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**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE
COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE
COMMITTEE OF THE REGIONS**

2024 Report on Energy subsidies in the EU

1. INTRODUCTION

Energy policy is critical for European competitiveness and security, for decarbonising the economy, tackling climate change, and reaching the EU's goal of climate neutrality by 2050. Under the European Green Deal, the EU has put in place an ambitious energy policy framework, reflecting the fact that energy production and use account for 75 % of greenhouse gas (GHG) emissions ⁽¹⁾. In 2023 and 2024, the Commission consolidated the policy framework that is needed to reach the EU's international commitments, and the Union's energy and climate targets. By reaching political agreements on nearly all the key legislative files in the Fit for 55 Package, the European Union has paved a clear pathway to its 2030 targets.

Energy subsidies play an essential role in the energy transition: if well-designed, these incentives can accelerate the development and deployment of clean energy solutions and contribute to economic, environmental, or social welfare purposes. If poorly designed, subsidies can act against the energy transition, change incentives for energy use by reducing the carbon price signal and put a burden on public finances. Ultimately all fossil fuel subsidies need to be phased out or reformed to maintain the necessary level of support without endangering the EU's climate objectives.

The energy crisis that started in 2021, and which was aggravated by the Russian aggression to Ukraine in 2022, had significant consequences for European energy policy and, by extension, energy subsidies. The impact of the crisis was still felt in 2023, which can be seen in the evolution of the total amount of energy subsidies; in the distribution of these subsidies across beneficiaries, energy sources and technologies; and, finally, in the instruments used to provide these subsidies.

The current, sixth, annual report monitoring energy subsidies and progress towards phasing out fossil-fuel subsidies ⁽²⁾ confirms that energy subsidies were stable until 2021, increased dramatically in 2022 following the energy crisis, and then moderately decreased in 2023. *Total energy subsidies* in the EU jumped from EUR 213 billion in 2021 to EUR 397 billion in 2022 and decreased by 10% to EUR 354 billion in 2023.

Energy subsidies linked to *national crisis measures* to protect EU consumers from the high prices accounted for an estimated EUR 145 bn in 2023 (down from EUR 187 bn in 2022). Across the EU, at least 270 national measures were created to address the energy price crisis. Households were the main direct beneficiaries of these crisis measures (receiving EUR 121 bn in 2021-2023), followed by industry and the transport sector (EUR 30 bn and 28 bn, respectively, over the same period). Cross-sectoral support to all energy consumers reached EUR 125 bn in the same period.

Fossil fuel subsidies increased from EUR 60 bn in 2021 to EUR 136 bn in 2022 in response to the crisis, and then decreased to EUR 111 bn in 2023 ⁽³⁾. *Renewable energy* subsidies decreased in 2021 to EUR 83 bn - the first decrease since 2015 - and further to EUR 68 bn in 2022 and 61 bn in 2023. The decrease was mainly due to high prices on the wholesale electricity market that reduced the subsidy amounts paid under dynamic market-based support instruments as renewables became more competitive, demonstrating their role in

⁽¹⁾ Source: [Energy and the Green Deal](#)

⁽²⁾ Article 35, point n of the Regulation on the Governance of the Energy Union (2018/1999/EU) ("the Governance Regulation").

⁽³⁾ These figures include tax expenditures that cannot be directly compared across countries.

lowering energy prices. Support *to energy-efficiency* measures, for example energy renovations of buildings, increased from EUR 23 bn in 2021 to EUR 34 bn by 2022 and to EUR 44 bn in 2023 helping to reduce energy bills. The overwhelming majority of energy subsidies (EUR 247 bn in 2022 and EUR 213 bn in 2023) were still dedicated to supporting energy consumption.

In 2023, the total amount of environmentally harmful energy subsidies ⁽⁴⁾ in the EU-27 is estimated at EUR 136 bn, 38% of total energy subsidies. The biggest share of harmful subsidies (EUR 93 bn or 68%) is linked to fossil fuels and phasing out these subsidies would free up important public resources, which could be used to strengthen Europe's energy security, reduce government deficits and increase the pace of the clean energy transition. However, looking at national phase-out plans, less than half (43% or EUR 48 bn) of fossil fuel subsidies are scheduled to end before 2025, another 9% (EUR 10 bn) are scheduled to end between 2026 and 2030, while for the remaining 48% (EUR 53 bn), there is either no end-date or it has been set after the year 2030.

A note on methodology

This report relies on data from an external study conducted for the Commission. The report and the study are based on a bottom-up inventory approach, relying on information from national budget documents and reports. National subsidy data was aggregated at the EU27 level and supplemented with data from recognised sources such as European or international institutions and specialised databases. If 2023 data were not fully available or validated, 2022 data were used as an estimate. As in previous editions, Member States were given the opportunity to provide feedback on the data used for the study.

The inventory of energy subsidy measures provides reliable information on the fiscal impact of direct budgetary transfers for energy use and production, and is necessary to promote transparency around public policies and help identifying specific support measures for reform. The subsidy amounts of certain measures, such as those based on estimates of revenues forgone, may not be comparable across countries due to country-specific approaches to benchmark tax systems. However, they reflect appropriately the fiscal costs of the subsidy measures.

The assessment of tax measures depends on the baseline tax rates that are applicable in each country. Therefore, a country with higher “baseline” taxes but significant tax exemptions can have considerably higher levels of energy subsidies, as well as overall higher energy tax rates than a country with lower tax rates and fewer or no exemptions. As such, this internationally well-established measurement approach, focusing on the fiscal cost of subsidies, is less well suited to compare environmental, climate and energy impacts of tax-based subsidies between countries. Further work is needed to analyse effective tax rates on energy use and carbon emissions, which could usefully complement the inventory approach for tax-related measures.

In addition, implicit subsidies (such as not imposing carbon price or taxes on fuels) are not covered due to methodological problems associated with the lack of a robust, reliable and comparable assessment of negative social and non-climate related environmental impacts associated with subsidies.

⁽⁴⁾ See Section 2.5 for the definition.

2. ENERGY SUBSIDY TRENDS IN THE EU

The total amount of energy subsidies in the EU-27 has increased from EUR 213 billion in 2021 to EUR 397 bn in 2022 and then decreased by 10% to EUR 354 bn ⁽⁵⁾ by 2023 (

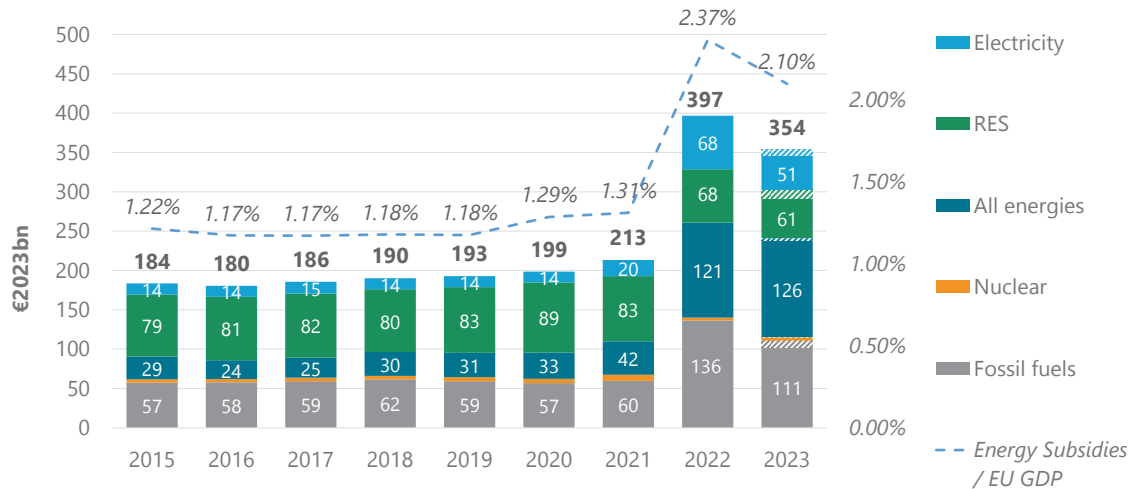


Figure 1).

It is important to note that the years 2021-2023 have been dominated by the energy price crisis. The post-COVID economic recovery in 2021 already put upward pressure on global and European energy prices and led to a first increase in subsidies, which subsequently double from EUR 199 bn in 2020 due to the impact of emergency measures taken by Member States. The 2023 data shows that energy subsidies decreased as some of the price containment measures expired or were withdrawn. In relative terms, energy subsidies increased from 1.3% of EU GDP in 2021 to 2.37% by 2022 and 2.1% in 2023 (right scale on

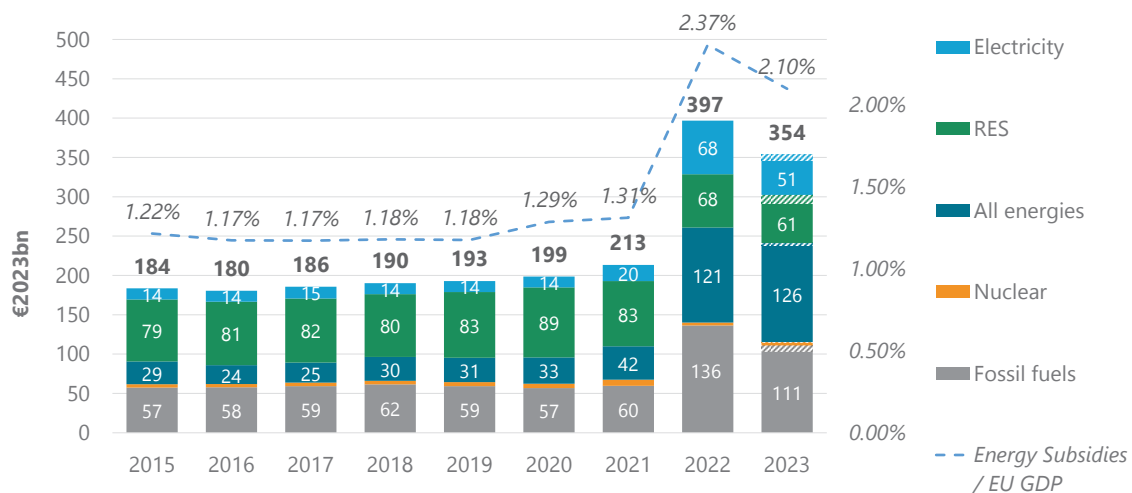


Figure 1).

⁽⁵⁾ In this report, all figures are expressed in EUR 2023 bn. Due to data corrections and the change in the monetary basis, total amounts in this report may differ from the 2023 energy-subsidy report.

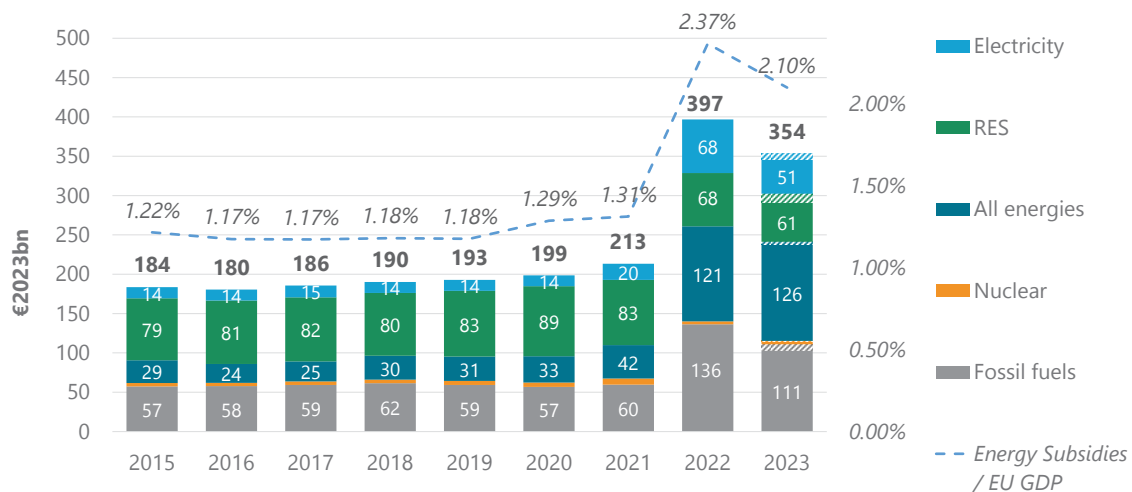


Figure 1: Total energy subsidies in the EU-27 (EUR₂₀₂₃ bn, left, % of EU GDP, right)
Source: Enerdata, Trinomics, 2024. NB: 2023 estimates are represented with hatching ⁽⁶⁾

In 2023, subsidies provided to *fossil fuels*, *renewables* and *electricity* ⁽⁷⁾ all decreased, to 111 bn (-25%), 61 bn (-8%) and EUR 51 bn (-26%), respectively) compared to 2022. Only subsidies allocated to *all energies* ⁽⁸⁾ continued their increase to EUR 126 bn (+13%), as some of cost containment measures implemented by Member States continued to apply to two or more energy carriers.

