



# From Climate Objectives to Actions: Proposals of the Spanish White Book on Tax Reform for Energy and Transport

Xavier Labandeira

Universidade de Vigo

Florence, 23 November 2022

## Cop27

### World still 'on brink of climate catastrophe' after Cop27 deal

Experts say biggest economies must pledge more cuts to carbon emissions but hail agreement to set up loss and damage fund

● [A deal on loss and damage, but a blow to 1.5C - what will be Cop27's legacy?](#)

Fiona Harvey in Sharm el-Sheikh

Sun 20 Nov 2022 20.43 GMT



More than 33 million people in Pakistan have been affected by this year's floods, according to the country's climate change minister. Photograph: Nadeem Khawar/EPA

“Since the **EU (is) disappointed that fossil fuel phase-out is not in the text**, we would like them to take leadership and revise their NDCs and **put into plans their fossil fuel phase-out urgently and stop expansion of fossil fuels including oil and gas.** [It's] not enough to **play to the gallery** but act if they really want to save the planet and **not hide behind 2050 net zero targets**” (M. Raman)

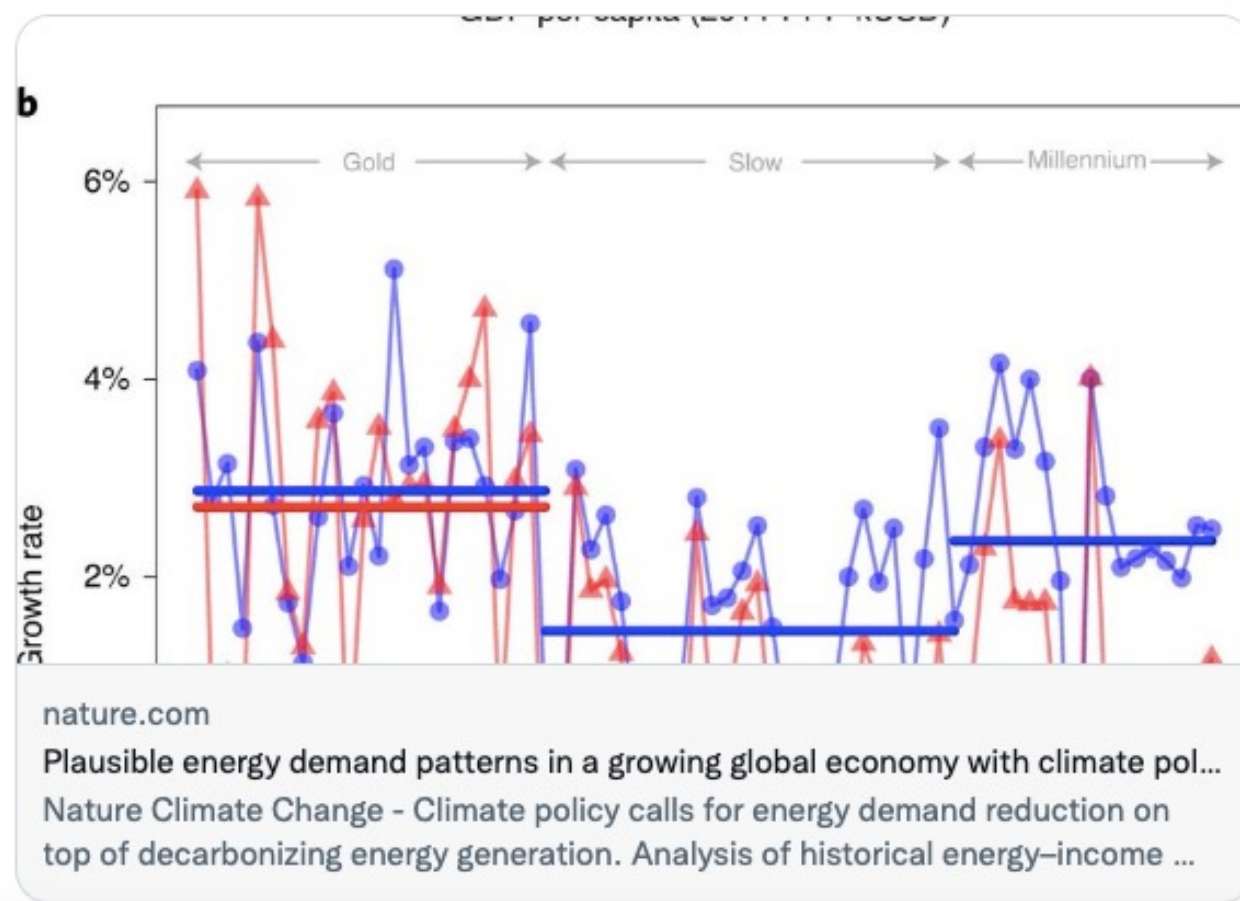


**Navroz Dubash**  
@NavrozDubash

...

