et administrative (2009), Ministère de l'écologie, de l'énergie, du développement durable et de la mer, Ministère de l'économie, de l'industrie et de l'emploi (2009)

2000, that is, because of the exceptions that constituted a violation of equality before tax.<sup>7</sup> Among other things, the exception for the energy and energy-intensive sectors covered by the EU Emissions Trading Scheme (EU ETS) were criticised, as at the time the companies covered by the Emissions Trading Scheme had been allocated their CO<sub>2</sub> allowances free of charge and the court saw this as unequal treatment in view of the need to reduce emissions throughout France.

## 2.2 The introduction of an annually increasing CO<sub>2</sub> contribution in 2014 as part of energy taxes

It was not until 2013 that a new carbon tax project returned to the government's agenda. The *contribution climat énergie* (CCE), introduced on the 1<sup>st</sup> of January 2014, adds a surcharge to existing taxes on fossil fuels, calculated according to the carbon intensity of the energy source. However, the actual pricing takes place in the form of an increase in the respective energy tax in the usual units measured. Since the CO<sub>2</sub> price was thus a component of existing taxes, it was possible to provide for exceptions without violating the principle of tax justice, which the French Constitutional Court had called for in previous attempts.

With the exception of the electricity tax, the climate surcharge was integrated into three out of four energy taxes: the consumption tax on energy (*taxe intérieure de consommation sur les produits énergétiques*, TICPE), which mainly comprises petroleum products, the consumption tax on gas (*taxe intérieure de consommation sur le gaz naturel*, TICGN) and the consumption tax on coal (*taxe intérieure de consommation sur le charbon*, TICC).<sup>8</sup>

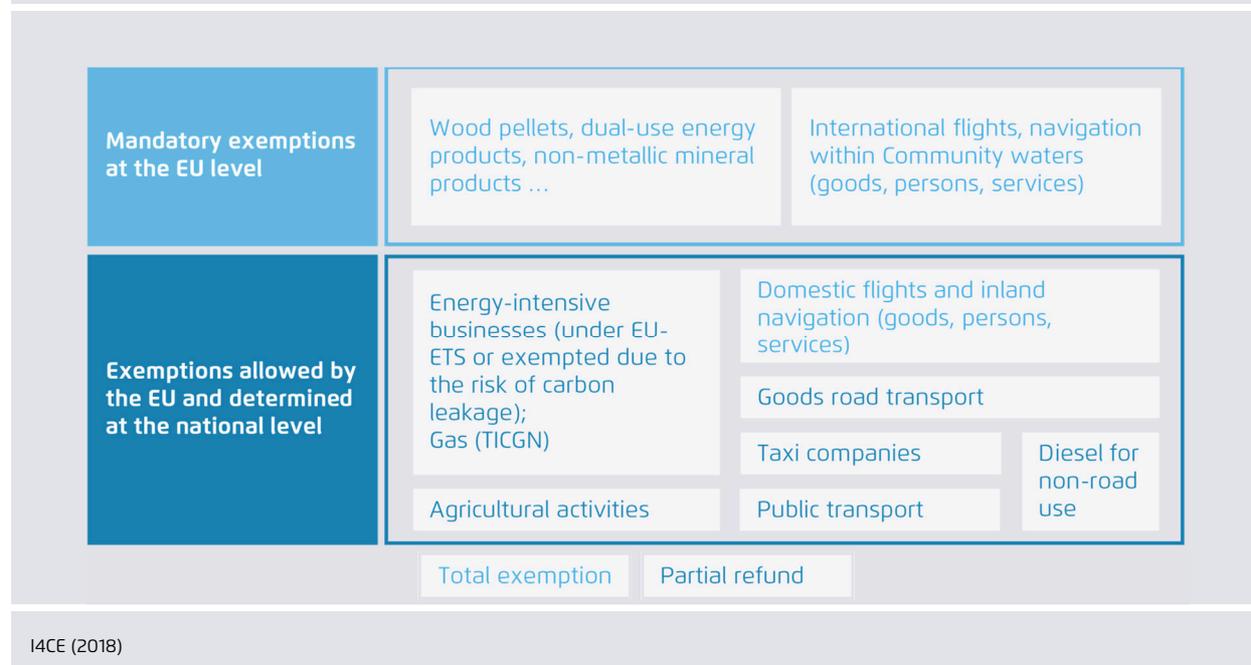
The climate surcharge is paid by households and companies when purchasing diesel, petrol, heating oil, natural gas or coal as part of the three taxes mentioned. The material use of mineral oil (e.g. in the chemical industry) is exempt from the payment of the climate surcharge, as is its use in sectors covered by the EU ETS. Therefore, the climate surcharge applies only to the building heating and transport sectors. The rates of the three taxes in question are fixed at the national level, with the TICPE applying reduced rates in Corsica and the overseas departments, while in the Paris periphery (Île-de-France region) the rates are increased by 1.02 cents per litre for petrol and 1.89 cents per litre for diesel. The additional revenue will be used to provide additional funding for sustainable public transport infrastructure in the Île-de-France region.