Fossil fuel subsidies accounted for 34% of total energy subsidies in 2023, similar to support to *all energy sources* (31%)

Category	All energies	Electricity	Fossil fuels	Nuclear	RES	Total
Direct transfers	17.3%	1.4%	6.8%	0.3%	2.7%	29%
Tax measures	5.0%	5.5%	14.0%	0.2%	2.0%	27%
Income/price support	12.1%	7.6%	10.3%	0.3%	12.2%	42%
Under-pricing	0%	0.03%	0.18%	0%	0%	0.2%
RD&D support	1.2%	0.0%	0.1%	0.4%	0.4%	2.1%
Total	36%	15%	31%	1.2%	17%	100%

Figure 2, bottom). *Renewable energy sources* received only 17% of energy subsidies in 2023 (down from 40% in 2021 and 22% in 2022) as renewable energy became more competitive under high energy prices, consequently reducing the need for financial support from dynamic market-based instruments; while *electricity* and *nuclear energy* captured 15% and 1% of all subsidies, respectively.

In terms of instruments for providing energy subsidies, various *income support* measures remained the most important, comprising 42% of the total (

⁽⁶⁾ Data under the “To be confirmed” category amounted to 8% of the total amount included in the Subsidy inventory for the year 2023.
⁽⁷⁾ In certain cases, it is not possible to separate subsidies given to electricity consumption by the source of generation (fossil, nuclear or renewable), therefore this chart shows electricity (energy carrier) subsidies alongside those given to its energy sources.
⁽⁸⁾ This category is used to classify all subsidy measure that apply to energy produced from a mix of both fossil fuel and low carbon sources or from an unknown source.

Category	All energies	Electricity	Fossil fuels	Nuclear	RES	Total
Direct transfers	17.3%	1.4%	6.8%	0.3%	2.7%	29%
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Total	36%	15%	31%	1.2%	17%	100%

Figure 2, right). These were followed by *direct transfers and grants* (29%) and *tax measures* (27%). It is notable that tax measures were the most used instrument to support fossil fuels, while renewable support is relying more on income support measures.

Category	All energies	Electricity	Fossil fuels	Nuclear	RES	Total
Direct transfers	17.3%	1.4%	6.8%	0.3%	2.7%	29%
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Total	36%	15%	31%	1.2%	17%	100%

Figure 2: Subsidy distribution by instrument (2023)

Source: Enerdata, Trinomics, 2024

2.1. Subsidies by energy source / carrier

In 2022, the slight downward trend of **fossil fuel subsidies** since 2019 – as highlighted in

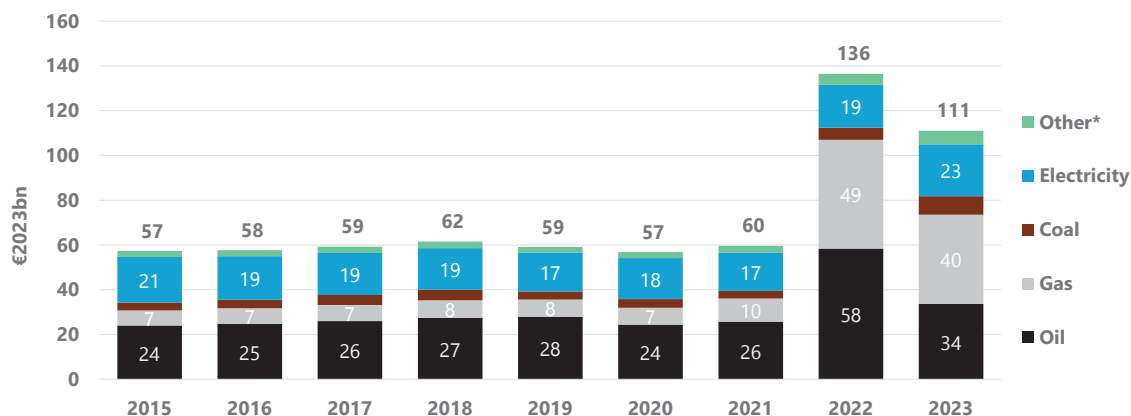


Figure 3 – was disrupted as a direct consequence of the European response to the energy crisis, in which subsidy measures were one of the primary tools to counteract the effects of high energy prices on households and European industries.

As a result, fossil subsidies more than doubled between 2021 and 2022, from EUR 60 bn to EUR 136 bn, and decreased in 2023, by -16%, to EUR 111 bn. Support directed to natural gas and fuels derived from crude oil both dramatically increased in 2022, reaching EUR 49 and 58 bn respectively, compared to 2021. The reasons for this are the various rebates and tax reductions applying to road fuels, as well as the direct transfers and income support measures that supported both natural gas and diesel/gasoline users.

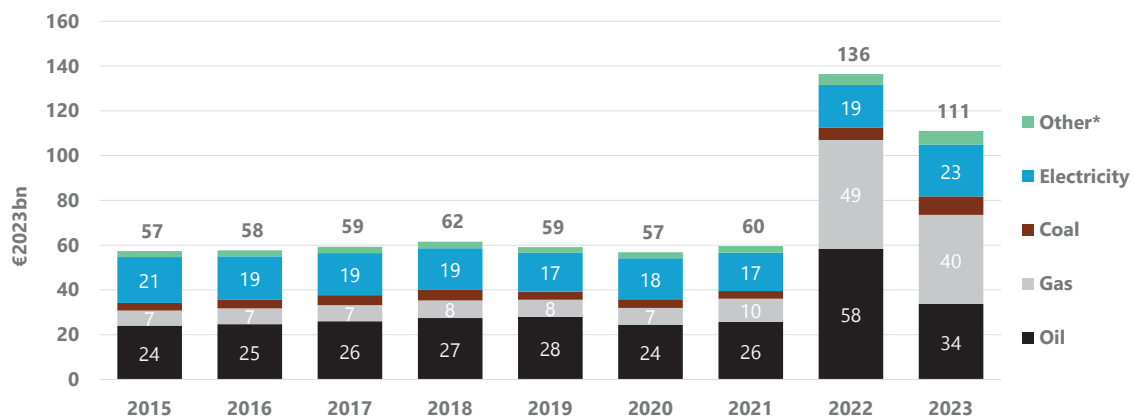


Figure 3: Fossil fuel subsidies by energy vector ⁽⁹⁾(EUR₂₀₂₃bn)

Source: Enerdata, Trinomics, 2024. *"Others" includes subsidies directed to all fossil fuels, and heat from fossil sources. The figures in the graph include tax expenditures that cannot be directly compared across countries.

The strong support for natural gas and oil products continued in 2023, although at a lower level (EUR 40 and 34 bn, respectively), which reflects both the evolution of fossil energy prices as well as the still-important role fossil fuels play in the EU27 energy mix.

Subsidies for **renewable energy sources** have been following a decreasing trend in recent years, as shown on

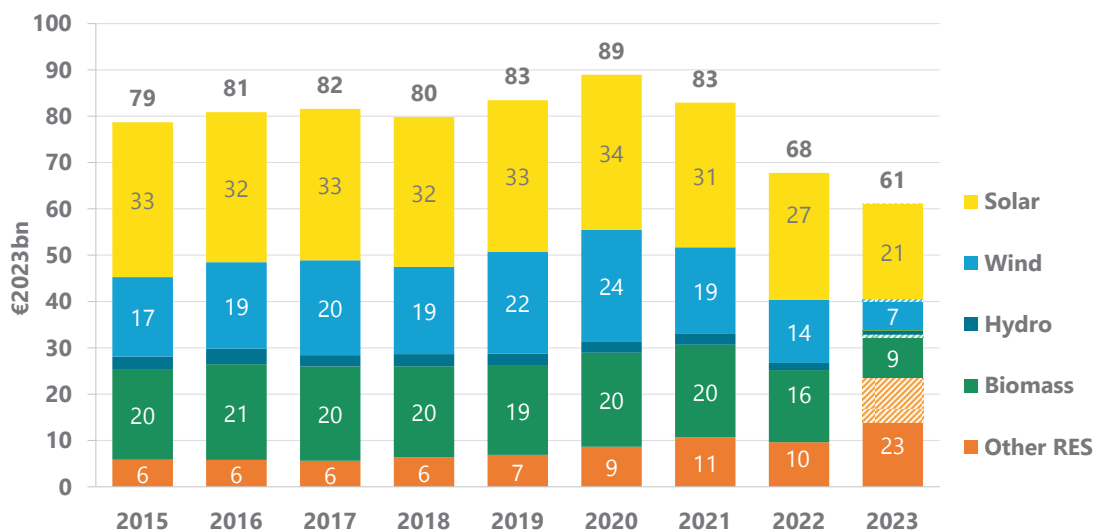


Figure 4: these fell from EUR 89 bn in 2020 to EUR 83 bn (-7% year-on-year) in 2021, EUR 68 bn in 2022 (-18% yoy) and finally to EUR 61 bn (-10% yoy) in 2023. This decline was mainly due to the increase in wholesale electricity market prices, which automatically led to lower payments under the RES support instruments that provide a top-up to market prices as renewables became more competitive. The decline in subsidies for renewable energy came also despite the increase in installed and supported RES generation capacity – as some of this new capacity no longer needs subsidies to compete with other energy sources.

⁽⁹⁾ Including subsidies provided to electricity explicitly generated by burning fossil fuels.

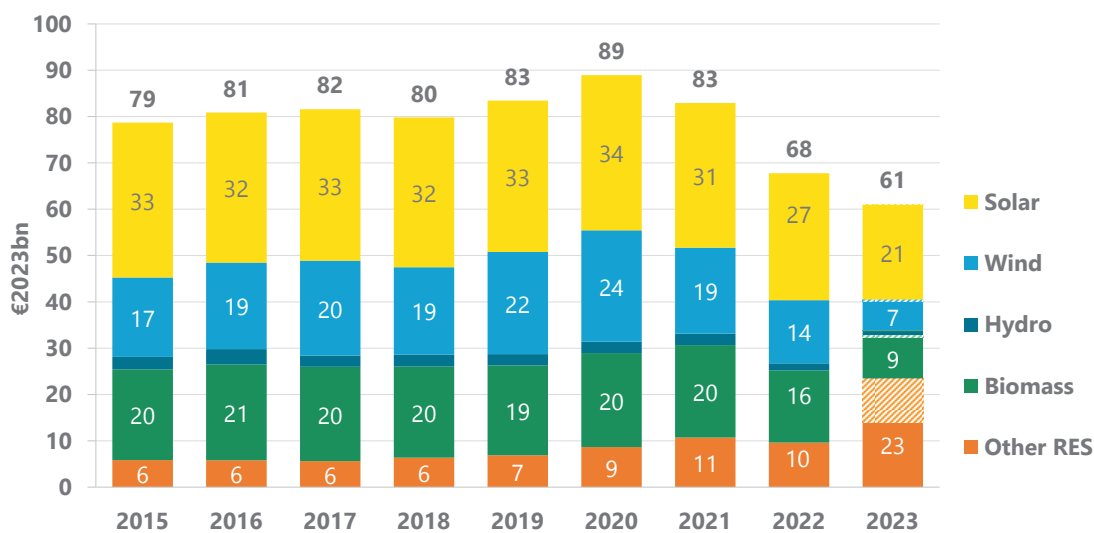


Figure 4: Renewable subsidies by technology (EUR₂₀₂₃bn)