3/n Scolding on mitigation progress by EU smacks of duplicity. Absent steep emission declines in rich North or massive additional investment, 1.5 trajectories requires compressing energy demand in poor countries at cost of development as spelled out in

[Traducir Tweet](#)





# LIBRO BLANCO SOBRE LA REFORMA TRIBUTARIA



COMITÉ DE PERSONAS EXPERTAS PARA ELABORAR EL  
LIBRO BLANCO SOBRE LA REFORMA TRIBUTARIA

Madrid, 2022

- **The White Book and its relevance**
  - EU Recovery and Resilience Plan
  - Mandate and team
  - [https://www.ief.es/docs/investigacion/comiteexpertos/LibroBlancoReformaTributaria\\_2022.pdf](https://www.ief.es/docs/investigacion/comiteexpertos/LibroBlancoReformaTributaria_2022.pdf) (A future WP in English)
  - Useful now and elsewhere?

- **Environmental chapter**
  - (environmental) Objectivity
  - No to “sacred cows”
  - No to “fundamentalism”
  - Common approximation
  - Compensations

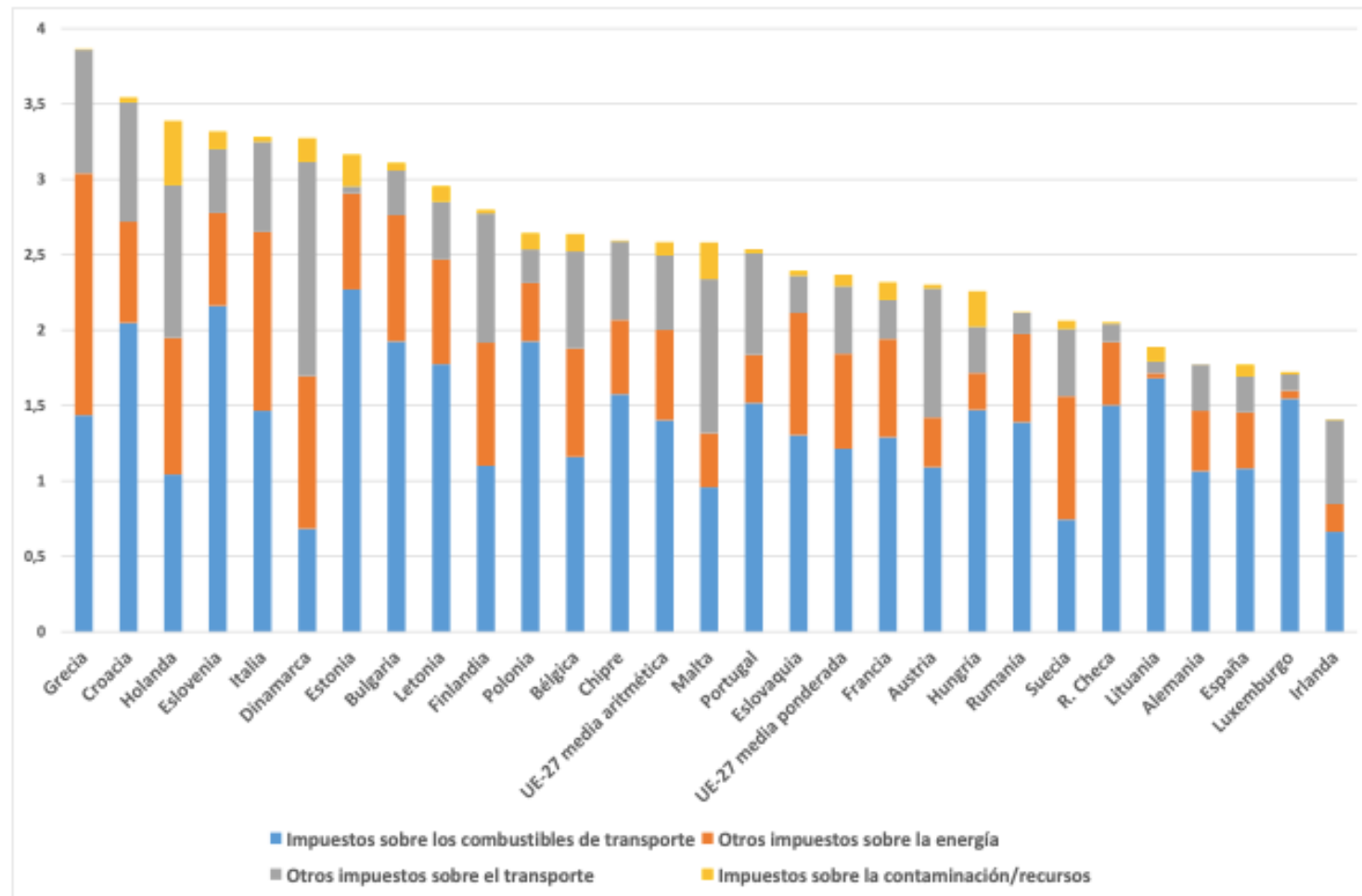
- Realistic and feasible solutions
- Non on a blank page (*reform*)
- Roadmap for policymakers: it does not substitute in-depth exploration
- **Academic method: foundations, evidence and empirical illustration**