When it was introduced in 2014, the climate surcharge amounted to seven euros per tonne of CO<sub>2</sub>; and was offset once by a corresponding reduction in fuel tax. Subsequently, the climate surcharge rose to 14.5 euros per tonne of CO<sub>2</sub> in 2015 and to 22 euros per tonne of CO<sub>2</sub> in 2016 (Figure 1). There was also an increase in 2017 and 2018: to 30.5 and 44.6 euros respectively. The plan provided for an annual increase of around ten euros per year in the following years, so that in 2022 the climate surcharge would have been 86.2 euros per tonne of CO<sub>2</sub> and rising to 100 euros per tonne of CO<sub>2</sub> by 2030. At the same time, in the period between 2015 and 2021, the diesel tax privilege that exists in France was to be abolished. According to the original plan, the energy tax on diesel should be at the same level as the energy tax on petrol from 2021 onwards. The energy tax on diesel fuel therefore rose more sharply than the corresponding tax on gasoline.

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7 Conseil constitutionnel (2009)

8 The gross revenues of the consumption tax on energy (mainly for diesel, petrol and heating oil) amounted to around 30 billion euros in 2017, while electricity, gas and coal taxes together generated around 9.5 billion euros (Ministère de l'Action et des Comptes Publics 2018, p.28).

**Figure 2: Energy tax exemptions in France**


At the beginning of 2018, there were discussions about reaching the 100-euro threshold before 2030 and raising the climate surcharge to 130 euros per tonne of CO<sub>2</sub> by 2030 in view of advancing climate change. However, the Yellow Vests protests at the end of 2018 have now led to a suspension of the planned increase on the 1<sup>st</sup> of January 2019 with the way forward currently under discussion.

### 2.3 Derogations in the context of the climate surcharge

As already mentioned, all companies subject to the EU ETS are excluded from the climate surcharge. This means that the energy industry and large parts of the energy-intensive industry are exempt from paying the climate surcharge for competitive reasons. In addition, the existing exemptions from the energy tax, and thus also from the energy tax increased by the carbon surcharge, continue to apply to a number of other industries and sectors, mainly for reasons of European or international competition: freight transport companies, agriculture, inland navigation, air transport and public transport opera-

tors. A small part of these exemptions is due to the EU Energy Tax Directive, but the much larger part is based on decisions taken at national level (Figure 2). The exemptions are granted in the form of a refund of excise duties. In 2018, 6.9 billion euros of the mineral oil taxes (TICPE) are expected to be repaid, which corresponds to an increase of 15 percent compared to the previous year<sup>9</sup>. For comparison: the gross revenues of the mineral oil tax as the third largest tax source of the country amounted to 30 billion euros in 2017.<sup>10</sup>

Companies received a direct refund of the energy consumption tax, whilst households were made to bear the full burden of the climate surcharge. Hence, flying in the face of the polluter pays principle, which forms the basis for carbon taxing. Moreover, it can only be stated that the availability of public data on both energy consumption taxes and CO<sub>2</sub> contribution is very low overall. The lack of transparency prevents a more precise analysis of total

<sup>9</sup> I4CE (2018)

<sup>10</sup> Ministère de l'Action et des Comptes Publics (2018), p.28

revenue, refunds and thus available resources - especially in regards to the CO<sub>2</sub> surcharge.

### 3 The protest of the Yellow Vests and its central causes

Since his election in 2017, French President Emmanuel Macron has implemented various reforms in the areas of tax law, the labour market and social policy in line with his election program. These reforms had already led to a number of protests and formed the breeding ground for criticism of his policies, on which the so-called 'Gilets Jaunes' have grown.