Source: Enerdata, Trinomics, 2024. NB: 2023 estimates are represented with hatching

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shown

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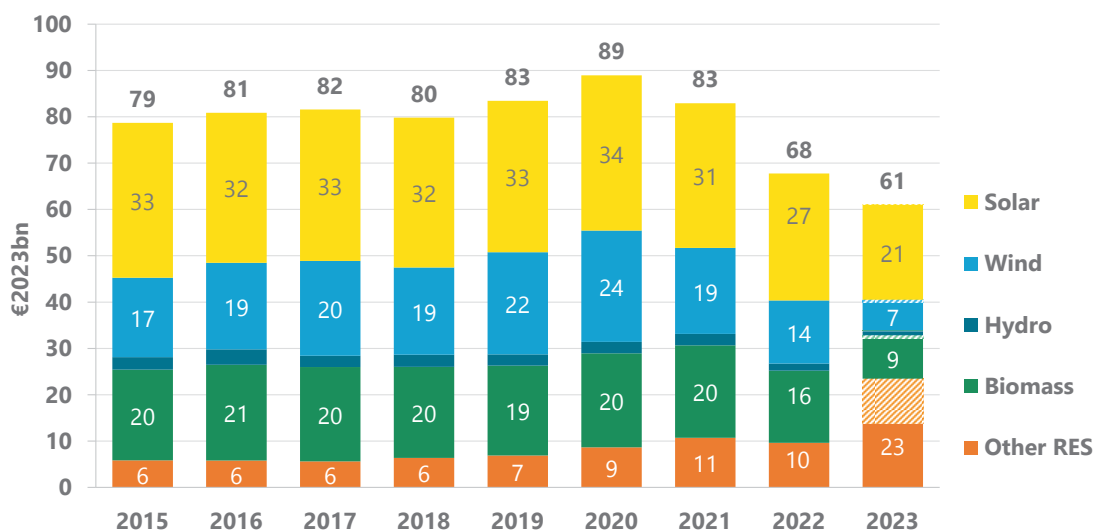


Figure 4, solar energy received by far the largest share of subsidies, both historically and in 2023 (EUR 21 bn), followed by biomass (EUR 9 bn) and wind power (EUR 7 bn). Hydropower received marginal financial support (~EUR 1 bn), while subsidies targeting multiple renewable technologies (such as tax reductions on green technology or public aid for investment projects) jumped to EUR 23 bn by 2023.

The typical instrument for providing subsidies to renewable energy sources (RES - see

Category	All energies	Electricity	Fossil fuels	Nuclear	RES	Total
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Figure 2) continued to be feed-in tariffs and feed-in premiums or Contracts for Difference, together accounting for EUR 36 bn (or 60% of all RES subsidies). Direct payments to RES

producers almost doubled to reach EUR 9 bn in 2023, most likely due to increasing direct support for RES production and electricity infrastructure included in Member States' recovery and resilience plans, as well as increased support for boosting renewable energy and energy efficiency in heating and cooling. The rest of the RES subsidies were provided through tax measures, as well as RES quotas and other instruments (EUR 7 and 9 bn, respectively).

Support for different renewable technologies varies significantly in Member States, reflecting both national energy mixes, priorities and local RES potentials (

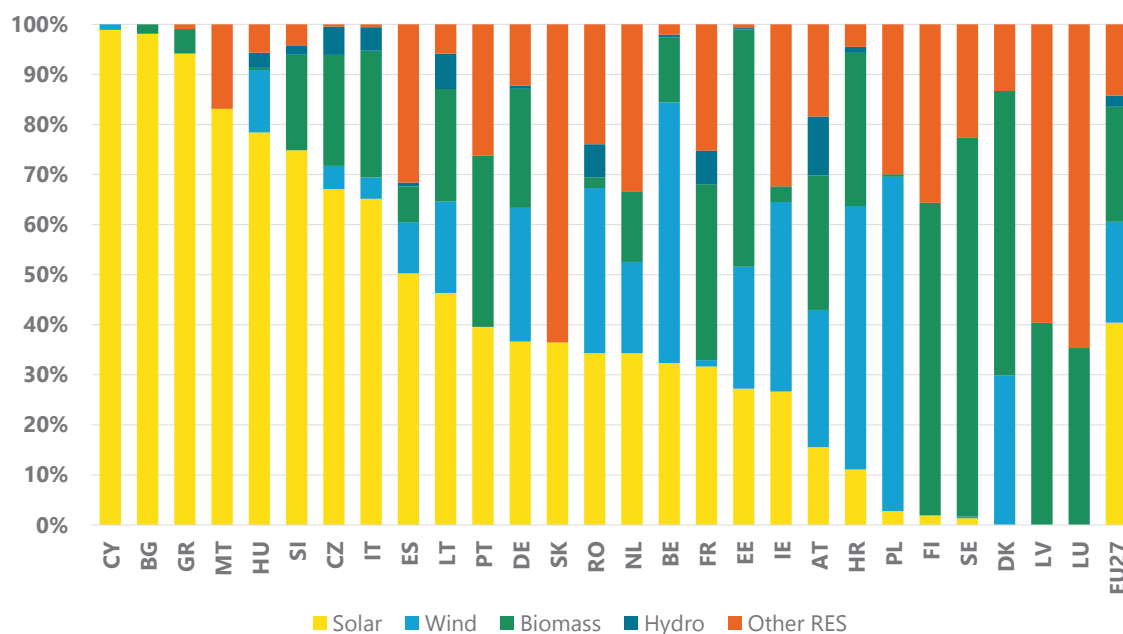


Figure 5). *Solar energy* received over 50% of RES subsidies in 9 Member States ⁽¹⁰⁾, while *wind power* constitutes a substantial proportion of RES subsidies in Belgium, Croatia and Poland. *Biomass* is highly subsidised in the Nordic and Baltic regions, while three Member States (Latvia, Luxembourg and Slovakia) seem to have adopted technology neutral- RES support policies that apply to all forms of renewables.

⁽¹⁰⁾ Bulgaria, Cyprus, Greece, Malta, Hungary, Slovenia, Czechia, Italy and Spain.

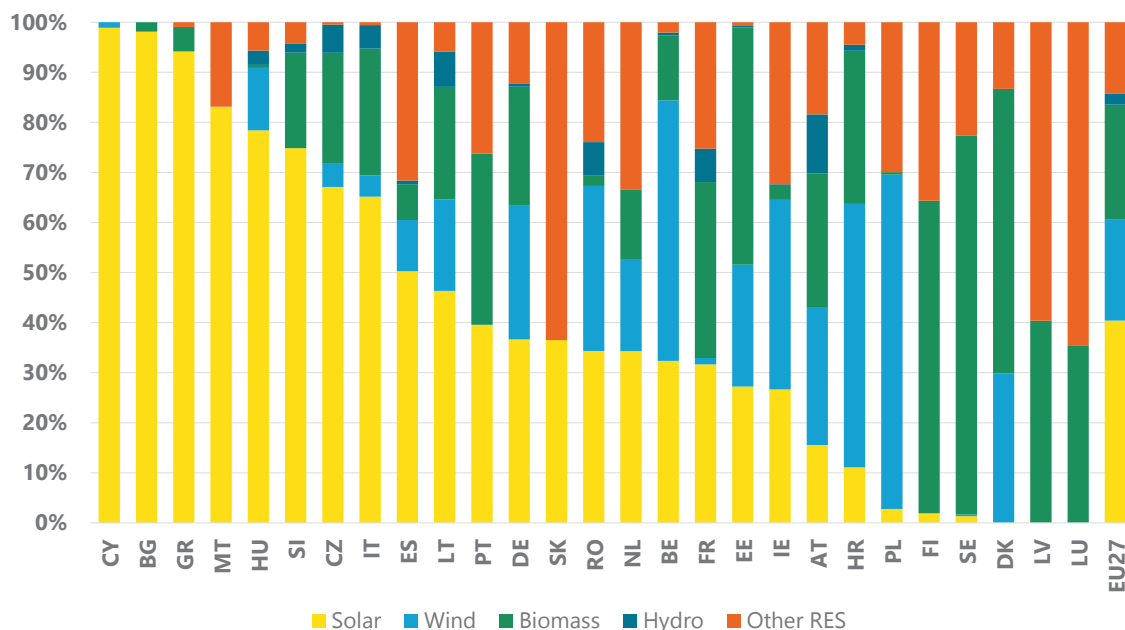


Figure 5: Share of RES subsidies by technology in Member States (%)
Source: Enerdata, Trinomics, 2024

Subsidies for **nuclear energy** dropped from EUR 7.9 bn in 2021 to 3.7 bn in 2022 and 4.1 bn in 2023. Of the 14 MS providing nuclear subsidies, France (EUR 2.9 bn) accounted for the biggest share, followed by Germany (EUR 0.8 bn) , Spain and Belgium (EUR 0.1 bn each). The rebound seen in 2023 is mainly attributed to an increase in capacity payments made by the French government to limit the rise in electricity tariffs, practically doubling the amount provided in 2022 (+ 97% to EUR 1.1 bn).

2.2. Subsidies by economic purpose

Although the total amount of energy subsidies in 2023 decreased compared with 2022, there was no significant change in the categories according to the economic purpose of the subsidies (

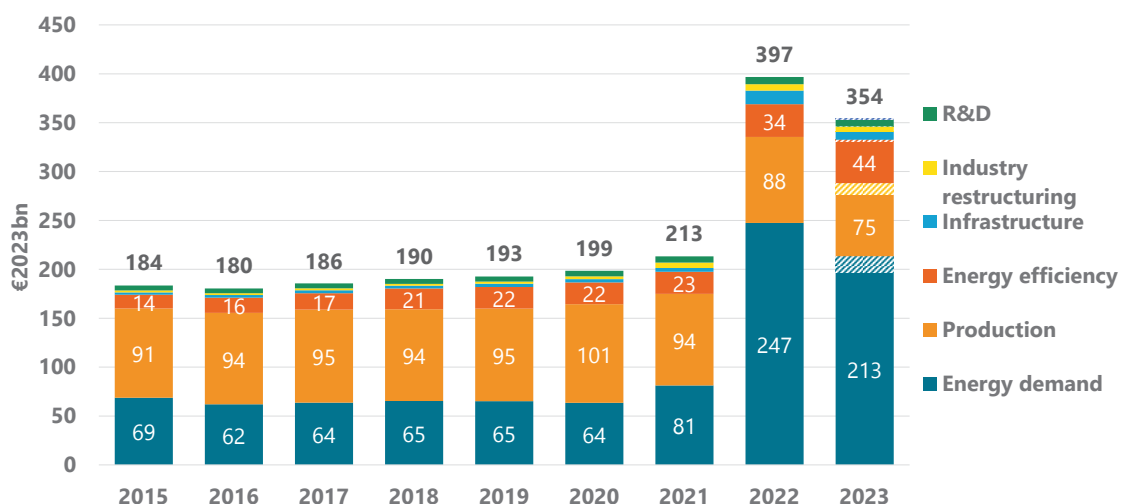


Figure 6).