- **Foundations**
  - Cost minimisation; promotion of green technologies (vs alternatives)
  - Necessary instrument (not sufficient), essential for ecological transition in market economies



# • Diagnosis

Environmental revenues in relation to GDP. 2019



Source: European Commission (2021c)

- **Principles and guidelines**
  - Environmental Rationale →
  - Consideration of regulatory setting:
    - *'Fit for 55'*
    - Spanish jurisdictional framework

**Table 1. Spanish Environmental Commitments and Current Situation**

Environmental Problem / Reference Year	Target	Latest data
1. Greenhouse Gas Emissions (GHG) / 1990	-23% in 2030	+8,5% (2019)
1b. GHG emissions diffuse sectors/2005	-26% in 2030 (-37.7% in 2030, <i>Fit for 55</i> )	-15,1% (2019)
2. Emissions of Nitrogen Oxides (NOx) / 2005	-41% between 2020-2029 -62% from 2030	-50,3% (2019)
3. Emissions of Volatile Organic Compounds other than Methane (NMVOC) / 2005	-22% between 2020-2029 -39% from 2030	-23,3% (2019)
4. Ammonia (NH3) Emissions / 2005	-3% between 2020-2029 -16% from 2030	-2,8% (2019)
5. Particulate Matter 2.5 (PM <sub>2.5</sub> ) Emissions / 2005	-15% between 2020-2029 -50% from 2030	-8,6% (2019)
6. Energy efficiency (Mtoe)	Primary energy: 122.6 (2020); 98.5 (2030) Final Energy: 87.23 (2020); 73.60 (2030)	Primary energy: 120.75 (2019) Final energy: 86,30 (2019)
7. Weight of waste produced / 2010	-10% in 2020 -15% by 2030	-8,1%* (2018) -6,9%** (2018)
8. Household and similar wastes destined for preparation for reuse and recycling.	50% <u>by</u> 2020	35%*** (2018)
9. Non-hazardous construction wastes destined for preparation for reuse and recycling.	70% in 2020	47%**** (2018)
10. Recovery of the costs of water-related services.	100%	67,9%

**Data sources:** MITECO, *Inventario Nacional de Emisiones a la Atmósfera*; INE, *Estadísticas sobre Recogida y Tratamiento de Residuos*; MITECO, *Memoria Anual de Generación y Gestión de Residuos*; European Commission, *Commission Assessment for Spain's NECP*; Eurostat, *Energy Efficiency*; MITECO, *Síntesis de los Planes Hidrológicos Españoles. WFD Second Cycle (2015-2021)*

**Notes:** \* Amount of non-hazardous and hazardous waste managed; \*\* Amount of municipal waste collected; \*\*\* Weight of waste recycled and composted out of total municipal waste collected; \*\*\*\* Weight of waste destined for recovery and backfilling operations out of total non-hazardous waste.