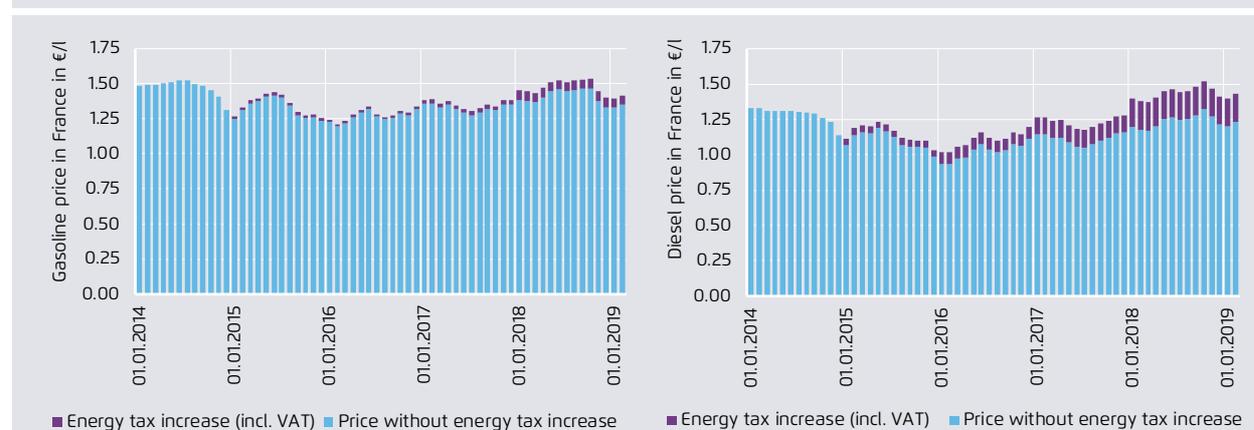
The social movement of the Yellow Vests emerged in October 2018 as a protest against the high fuel prices and was quickly directed against the planned increase in diesel and gasoline taxes on January 1, 2019. This increase, planned for 2019, consisted of a rise in the climate surcharge from 44.60 euros to 55.00 euros per tonne of CO<sub>2</sub> and the partial reduction of the diesel tax privilege. By 2022 the diesel tax level is to be brought in line with the level of the pet-

rol tax. As a result, the diesel tax would have increased by 6.5 cents per litre at the beginning of 2019 and the petrol tax by 2.9 cents per litre.

What was different about the climate surcharge compared to previous years was that in autumn 2018 world market prices for oil had risen continuously since the beginning of 2016 whilst the price of diesel reached a new all-time high in October 2018, higher even than the previous oil price highs of 2008 and 2012/13. In October 2018, a litre of diesel cost more than 1.50 euros in France, about ten cents more than in January of that same year. Compared to the beginning of 2016, when the price of diesel was only just over one euro per litre due to the then low world market prices for oil, this was an increase of 50 percent in less than three years (Figure 3).<sup>11</sup>

During the Yellow Vests protests, the French took to the streets in the countryside and in small towns - a section of the population that had hardly expressed itself politically in the past. Three reasons were decisive for the rapid and widespread spread of the protests:

Figure 3: Development of petrol and diesel prices and applicable energy tax increase in France including VAT



Agora Energiewende, data source: Ministère de la Transition écologique et solidaire (2019). Note: The higher tax increase for diesel compared to petrol is due to the higher CO<sub>2</sub> emissions per litre and the planned gradual abolition of the diesel tax privilege between 2015 and 2020.

11 Ministère de la Transition écologique et solidaire (2019)

### Reason 1: Without redistribution, the climate surcharge disproportionately burdens low income households.

The heterogeneous movement of the Yellow Vests – which does not include trade unions or political parties – protested against a tax increase, the effects of which would have been felt primarily by low to middle-income households. In fact, calculations by the French Ministry of the Environment in the context of the preparation of the 2018 budget show that the increase in the energy tax between 2017 and 2022 would lead to average annual extra costs for households of about 79 euros in 2018 and 313 euros in 2022 compared to 2017. Depending on the type of heating used and transport modes, the additional costs could even rise to as much as 136 euros (2018) and 538 euros (2022) per household<sup>12</sup>. For comparison: in 2015, the average monthly wage in France for a full-time job was 2,250 euros and the monthly median wage was just under 2,000 euros (both before income taxes).<sup>13</sup>