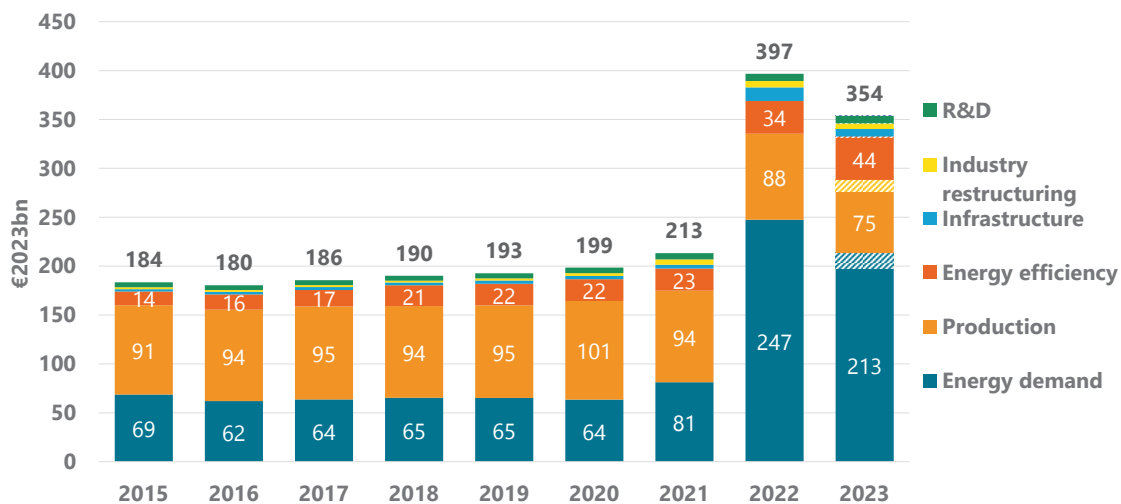


Figure 6: Energy subsidies by economic purpose (EUR_{2023bn})

Source: Enerdata, Trinomics, 2024. NB: 2023 estimates are represented with hatching

Financial support directed to *energy demand* ⁽¹¹⁾ remained the largest category (62% of the total) at EUR 213 bn in 2023. Support for *energy efficiency* measures further increased, by 30% compared to 2022, to EUR 44 bn in 2023, while subsidies in every other category decreased: for *infrastructure development* by 37% to EUR 8.8 bn, for *energy production* by 14% to EUR 75 bn and for *R&D* by 1%, to EUR 7.4 bn.

Focusing on **subsidies supporting energy demand**, which aim at limiting the costs of energy consumption, these can address a wide range of economic sectors, from energy intensive industries to households. Until 2021, *energy demand* support was provided almost exclusively through tax measures (for example tax reductions, exemptions and refunds) and their importance remained in 2023, with EUR 80 bn. However, during the crisis, the importance of alternative measures such as *consumer price regulation* and *direct grants* started to increase and by 2023, energy demand subsidies corresponding to these two categories reached EUR 88 and 37 bn, respectively.

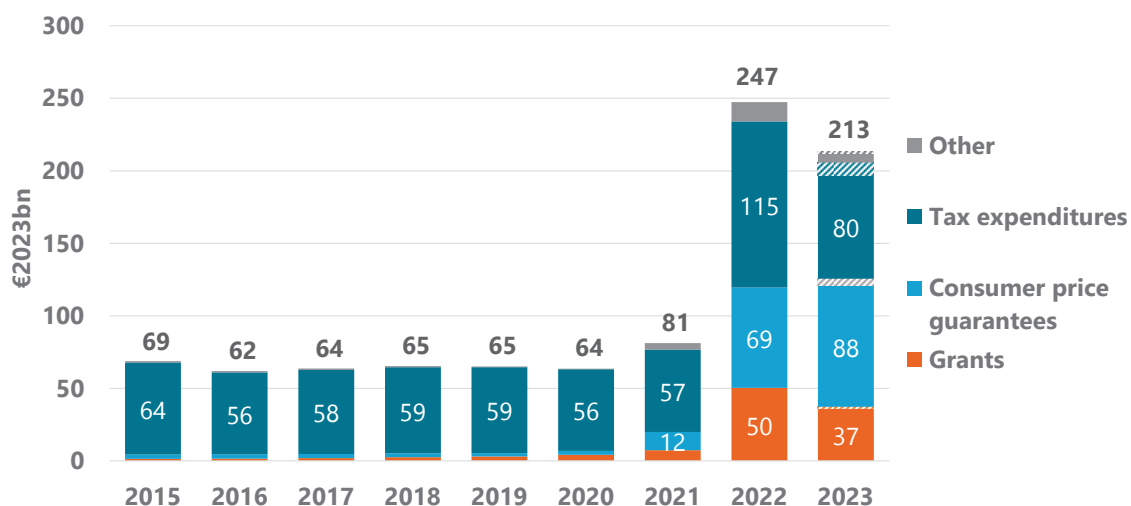


Figure 7: Subsidies supporting *energy demand* by instrument (EUR_{2023bn})

⁽¹¹⁾ E.g. supporting the use of energy through lowering its costs.

Source: Enerdata, Trinomics, 2024. NB: 2023 estimates are represented with hatching.
The category "Other" includes direct transfers (except grants), income or price supports (except consumer price guarantees) and under-pricing of goods/services supports.

Subsidies for energy efficiency measures, which both support lower energy bills and the zero carbon transition, have substantially increased since 2015 and by 2023 had reached EUR 44 bn. *Grants* were the most significant support instrument for energy efficiency investments, accounting for over EUR 32 bn or 70% of all energy efficiency subsidies in 2023, due to the implementation of the investments in the Recovery and Resilience Facility. Grants were followed by *tax measures* (EUR 7 bn), *soft loans* and *energy efficiency obligations* (EUR 3 bn both).

2.3. Subsidies linked to the energy crisis

The European Commission has been working together with Member States since 2021 to tackle the energy crisis, including by adopting the REPowerEU plan ⁽¹²⁾. This has included working to: (i) secure alternative energy supplies; (ii) reduce energy demand to compensate for the shortfall of Russian gas deliveries; (iii) make greater use of renewables; and (iv) increase energy efficiency. In addition to implementing measures introduced at Union level or enabled by Union-level frameworks, Member States also adopted national measures to shield their citizens and their economy from damaging energy prices.

Through these national measures, Member States provided energy subsidies worth EUR 187 bn in 2022 and EUR 145 bn in 2023 in, accounting for 45% and 40% of total energy subsidies, respectively (

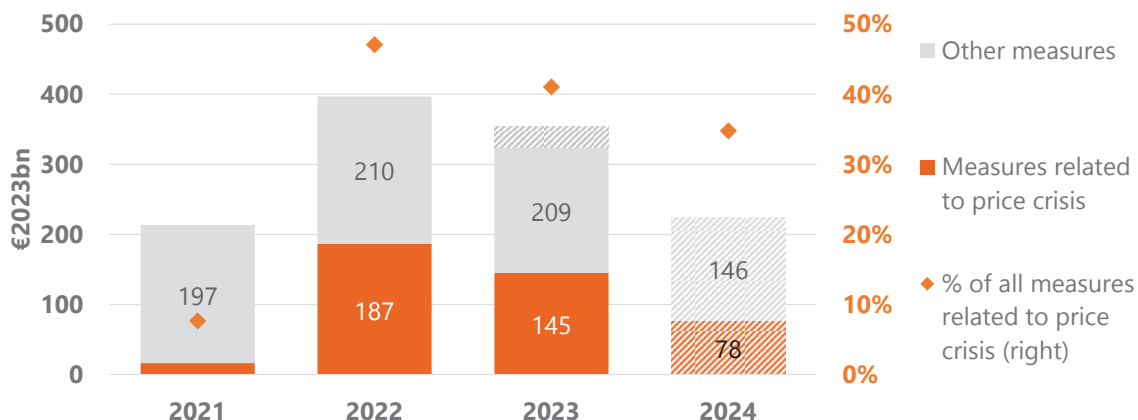


Figure 8). Preliminary figures for 2024 show a significant reduction of the crisis support to EUR 78 bn, as most of the crisis subsidies will expire before 2025 (see also section 2.6).

(12) [REPowerEU: Affordable, secure and sustainable energy for Europe](#)

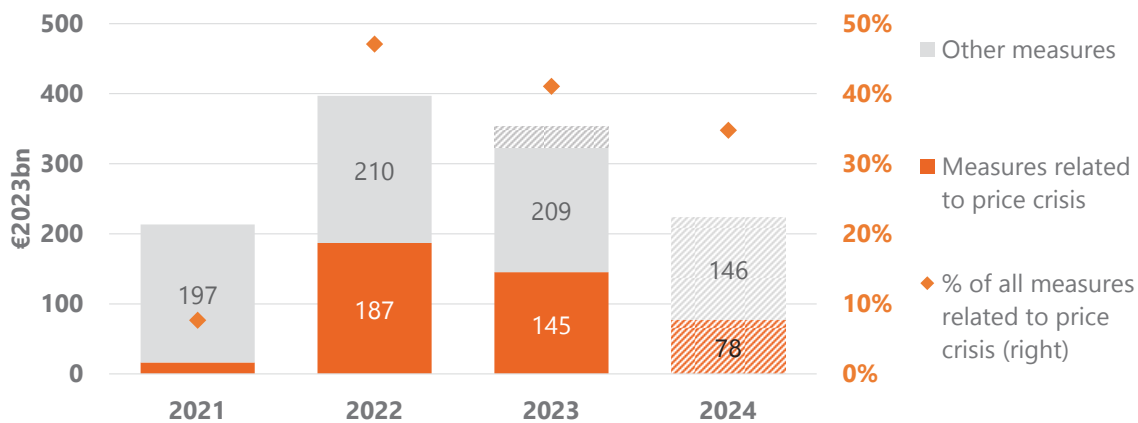


Figure 8: Structural and energy crisis-related subsidies (left); share of crisis subsidies in total energy subsidies (right, %)

Source: Enerdata, Trinomics, 2024. Figures for 2024 are based on preliminary data.

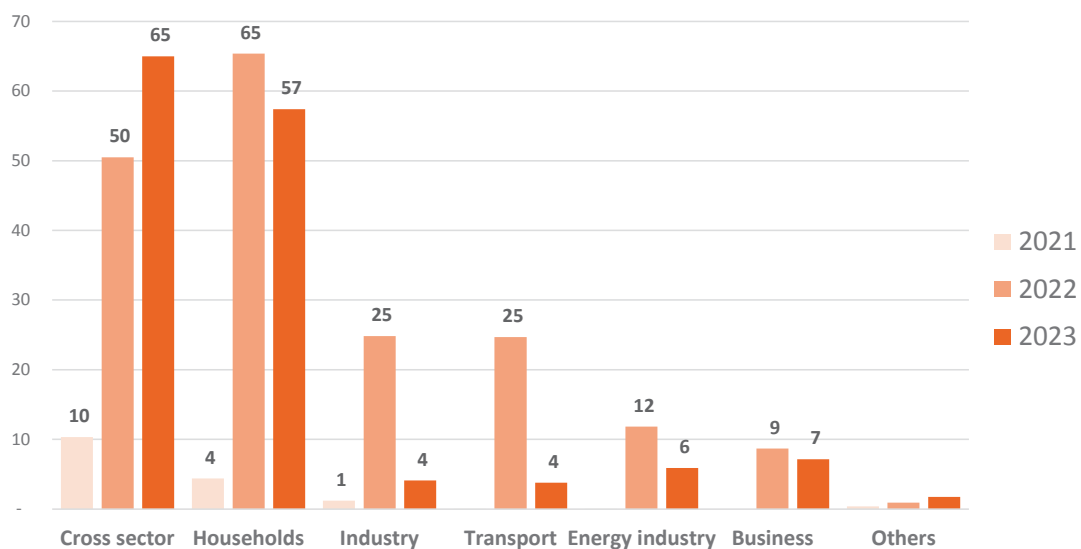


Figure 9 shows that most of the sectoral **targeted** crisis subsidies were aimed towards *households* (EUR 65 bn in 2022 and 52 bn in 2023), followed by *industry* and *transport* (EUR 29 bn respectively in 2022-23), while other sectors, such as *energy industry* or *businesses*, received significantly less (EUR 18 and 16 bn in total, respectively). EUR 64 bn was provided through **untargeted** or cross-sectoral subsidies.