- Effectiveness: good praxis in tax design
- Priority Areas:
  - ‘Sustainable Electrification’
  - ‘Mobility compatible with ecological transition’
  - ‘Increase in circularity’
  - ‘Recognition of environmental costs associated to water use’

- Distributional and competitiveness compensatory packages
- *Ad hoc* or derived assessment→
- (Actions in other conventional taxes)

## Una compensación justa en la transición verde

XAVIER LABANDEIRA

Para proteger los avances hacia la sostenibilidad se debe minimizar la desigualdad en el reparto de costes de la política climática, dando ayudas no en general, sino de manera selectiva a los más afectados

**E**n las últimas semanas ha quedado claro que el camino a la descarbonización de nuestras economías no será fácil. A pesar de que la población de los países avanzados declara una preocupación creciente por los problemas del cambio climático, se multiplican las protestas ante el aumento de los precios energéticos causados por las políticas climáticas y en algunos lugares empieza a discutirse la acelerada expansión de las renovables. El fenómeno, que empieza a sentirse con fuerza en España, es generalizado; como botón de muestra, el resultado negativo del referéndum suizo del pasado domingo sobre la ley de cambio climático, avalada por casi todas las fuerzas políticas. En la disparidad entre deseos y praxis de la población, sin duda las cuestiones distributivas (quiénes, aparentemente, se benefician y quiénes asumen los costes de la transición) representan un papel fundamental.

No deja de sorprender que la solución a un problema esencialmente distributivo como el cambio climático, causado por las mayores emisiones de los más pudientes y



tuación correctora de la política climática; deben concentrarse exclusivamente sobre los más vulnerables (territorios, sectores y grupos de renta); y deben ser capaces de revertir íntegramente los efectos negativos en el corto plazo y de resolver el problema distributivo en el medio plazo.

No tiene sentido, por ello, retrasar el progreso de la transición manteniendo artificialmente bajos los precios de los productos energéticos, en particular los combustibles fósiles, para proteger a los que menos tienen. Primeramente, porque esto evita que se adopten los cambios de comportamiento e inversión necesarios para la corrección climática, engordando aún más la bola de nieve a la que me referí antes. Por si fuera poco, estas medidas tan burdas acaban beneficiando, con la excusa de proteger a ciertas capas sociales, a los que más tienen por sus elevados consumos energéticos. Precisamente, por eso no tienen sentido estrategias compensatorias generalizadas, de *café para todos*, y urge ser muy selectivo en su aplicación. Entre ellas destaca lo que podríamos denominar *cheque verde*, una cantidad monetaria que sirva para