The energy tax, like any excise tax, is a regressive tax, which means that with increasing incomes people pay a lower percentage of their income towards it. In addition, the price elasticity of petrol and diesel consumption – i.e. the change in consumption when prices rise or fall – is weak. This means that low-income households are hardest hit by this tax and cannot switch to alternatives easily. For this reason, the Rocard report had already recommended in 2009 that the introduction of the climate surcharge be linked to redistribution. For example, it had proposed a proportionate redistribution of tax revenues with a targeted focus on low-income households. However, the 2014 implementation of the "Energy and Climate Contribution" did not introduce a direct redistribution of revenues towards (low-income) households. In contrast, companies were granted tax refunds (see Chapter 2.3).

What is relevant in this context is that an annual energy cheque of 150 euros (200 euros from 2019)

was introduced at the beginning of 2018 for around four million low-income households. However, this was a replacement of the regulated social tariffs for electricity and gas that had existed until then and that were abolished on the 31<sup>st</sup> of December 2017. In this respect, the energy cheque was not intended as a compensation for the CO<sub>2</sub> tax but as a replacement for another form of social policy in the energy sector. In response to the protests of the Yellow Vests, the French government has announced that it will extend the energy cheque procedure: The cheque amount is to be increased by an average of 50 euros and the number of eligible persons is to be increased by a further two million households. This additional measure costs about 700 million euros per year – but is still significantly lower than the additional revenue from the increase in the CO<sub>2</sub> surcharge in 2018, which amounts to about 2.7 billion euros.

### Reason 2: Use of revenue for budget restructuring instead of energy system transformation

In their protests, the Yellow Vests have repeatedly questioned whether the climate surcharge really serves climate protection – and explained that the climate surcharge is ultimately a measure to restructure the state budget on the back of the "small people", similar as increasing the tobacco tax.

In fact, it is difficult to track the use of revenues generated from the climate surcharge. The principle of non-affectation also applies in French tax legislation, according to which tax revenues generally do not serve any specific purpose but flow into the general state budget. While there are exceptions to this principle for individual taxes, there is no exception for energy taxes – and of course certainly not for the CO<sub>2</sub> surcharge which is only part of energy taxes.

An exception in this context is part of the revenue from the energy consumption tax on petroleum products. Each year, as part of the preparation for the 2019 budget, the amount of revenue from energy taxes on petroleum products paid to the French transport infrastructure financing agency (*Agence de financement des infrastructures de transport de*

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<sup>12</sup> Sénat (2017)

<sup>13</sup> INSEE (2018)

France, AFITF) and to the special account for the energy transition (*Compte d'Affectation Spécial "Transition Énergétique"*) is determined. This latter sum largely covers the market premiums for financing renewable energies, the French counterpart to the German EEG levy. In 2018, 1.0 billion euros of the mineral oil tax revenues were paid to AFITF and 7.2 billion euros to the special account; in 2017 the figure was approximately 1.1 and 7.0 billion euros, respectively. The remainder of the revenues from the mineral oil tax, amounting to 22 billion euros, flows into the state budget, as is the case in Germany, unless it is used for tax refunds to companies. Although it can be argued that part of the revenue from the carbon tax is used for the energy transition, there is no one-to-one relationship that guarantees that the additional revenue from the carbon surcharge would be used to finance it. This becomes particularly clear when comparing 2017 to 2018: The increased climate surcharge income of 2.7 billion euros is offset by an increased subsidy for the special account for the energy transition of 200 million euros.

Even though they are not directly related to the climate surcharge, some climate protection measures, which are financed from budget funds, have recently been implemented by the French government. From 2014 for example, the VAT rate on products and services in the context of energy-related refurbishments was reduced to 5.5 percent. This measure led to tax losses of around one billion euros in 2016. In addition, there are - as in Germany - subsidy programmes for the modernisation of heating systems and low-interest loans for the energetic refurbishment of buildings. In addition, there are not only premiums for the purchase of electric cars in the amount of 2,500 euros, but also exchange premiums in the amount of 1,000 euros for the replacement of old cars with vehicles with lower CO<sub>2</sub> emissions. For low-income households, this premium increases to 2,000 euros. However, the Yellow Vests did not re-

gard these subsidy programmes as adequate responses to rising petrol and diesel prices.