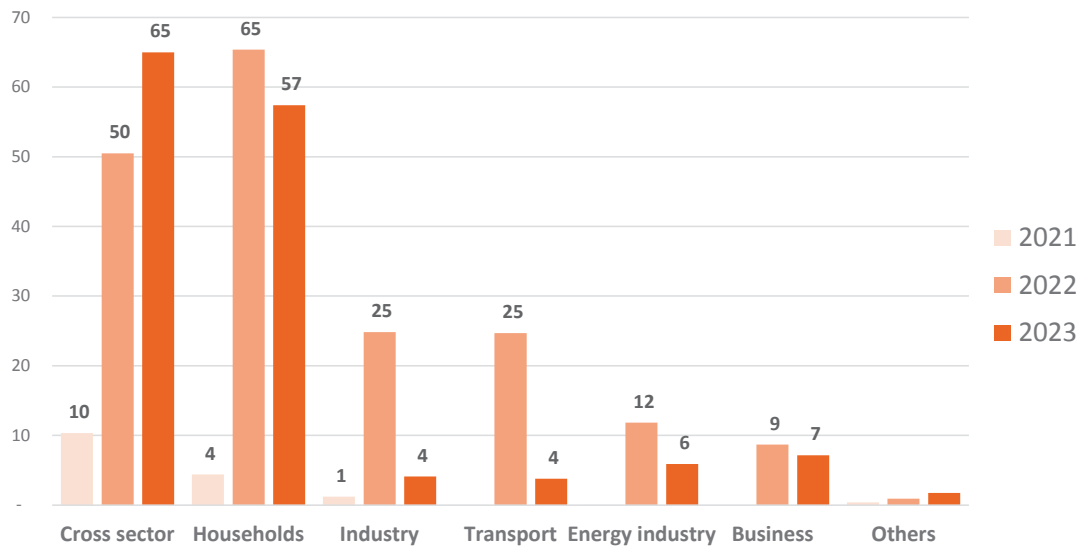


Figure 9: Distribution of subsidies addressing the energy crisis (EUR₂₀₂₃bn)
Source: Enerdata, Trinomics, 2024

The 2021-2022 energy crisis was mostly characterised by sudden, large increases in the price of *electricity*, *natural gas* and, to a lesser extent, *crude oil* and refined products. The support provided to *electricity* increased the most and reached EUR 59 bn in 2022 and remained essentially at the same level in 2023, despite a significant fall in wholesale and retail prices

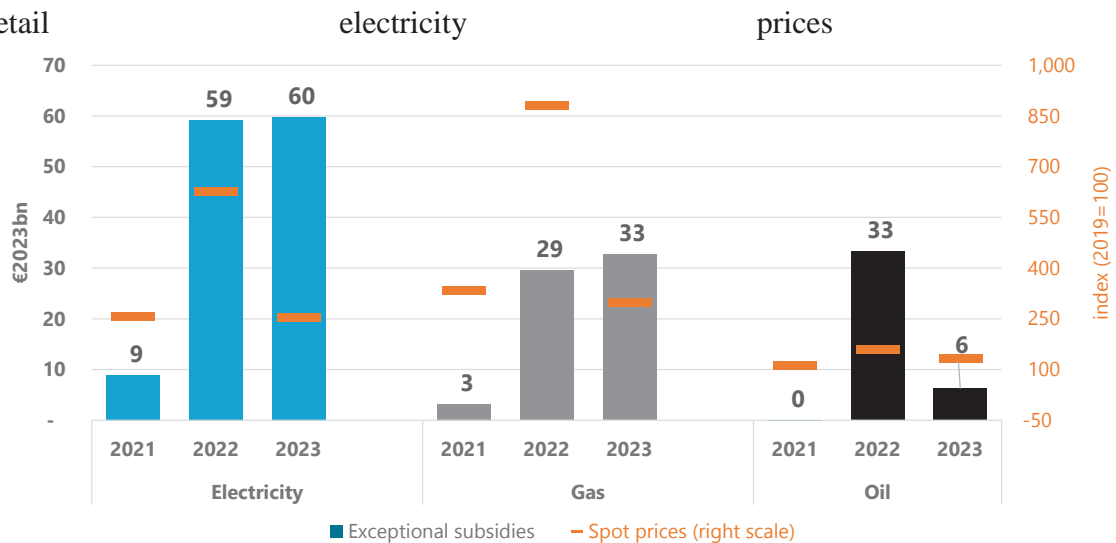


Figure 10, left). Exceptional subsidies for natural gas (

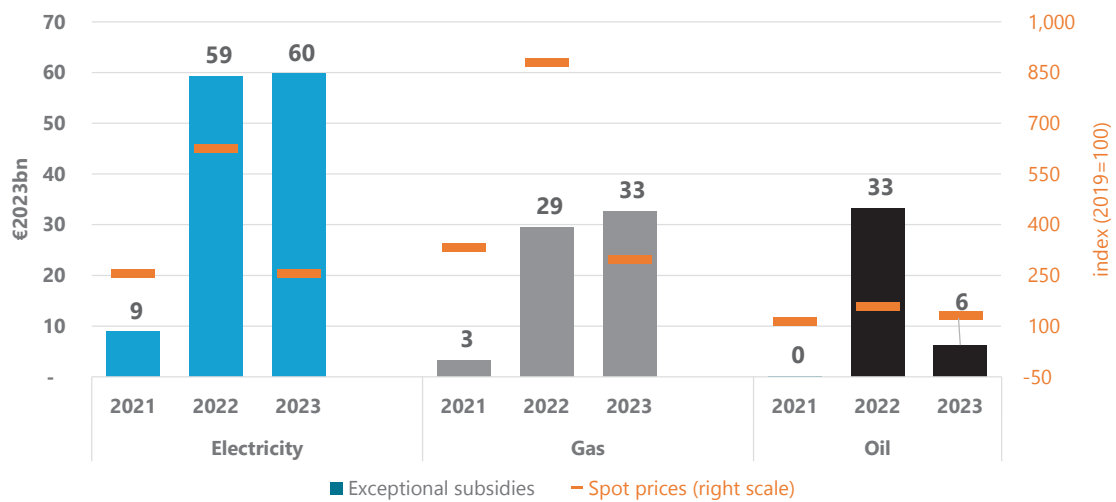


Figure 10, centre) were much lower (EUR 29 bn in 2022), but also remained at the same level in 2023, despite lower wholesale gas prices.

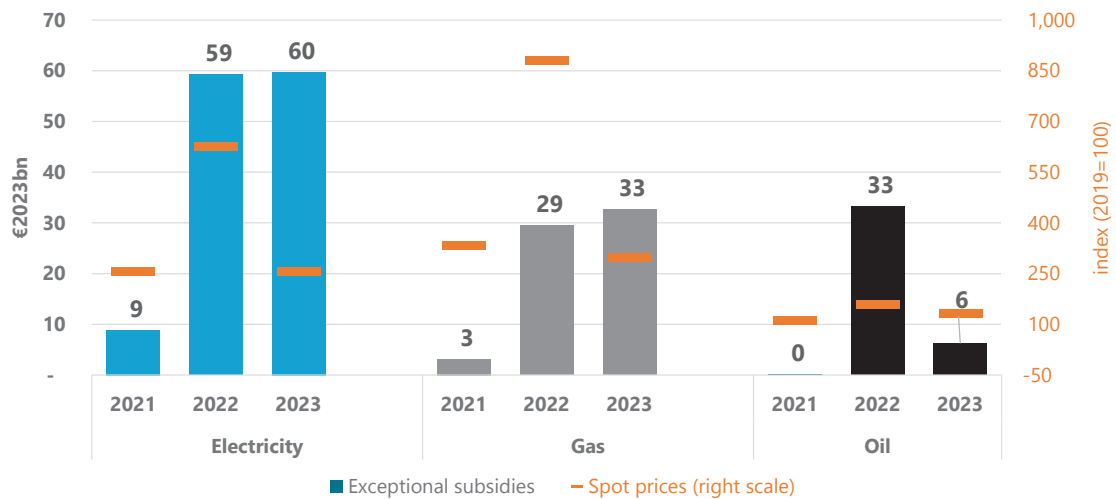


Figure 10: Crisis subsidies by energy carrier (left) compared to prices changes (right, %)

NB: Left axis corresponds to the amount of crisis-related energy subsidies (in EUR2023bn) and right axis to the development of spot prices (indexed to 2019). Electricity and gas prices correspond to annual average spot prices for Germany (evolution was similar in other EU countries). Annual average Brent prices were considered for oil.

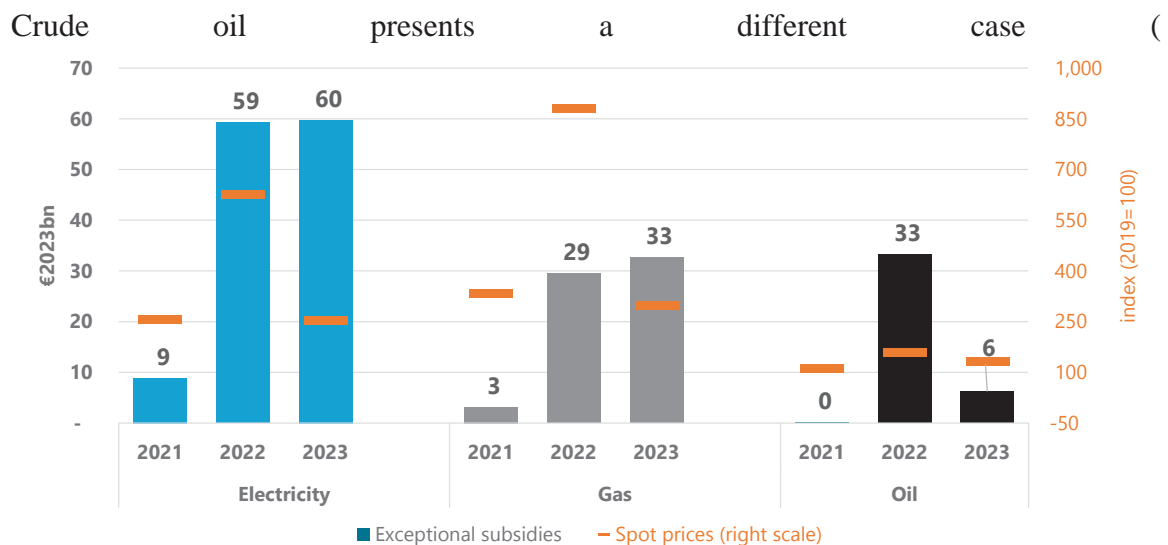


Figure 10, right), as the benchmark Brent prices did not increase as much as gas and electricity prices. Exceptional support for oil reached EUR 33 bn in 2022, but, in contrast to electricity and gas, these aids fell sharply in 2023, to EUR 6 bn, as oil prices in global markets decreased and exceptional support measures targeting oil products (e.g. VAT decrease for road fuel) were ended.

2.4. Subsidies by economic sector

Historically, the *energy industry* ⁽¹³⁾ was the most subsidised economic sector: between 2015 and 2020, it benefited from more than half of all energy subsidies (

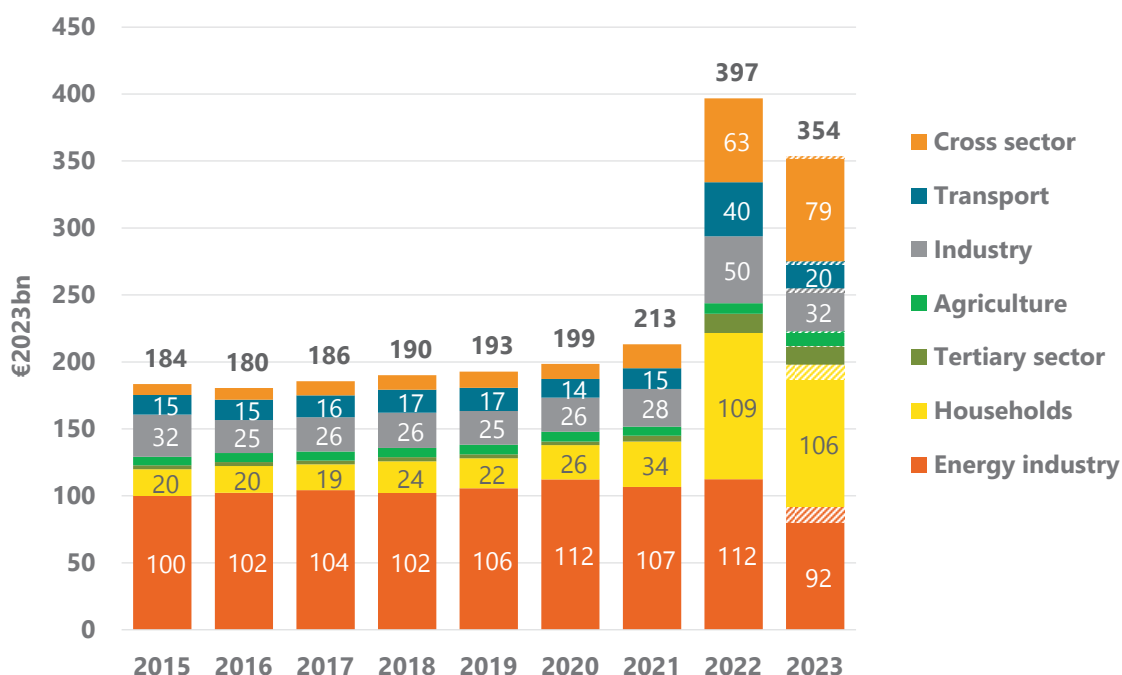


Figure 11). It was followed by *industry*, *households*, and *transport*.