### Reason 3: Social inequalities and mistrust of institutions

The Yellow Vests protest quickly moved away from the question of CO<sub>2</sub> taxation and the increase in energy taxes and turned into an overall critique of the social inequalities compounded by the reforms of the Macron government. In the first 18 months of President Macron's term of office, many reforms were adopted (see box), including a reform of the Labour Code to make the labour market more flexible and a reform of the French railways and their special staff regulations. A pension reform was announced for 2019, which will abolish the "special pensions" that exist in some occupational groups.

In addition, various changes have been adopted for households: for example, social security contributions for employed persons have been reduced, while the general social contribution (*contribution sociale généralisée*, CSG) to finance social insurance has been increased. In addition, it was decided on the one hand to gradually reduce the housing tax (*taxe d'habitation*) for about 80 percent of the households subject to it by 2020, but at the same time to reduce rent subsidies for low-income households by five percent.

To encourage investment, the wealth tax (*impôt de solidarité sur la fortune*, ISF) was abolished and replaced by a real estate tax (*impôt sur la fortune immobilière*, IFI). The taxation of the return on capital became a flat tax of 30 percent. The abolition of the wealth tax, which has affected around 350,000 taxpayers to date, and the replacement by the real estate tax should reduce government revenues by around 3.2 billion euros in 2018. Furthermore, the corporate tax is to be reduced from 33 percent to 25 percent by 2022.

### Macron government reforms 2017/18

- Reform of the Labour Code to make the labour market more flexible
- Gradual increase in tobacco duty between 2017 and 2020
- Increasing the general social contribution to finance social security while reducing the social security contributions of the working population.
- Gradual reduction of the housing tax for the lower approximately 80 per cent of households subject to it by 2020, based on household income; simultaneous reduction of rent subsidies for low-income households by five per cent
- Limiting the adjustment of social benefits, including old-age pensions, to 0.3 percent each for 2019 and 2020 and thus below the inflation rate.
- Increasing the minimum pension in 2019 and 2020
- Abolition of the wealth tax with simultaneous introduction of the real estate tax
- Flat rate capital gains tax of 30 percent
- Reduction of corporate tax from 33 percent to 25 percent by 2022 to bring corporate tax in line with the EU average
- Reducing employers' social security contributions while abolishing the tax credit for competitiveness and employment
- Ongoing discussion on a reform of the pension insurance system

The analysis by the Institut des Politiques Publiques (IPP) shows the redistributive effects of the reforms for 2018/19 decided by Macron in his first 18 months in office (Figure 4): the 20 percent of lowest-income households<sup>14</sup> lose overall due to the cumulative effect of the following measures: the adjustment of social benefits below the inflation rate, the reduction in rent subsidies and increase in tobacco and energy taxes. The majority of households (the 60 percent with middle income) have slight income advantages from the reforms, mainly due to the reduction of

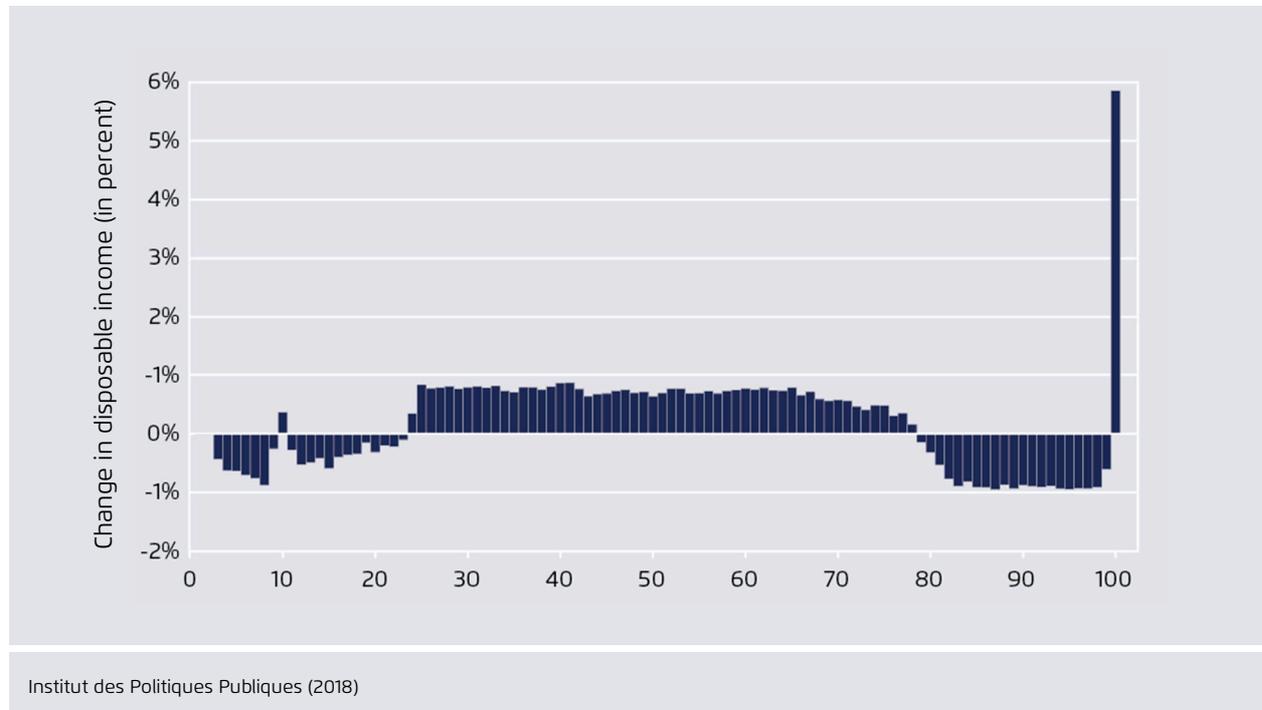
housing tax. Households which are in the 80 to 99<sup>th</sup> income percentile, i.e. the top wealthiest 20 to 2 percent of households are negatively affected overall. The richest one percent on the other hand, gain significantly (about 6 percent of disposable income per unit of consumption), in particular through the abolition of the wealth tax. The 0.1 percent of the highest incomes gain just under 18 percent.

The tendency was to give preference to workers in total, while pensioners were additionally burdened. The latter, like the 20 percent of low-income households, have been hit relatively hard by the adjustment of social benefits and old-age pensions below inflation levels (which amounts to an effective reduction), by the reduction in rent subsidies, and by the increase in the general social contribution and in tobacco and energy taxes<sup>15</sup>. For the 20 percent of households with the lowest incomes, this meant that their annual net income fell by up to one percent and for pensioners by as much as just under four percent.

14 The disposable income of a household is the sum of household income after taxes and social transfers. Disposable income per unit of consumption aims to relate disposable income to household size, taking into account economies of scale in shared expenditure. The first adult in the household counts as one consumption unit. Each additional person over the age of 14 is considered to be 0.5 units and each additional person under the age of 14 is considered to be 0.3 units. Households are classified according to their initial disposable income per unit of consumption and divided into 100 categories. The households belonging to the first percentile are therefore the one percent of the households with the lowest disposable income per unit of consumption, while the households in the hundredth percentile are the one percent of the richest households.

15 IPP (2018b)

Figure 4: Increase or decrease in disposable income through the 2018-2019 reforms including the preliminary 2019 financial plan in France (as of September 2018)



Institut des Politiques Publiques (2018)

In the course of the protests Macron was called the "President of the rich". Although the government announced several measures in favour of households, the Yellow Vests' demand for the reintroduction of the wealth tax was excluded from the outset. Several appearances in the media have left the impression of a president who disregards the "France of the small people" and who has further undermined public confidence in the government and its legitimacy. The continued dismantling of public utilities, mainly in rural and suburban areas in France, with the closure of many small post offices, hospitals, railway stations, etc., has created a gap between regions in France, a country where economic and political power has traditionally been very centralised.