In 2022, the amount of energy subsidies directed towards *households* jumped from EUR 34 bn in 2021 to EUR 109 bn in 2022 (+240%). Support to the *transport* sector increased to EUR 40 bn, while for *industry* reached EUR 50 bn. By contrast, subsidies to the *energy industry* grew by 5% to EUR 112 bn, and its share of total energy subsidies dropped from ~50% to 27% in 2022.

In 2023, energy subsidies to *households* remained stable at EUR 106 bn, while energy subsidies to *transport*, *industry* and the *energy industry* sectors all decreased, to EUR 20 bn, 32 bn and 92 bn, respectively. The amounts allocated to *tertiary* ⁽¹⁴⁾ and *agriculture* sectors were smaller (EUR 14 bn and 11 bn, respectively), together representing about 7% of the total energy subsidies in 2023.

⁽¹³⁾ The term covers energy extraction, conversion, refining, infrastructure, transmission, distribution, storage, waste management and retail. In short, the energy industry.

⁽¹⁴⁾ Tertiary sector covers public services and business sectors.

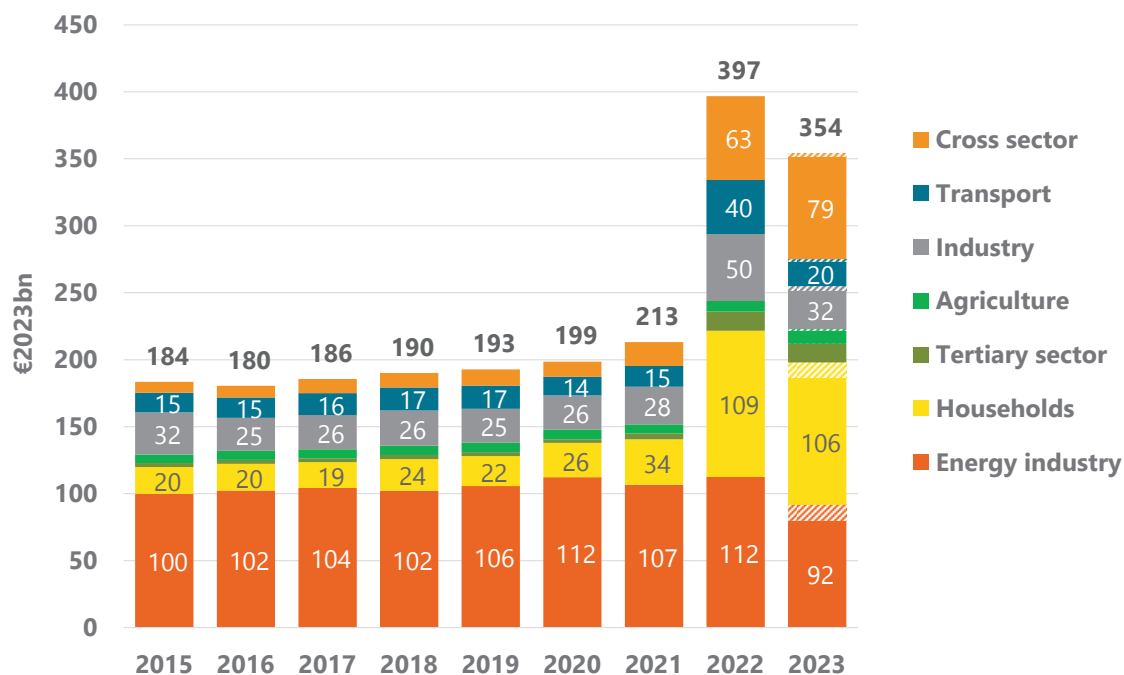


Figure 11: Energy subsidies by economic sector (EUR_{2023bn})
Source: Enerdata, 2024. NB: 2023 estimates are represented with hatching

When looking at the evolution of **FFS distributed by economic sector** (

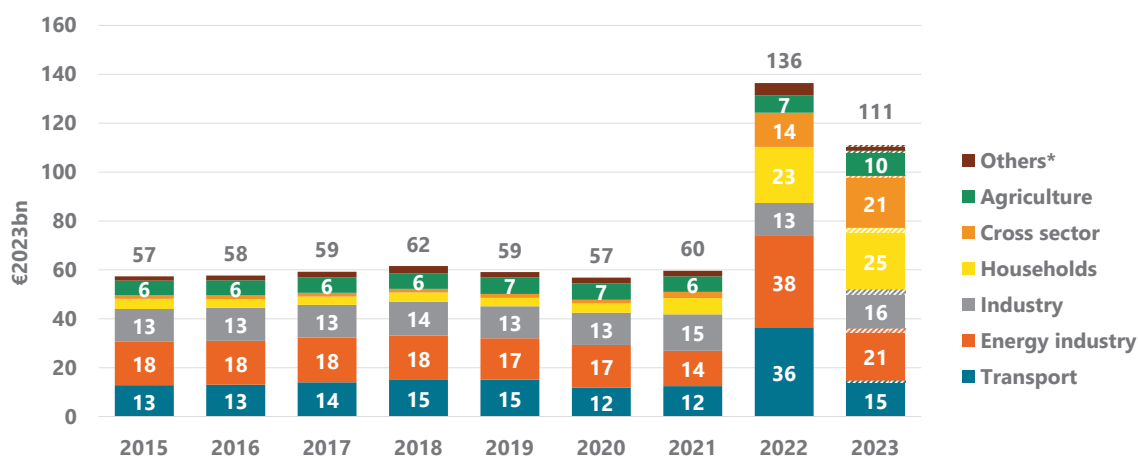


Figure 12), the 2022 increase is mainly caused by large increases in subsidies to the *energy industry* sector (EUR +23 bn) and to *households* (EUR +16 bn) to counteract the effects of the energy price crisis. Fossil fuel support directly attributable to *industry* fell in 2022, although this might have been shifted into the “All energies” category as many industry measures combined electricity and gas support.

It is worthwhile to note that in 2023, the level of support for two sectors, *Transport* and *Energy industry*, have quickly returned to their historical pre-crisis levels, highlighting the temporary nature of related measures. In contrast, *Households* and *Cross sectoral* supports have remained very important in 2023 compared to their historical values, reflecting a delay in the pass-through of lower wholesale energy prices to retail bills and therefore a longer need for continuing support.

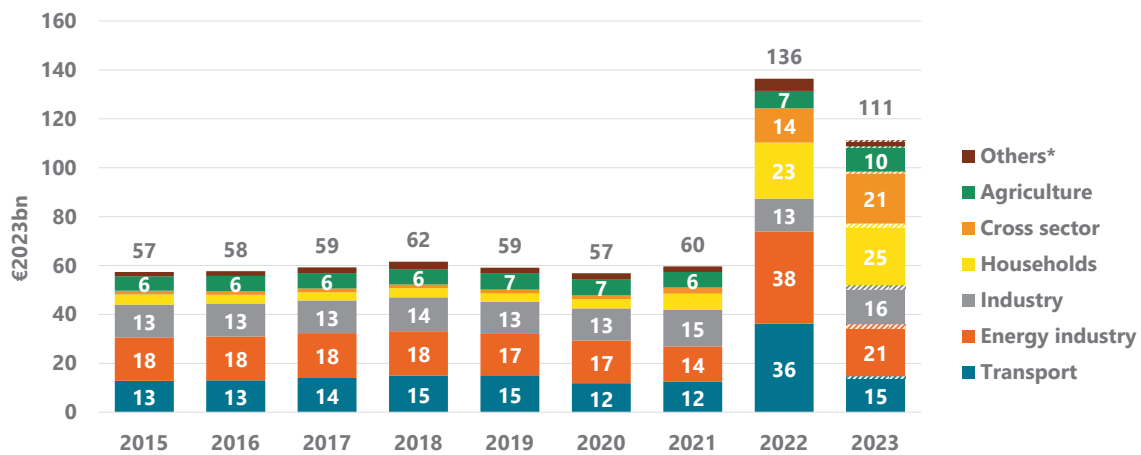


Figure 12: Fossil fuel subsidies by economic sector (2015-2023; EUR2023bn)

Source: Enerdata, 2024. *Others includes construction, services, business, public, and mining sectors. NB: 2023 estimates are represented with hatching

The analysis of **energy subsidies to households** shows that over the period of 2021-2023, 60% of household energy support was intended to counter the impact of rising energy prices and can be directly linked to the energy crisis. Furthermore, as shown on

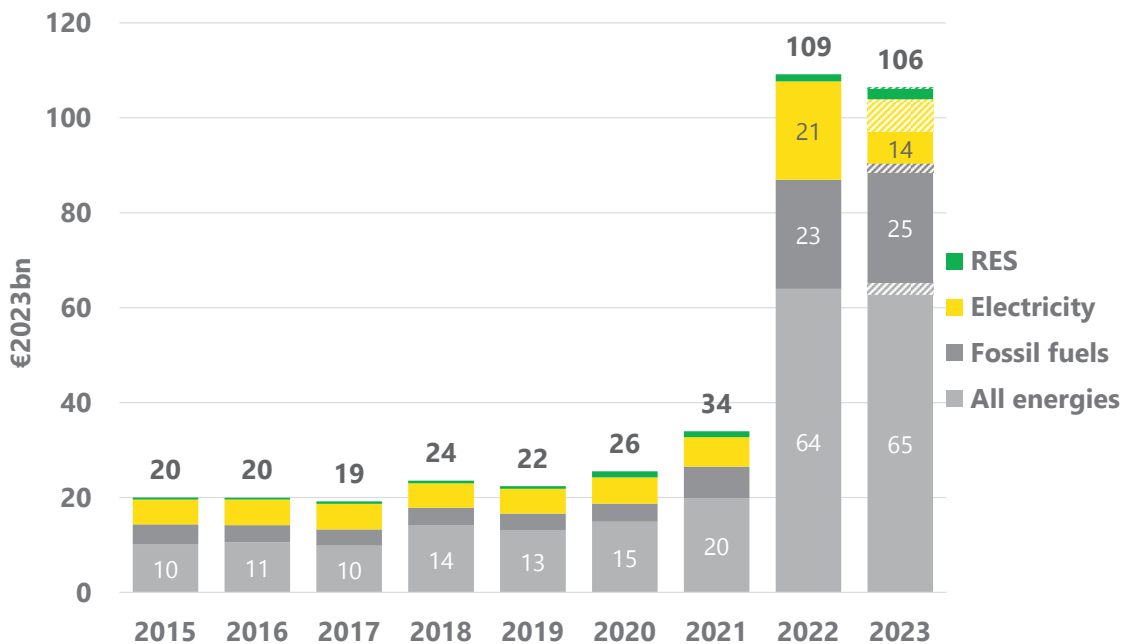


Figure 13, most of this support (EUR 65 bn or 61% in 2023) did not target any specific energy source - denoted as “All energies” on the graph. EUR 25 bn (22%) was allocated towards fossil fuels (mostly natural gas) in 2023, while electricity and RES received only EUR 13 bn (12%) and EUR 2.4 bn (2%) respectively. In this respect, even though effectively shielding household from sudden increases, these subsidies were lessening the price signals coming from the energy markets.