#### 4 Macron's government reaction to the protests

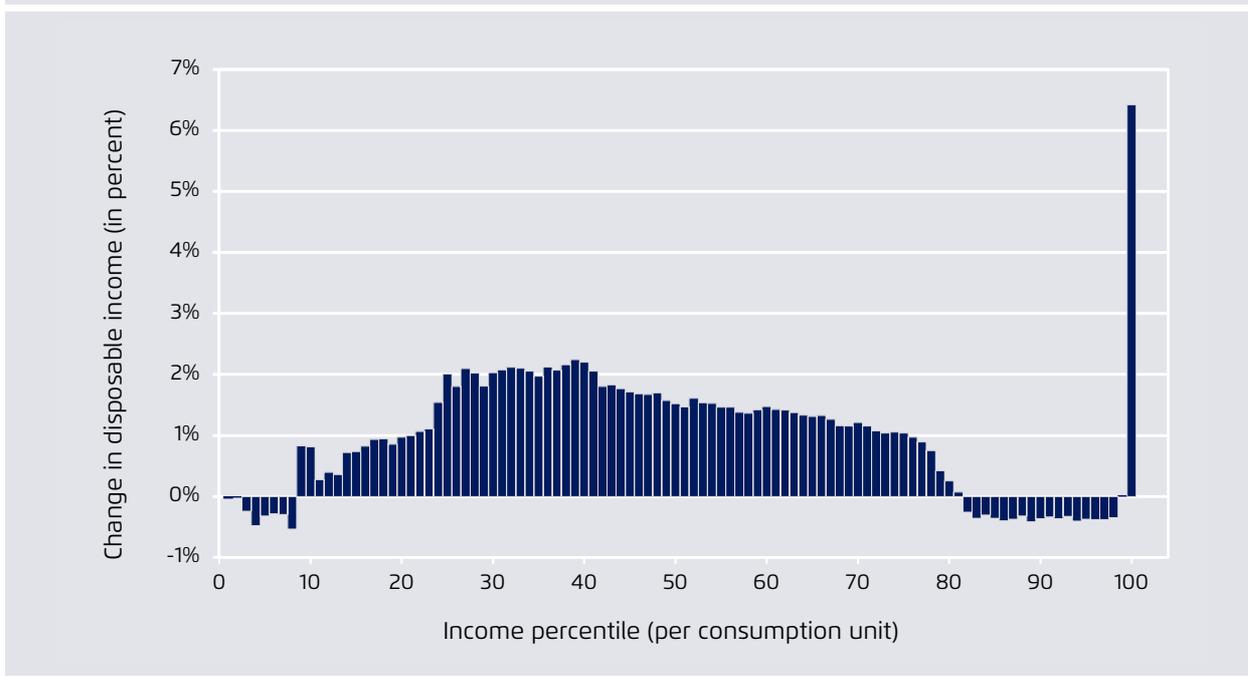
In response to the Yellow Vests protests, the French government announced at the beginning of December 2018 that the gasoline and diesel tax increase would be postponed by six months. Shortly thereafter, further concessions followed, which were to burden the state budget with a total of around ten billion euros in 2019 alone. The following list gives an overview of the measures taken by the French government in response to the Yellow Vests protests:

- Extension of the energy cheque introduced in 2018, which was originally intended to compensate for the abolition of social tariffs for electricity and gas and ensure a broader use of the social regulation, to an additional two million households (and increase the energy cheque by the average of 50 euros already provided for in the provisional budget of 2019 to 200 euros per

- household and year up to a certain household income).
- Increase in tax benefits for frequent drivers of small cars by five to ten percent.
  - Premium for the purchase of vehicles (2,000 euros for households with the lowest incomes and an additional 500,000 households by 2022).
  - 100 euros more purchasing power for low-income earners, of which approx. 20 euros increase (1.8 percent indexed to inflation) were already planned and approx. 80 euros via the increase in an existing employment premium (*prime d'activité*).
  - Abolition of the 2018 increase in the general social contribution for pensioners with a pension under 2,000 euros.
  - Abolition of social security contributions and income tax exemption on overtime up to 5,000 euros per year.
  - One-off abolition of taxes and social contributions on Christmas bonuses up to 1,000 euros in 2018 for employees up to a certain income threshold.
  - Postponement of the increase in gasoline and diesel tax by at least one year.
  - Postponement of the tightening of the requirements for the annual general inspection of vehicles.
  - Withdrawal of the announced increase in regulated electricity and gas prices for households as of January 1, 2019.
  - Limitation of bank transaction charges for payment defaults, which are more common for cheques still in use in France.

Despite these extensive reliefs, the Yellow Vests protests in France continue. As analyses show (Figure 5), the reforms promised by the French govern-

Figure 5: Increase or decrease in disposable income due to the 2018-2019 reforms including the newly announced measures in France in response to the Yellow Vests protests (as of January 2019)



Institut des Politiques Publiques (2019)

ment will improve the net income of the middle-income groups, but there will be hardly any improvement for the ten percent of the lowest income groups. The strong increase in income for the top one percent also remains unchanged.<sup>16</sup>

## 5 Conclusion: Findings from the yellow vest protests for the implementation of a CO<sub>2</sub> pricing

The Yellow Vests protests in France are often explained by the introduction of a CO<sub>2</sub> surcharge on fuels and combustibles and the associated increase in the prices of petrol and diesel. As the present background paper shows, this justification does not go far enough: a general rejection of CO<sub>2</sub> pricing with the fear that this levy will cause resistance in the population similar to the Yellow Vests protests in France cannot be justified with the situation in France. On the contrary, the need for an ecological transformation of society is recognized by the French population – but its implementation must go hand in hand with addressing systemic socio-economic inequalities. This is reflected in the 66 proposals for a social and environmental pact published at the beginning of March by 19 organisations, including trade unions and NGOs, represented by former Environment Minister Nicolas Hulot.<sup>17</sup> Pricing carbon remains an important policy tool, alongside compensation measures and a wide range of social policy measures.

In addition, a large number of legislative reforms in the first 18 months of the Macron government's term in office – including social benefits, social security and pension insurance, and the increase in tobacco and energy taxes – are leading to a social redistribution against which the Yellow Vests protests are directed: The 20 percent of lowest-income households will be burdened, while the one percent of richest households will benefit disproportionately from the abolition of the wealth tax in particular –

which will not change with the additional social benefits announced at the end of 2018 as a reaction to the protests. The increase in the CO<sub>2</sub> levy to climate and energy (*contribution climat énergie, CCE*) as part of the French energy taxes, together with rising market prices for petrol and diesel, must be seen as a trigger for general social unrest.

However, the Yellow Vests protests in France can teach us lessons for successfully introducing CO<sub>2</sub> pricing, as Iddri<sup>18</sup> and Terra Nova and I4CE<sup>19</sup> explain in recent papers on the further development of the carbon surcharge in France: the introduction of CO<sub>2</sub> pricing inevitably leads to redistribution effects. On the one hand, these are desired in the direction of a more sustainable energy system geared towards climate targets, on the other hand, they can, however, create income disadvantages especially for the lowest-income households. The following four lessons can therefore be drawn from the analysis of the French situation:

- CO<sub>2</sub> pricing must be implemented in a revenue-neutral way for the national budget, i.e. the revenue must be redistributed and/or used for climate protection. This is central to the acceptance of the measure as a climate protection instrument. The introduction of CO<sub>2</sub> pricing should also be accompanied by good and early communication about its objectives and impacts.
- **It is not enough to compensate companies for these burdens. Households must also be supported.** While climate policy has so far placed a strong focus on ensuring that companies competing internationally are not unduly burdened by new rules, social impacts have so far played a minor role. This was particularly true in France.
- **The introduction of CO<sub>2</sub> pricing should be accompanied by targeted redistribution of revenues to affected private households.** Like all consumption taxes, the carbon tax is a regressive tax and thus affects low-income households the hardest. However, since the energy transition

<sup>16</sup> IPP (2019)

<sup>17</sup> Fondation Nicolas Hulot, CFDT et al. (2019)

<sup>18</sup> Saujot, M., Berghmans, N., Chancel, L. (2019)

<sup>19</sup> Terra Nova, I4CE (2019)

should not be played off against social justice, a redistribution of (part of) the revenues to lower income groups is imperative.

- **Those affected by CO<sub>2</sub> pricing should be given attractive opportunities to protect themselves against the effects of pricing**, for example by switching to lower CO<sub>2</sub> emissions or emission-free alternatives for heating and transport. The corresponding programmes in France for lower-consumption passenger cars or for energy efficient refurbishments probably did not meet this criterion to a sufficient extent or were not sufficiently known. Part of the revenue should therefore be used to provide generous support to those particularly affected by CO<sub>2</sub> pricing to help them switch to low CO<sub>2</sub> heating systems and electric mobility and public transport.

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