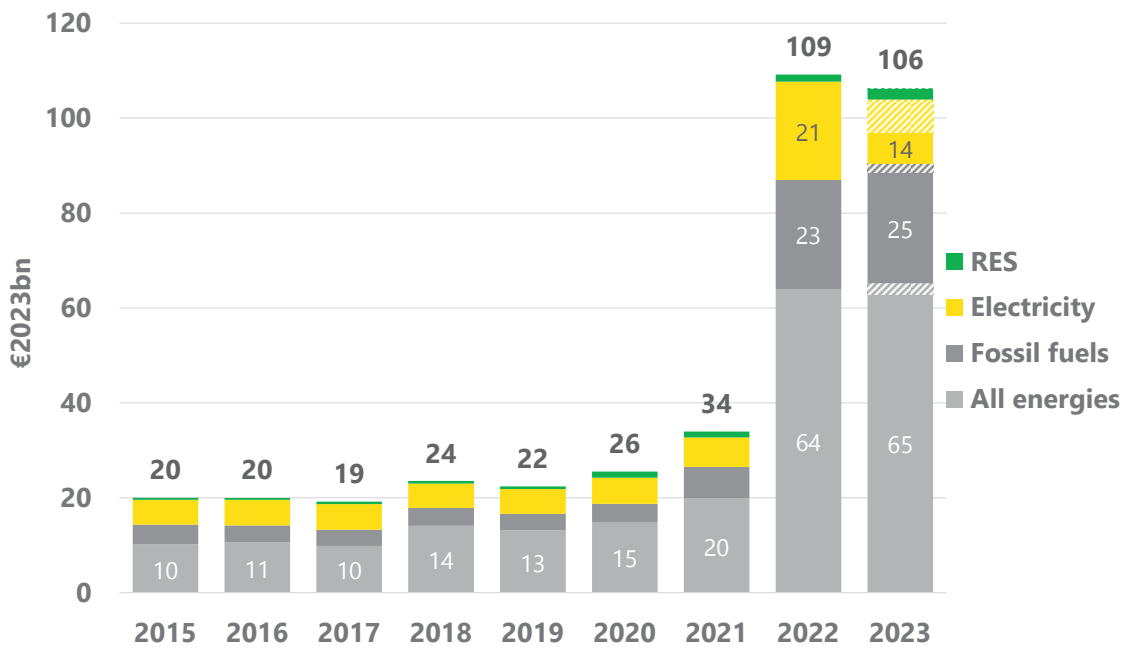


Figure 13: Composition of energy subsidies provided to households (EUR_{2023bn})

Source: Enerdata, Trinomics, 2024

The reason behind this distribution of subsidies to households is linked to the fact that an overwhelming majority of household energy subsidies supported energy consumption: 80% in 2022 (EUR 87 bn) and 71% in 2023 (EUR 75 bn). At the same time, energy efficiency measures for households (that would favour electrification, local RES production and storage) received only EUR 21 bn in 2022 and EUR 29 bn in 2023.

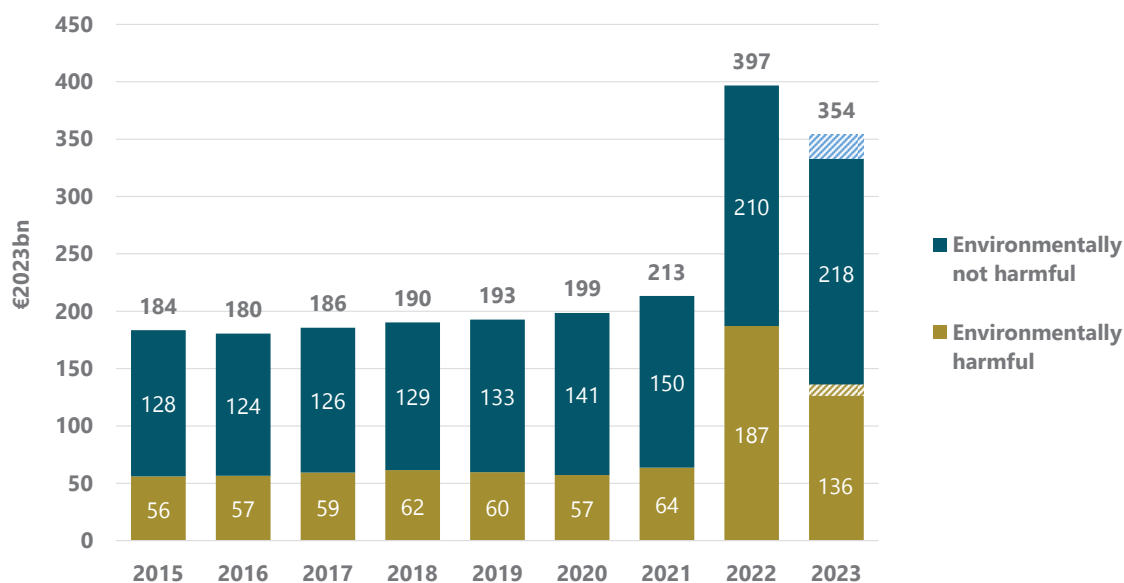
2.5. Subsidies by environmental impact

This report attempts to provide the first comprehensive assessment of *energy subsidies* in the EU for their environmental impact. In this context, the following definition was adopted:

Energy subsidies are environmentally harmful if the price or cost reduction that they bring about maintains or increases the availability or the use of energy sources that cause significant negative environmental impacts.

The term “*significant negative environmental impacts*” was inspired by the EU Taxonomy regulation, focusing on the two climate objectives, namely (1) climate change mitigation, and (2) climate change adaptation. Assessing the four other environmental criteria in the Taxonomy Regulation will require additional work in the next editions of this report.

As can be seen on



Figure

14

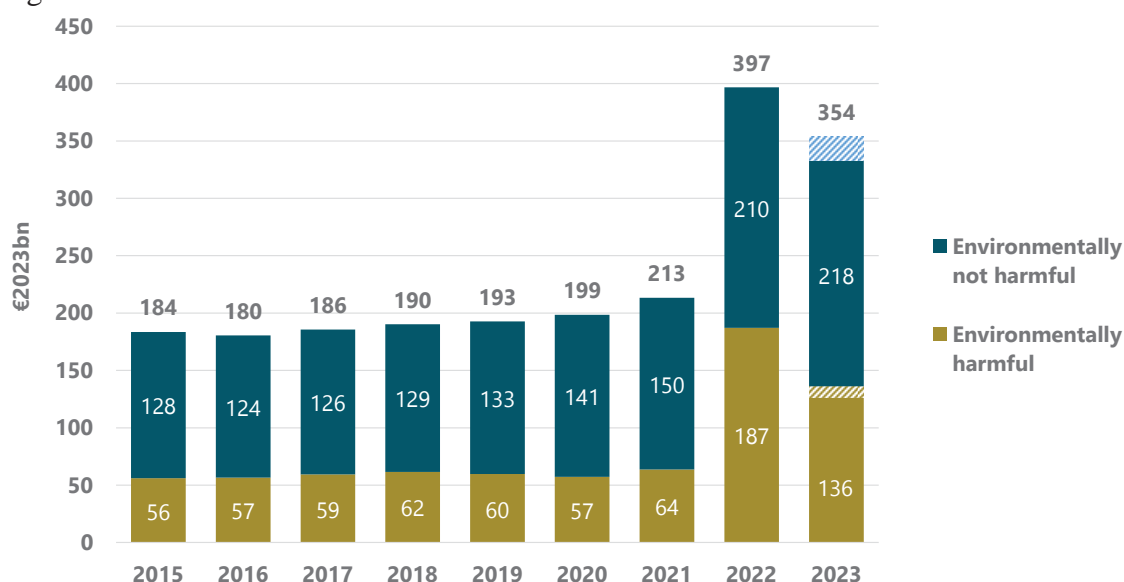


Figure 14, the majority of energy subsidies in 2023, EUR 218 bn (or 62% of the total) was classified as *environmentally not harmful*, while the amount of *environmentally harmful* subsidies was estimated at EUR 136 bn (38% of the total). Energy subsidies considered as *environmentally harmful* were mostly those related to fossil fuels (74%), followed by the “all energies” category (21%) ⁽¹⁵⁾, heat (3%) and electricity (2%) ⁽¹⁶⁾.

There are subsidies that are categorised as “fossil fuel subsidy” and “not environmentally harmful” – typically these are linked to measures such as covering the cost of closing coal power plants, to rehabilitating former mine sites or to social measures.

⁽¹⁵⁾ If energy subsidies did not target any specific energy carrier (i.e. “all energies”), the weight of fossil fuels in each Member States’ energy mix, expressed as %, based on Eurostat data for 2022, was used to determine the environmentally harmful portion.

⁽¹⁶⁾ The overwhelming majority of subsidies to *electricity* is considered as not harmful. The exception is when the subsidy is clearly linked to electricity generated from fossil fuel sources.

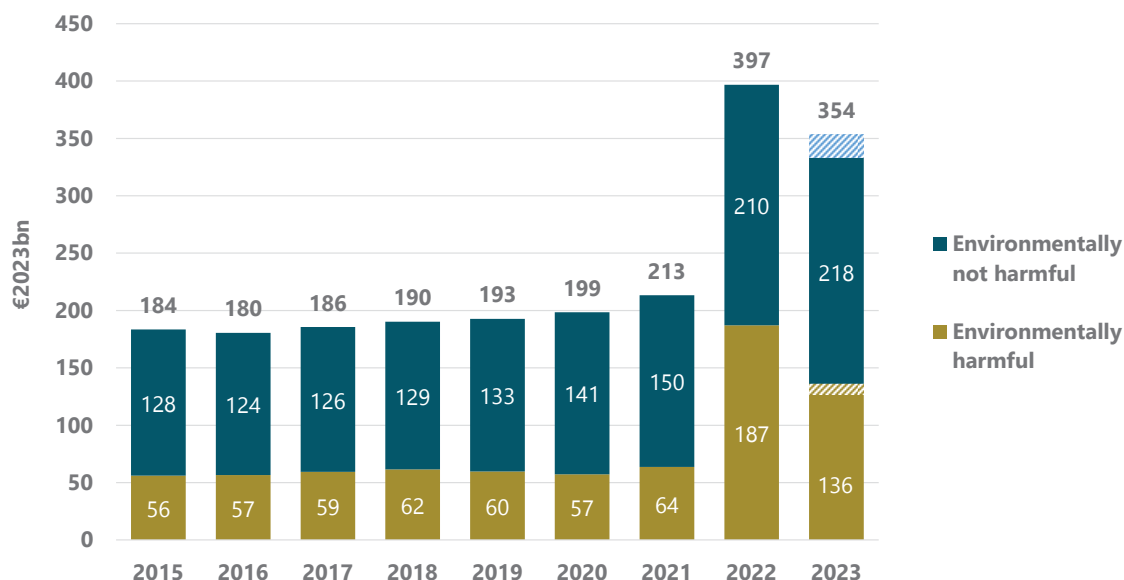


Figure 14: Energy subsidies by environmental impact (EUR_{2023bn})
Source: Enerdata, Trinomics, 2024. NB: 2023 estimate are represented with hatching

2.6. National plans on fossil fuel subsidies

In 2023, 43% of fossil fuel subsidies (EUR 48 bn) had a planned end-date before 2025 and another 9% (EUR 10 bn) had an end-date in the medium term, e.g. between 2026 and 2030 (

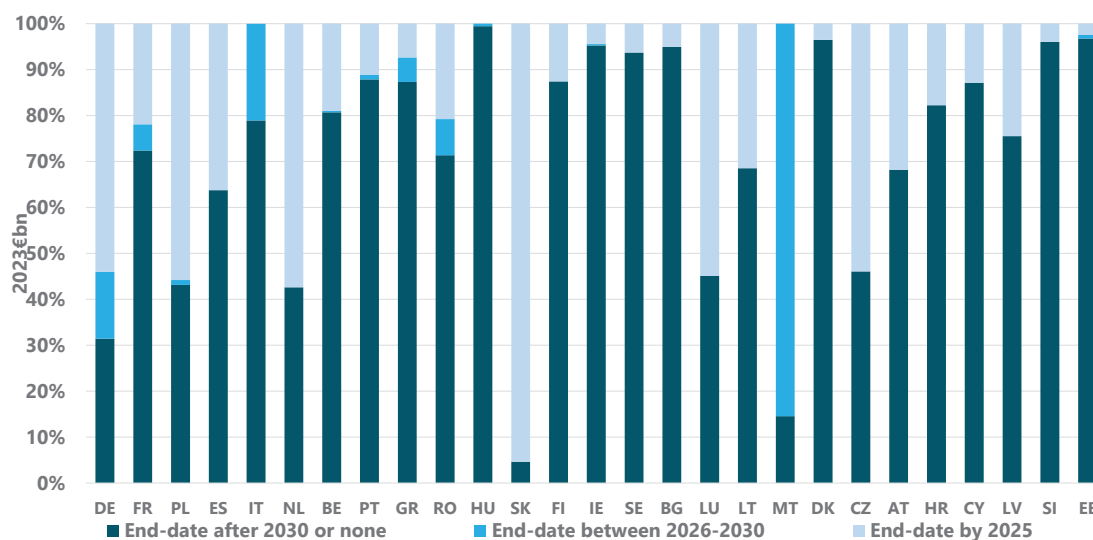


Figure 15). For the remaining 48% of fossil fuel subsidies (EUR 53 bn), there is either no end-date yet or the end-date has been set after the year 2030 ⁽¹⁷⁾.

⁽¹⁷⁾ The analysis is based on the updated annexes VIII and XV of the draft National Energy and Climate Progress Reports from 2023, as well as publicly available updates or announcements.

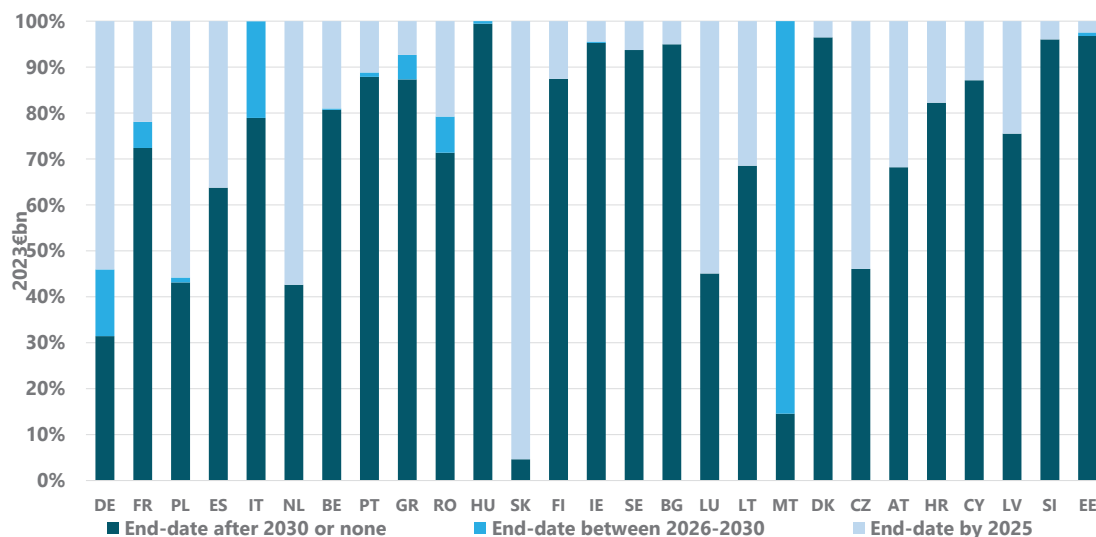


Figure 15: Fossil fuel subsidies by end-date, share of total FFS (% , 2023)

Source: Enerdata, Trinomics, 2024

Many Member States do not provide end-dates of energy subsidy measures, especially for those embedded in their tax code, finance law or national budget. Some measures include a minimum period for the subsidy to remain in place, but the decision whether to continue the subsidy beyond the minimum period is generally left for the future. When end-dates are announced, these are often for short term crisis measures, rather than the longer term “structural” measures.

Almost all EU Member States intend to move away from fossil fuels. However, this could pose a problem in several of them, especially where fossil fuel support, compared to their GDP,

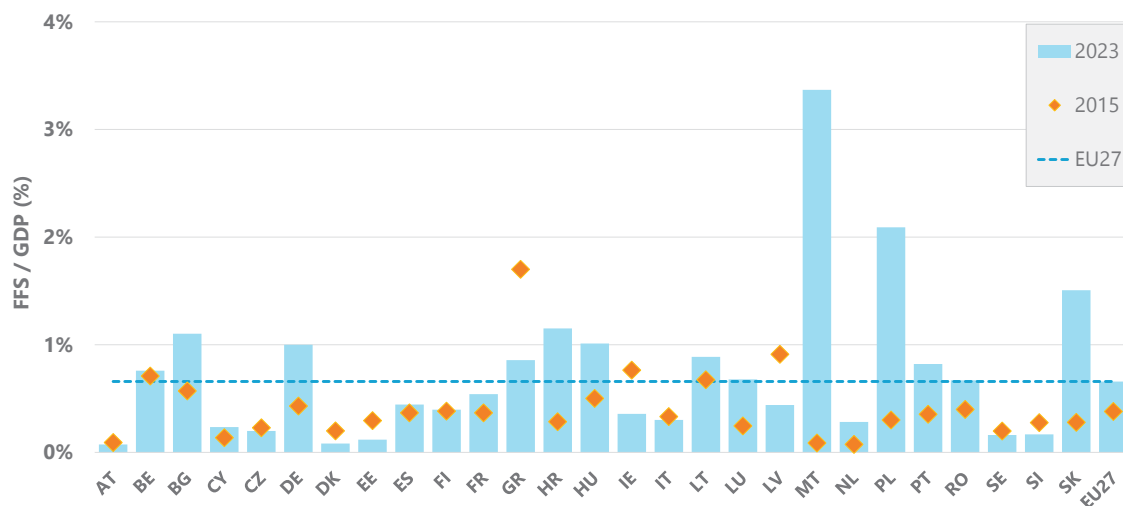


Figure 16).

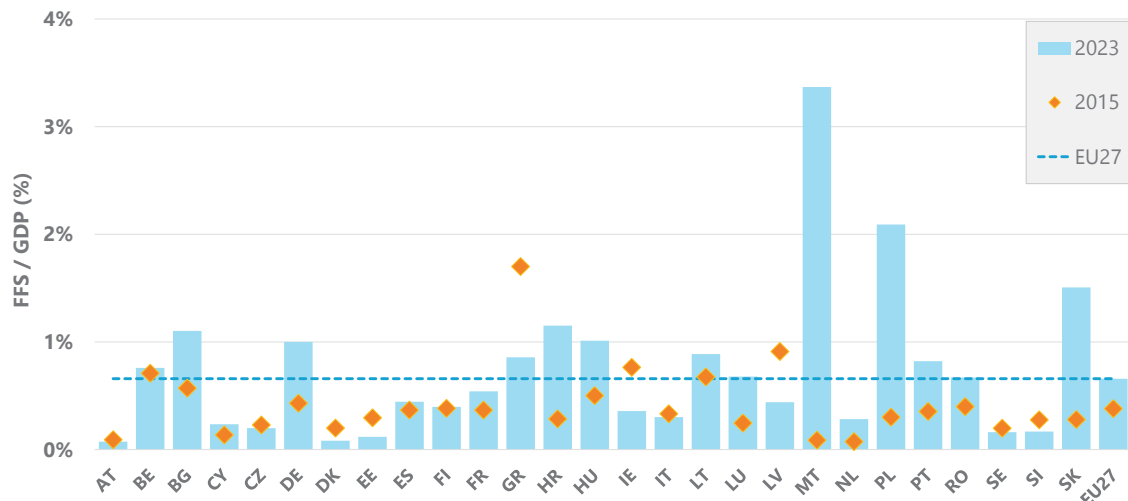


Figure 16: Fossil fuel subsidies compared to GDP (% 2015 and 2023)

Source: Enerdata, Trinomics, 2024

To be consistent with the EU’s collective climate ambition, fossil fuel subsidies need to be progressively phased out, but only Denmark translated this intention into concrete legislation. The information currently available on end-dates for these subsidies makes it evident that the EU is not on track to phase out fossil fuel subsidies consistent with its climate ambitions. Assuming that the lack on an end date means that the subsidy will stay in place, there is an increasing risk of inconsistency with the EU’s climate ambition that will grow over time as we are nearing 2050. More effort and more transparency from Member States is crucial in committing to ending fossil fuel support.

3. CONCLUSIONS

The recent energy crisis made it necessary to take bold policy initiatives in the European Union to mitigate the social and economic impact of the energy crisis. These exceptional measures to address the energy crisis have greatly impacted the trends in energy subsidies, temporarily reversing the recent declining trend of fossil fuel subsidies, while lower costs and higher energy prices resulted in a significant decrease of RES subsidies as they became more competitive. The recent spike in energy prices has also affected the types of measures used to provide the subsidies, the technologies promoted, and the sectors targeted by subsidies; leading to a significantly increase in household and cross-sectoral subsidies since 2022.

It is important to note that despite weakening price signals and providing the wrong incentives for energy use, increased energy subsidies did not lead to an increase in energy consumption in absolute terms. The EU achieved 18% of gas demand reduction over the period August 2022 to May 2024, which resulted in about 138 bn cubic metres (bcm) of gas saved⁽¹⁸⁾. These savings are the combined results of the efforts of Member States, businesses and citizens, coordinated by EU-level action⁽¹⁹⁾, that helped to avoid supply shortages and to ensure security of supply. Nevertheless, as the report shows, subsidies for

⁽¹⁸⁾ Comparing gas consumption in the Aug. 2022 – May 2024 period with the 5-year average. [Source: ‘Eurostat (nrg_cb_gasm)’]

⁽¹⁹⁾ Such as the [coordinated demand-reduction measures for gas](#).

imported fossil energy continue to put a heavy burden on European economies and distort incentives for energy use, often in environmentally harmful ways.

Reducing, reforming or eliminating fossil fuel support is identified as a priority for the new Commission. The mission letter to Commissioner Jørgensen ⁽²⁰⁾ explicitly mentioned the need to create a framework to further scale down and phase out the use of fossil fuel subsidies as part of the work to reduce Europe's dependencies. This framework needs to be part of a common effort between the European Commission and Member States to reduce Europe's dependencies on imported fossil fuels and on costly public interventions to protect energy users from volatile prices, in order to facilitate the transition to a clean and competitive European economy.

The 2022 spike in energy subsidies was a reflection of the short-term priority of shielding EU consumers from the energy bills shock. Now it is important that the temporary measures supporting fossil fuels and energy demand are not extended, because this could have long-lasting negative impacts, by reducing market incentives for energy efficiency and renewable energy investments and further locking in fossil fuel dependencies in households and energy intensive sectors. In addition, the continuously growing EU-wide support for energy efficiency investments will be key to reaching our 2030 energy efficiency target and will ultimately increase our energy security and reduce our dependence on imported fossil fuels.

The EU has decisively embarked on an energy transition to achieve climate neutrality by 2050. Under European legislation, there is an agreement to phase out fossil fuel subsidies. Spending public funds on incentives that go against the transition will slow down the transition and make it more costly. Energy savings and reduced reliance on fossil fuels in the residential, power, transport and industrial sectors should help the EU in a variety of ways: (i) reducing imports of fossil fuels; (ii) speeding up the clean-energy transition; and (iii) improving the EU's security of energy supply. The energy transition should therefore bring about a reduction in fossil-fuel subsidies, and a significant redirection in subsidy support to renewables and energy efficiency.

Although the situation on global and European energy markets has greatly improved since 2022, energy prices (like natural gas) remain significantly higher than before and have a negative impact on both European industrial competitiveness and household energy expenditures. This should be yet another reason for replacing fossil fuel technologies by more sustainable solutions and to achieve a significant decline in the consumption of fossil fuels (and their subsidies) in the medium term. Policy considerations for energy affordability may justify temporary measures to support households and industry. However, the energy transition will only succeed if low-carbon and renewable technologies and energy efficiency are rapidly scaled up; therefore, it is essential to increasingly redirect support away from environmentally harmful fossil fuel subsidies.

As indicated already in the Commission's assessment of the draft National Energy and Climate Plans (21), a collective effort by all Member States is necessary to explain how they plan to phase out fossil fuel subsidies and to set a clear and credible timeline for their

⁽²⁰⁾ Ref: [Mission letter to Dan Jørgensen, Commissioner for Energy and Housing](#).

⁽²¹⁾ COM(2023) 796 final

swift phase out, while adopting the ancillary measures needed to protect vulnerable households and safeguard competitiveness.