<https://n9.cl/aumbi>



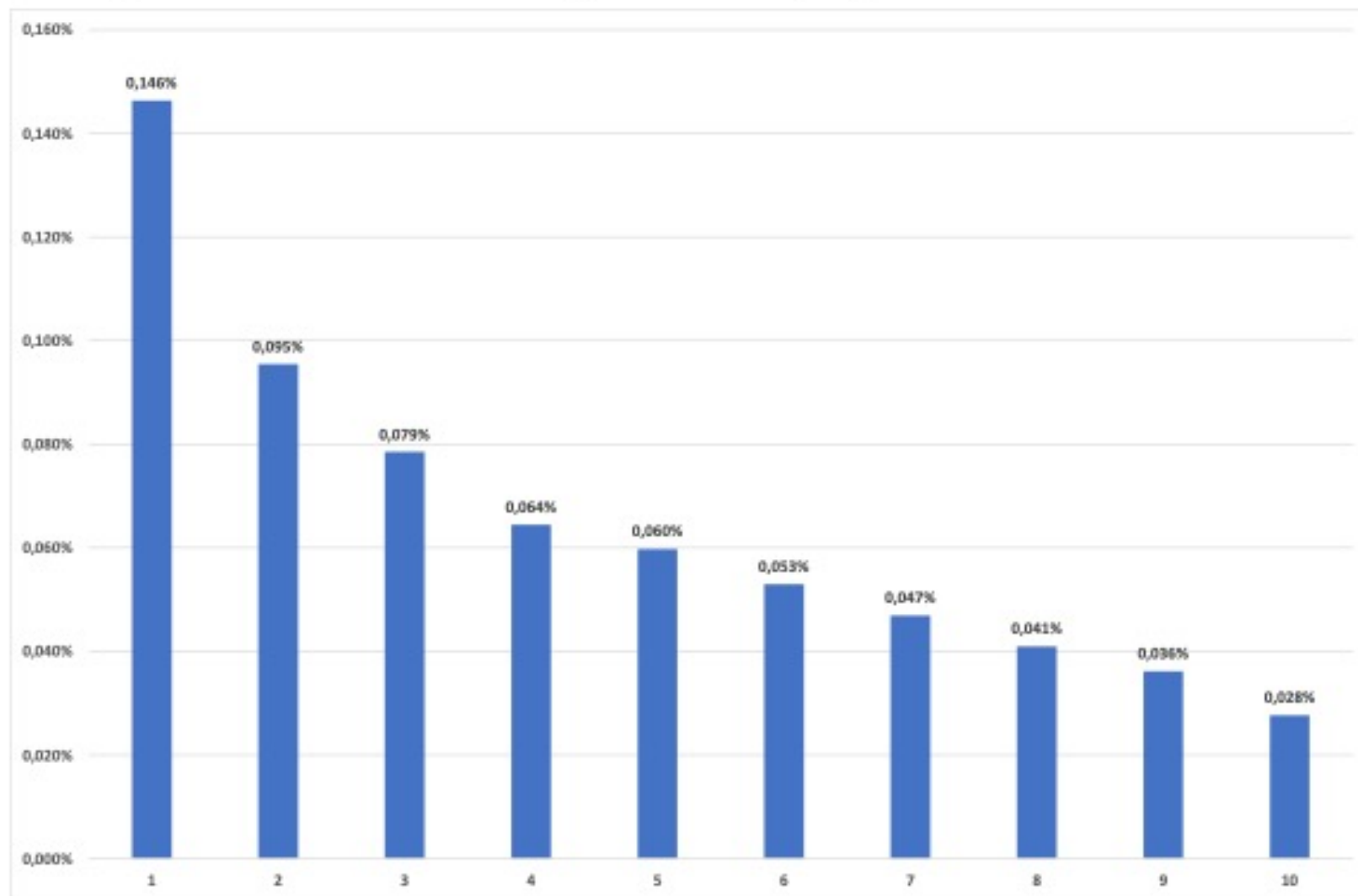
- Assessment
  - Revenue and emissions impacts
  - Distributional impacts and compensations (households)
  - Particularly in electrification and mobility (in other areas, generic or no assessment)

- **Proposals**
- **Sustainable electrification**
  - Why?
  - How? Removing barriers to electrification, but full coverage of environmental costs
  - *Suppression of IVPEE (P1) and reduction IEE (P3)*
  - *Improvement of regional environmental taxes (P2); nuclear charges (R1)*

**Table 3. Impacts on prices, demand and revenues of P1**

	Final price (%)	Demand and CO <sub>2</sub> emissions (%)	Variation in revenues, Millions of euros (% of IVPEE, IEE and VAT revenues)			
			IVPEE	IEE	VAT	Total
<b>Residential electricity</b>	-2,46%	0,50%	-372,31	-15,27	-65,91	-453,48 (-10,1%)
<b>Non-residential non-electro-intensive electricity</b>	-3,74%	0,76%	-468,88	-19,29	-	-488,17 (-44,0%)
<b>Non-residential electro-intensive electricity</b>	-3,74%	0,76%	-286,86	-1,77	-	-288,63 (-83,49%)
<b>Total</b>	-	0,68%	-1.128,04	-36,32	-65,91	-1.230,28 (-20,7%)

**Figure 2. Distributional impact of P1 by equivalent income deciles**



**Note:** Average percentage change in equivalent income by income deciles.

- **Mobility compatible with the transition**
- Why? →
- How? Generalized actions on tax rates on transport modes, fuels and vehicles
- *Taxation of aviation, maritime and agriculture-related fuels (P4)*
- *Equalization of excise taxes on diesel and gasoline (P5)*



[Press room](#) / [Fit for 55: Deal on stricter rules for member states' greenhouse gas emissions](#)

# Fit for 55: Deal on stricter rules for member states' greenhouse gas emissions

Press Releases ENVI Yesterday

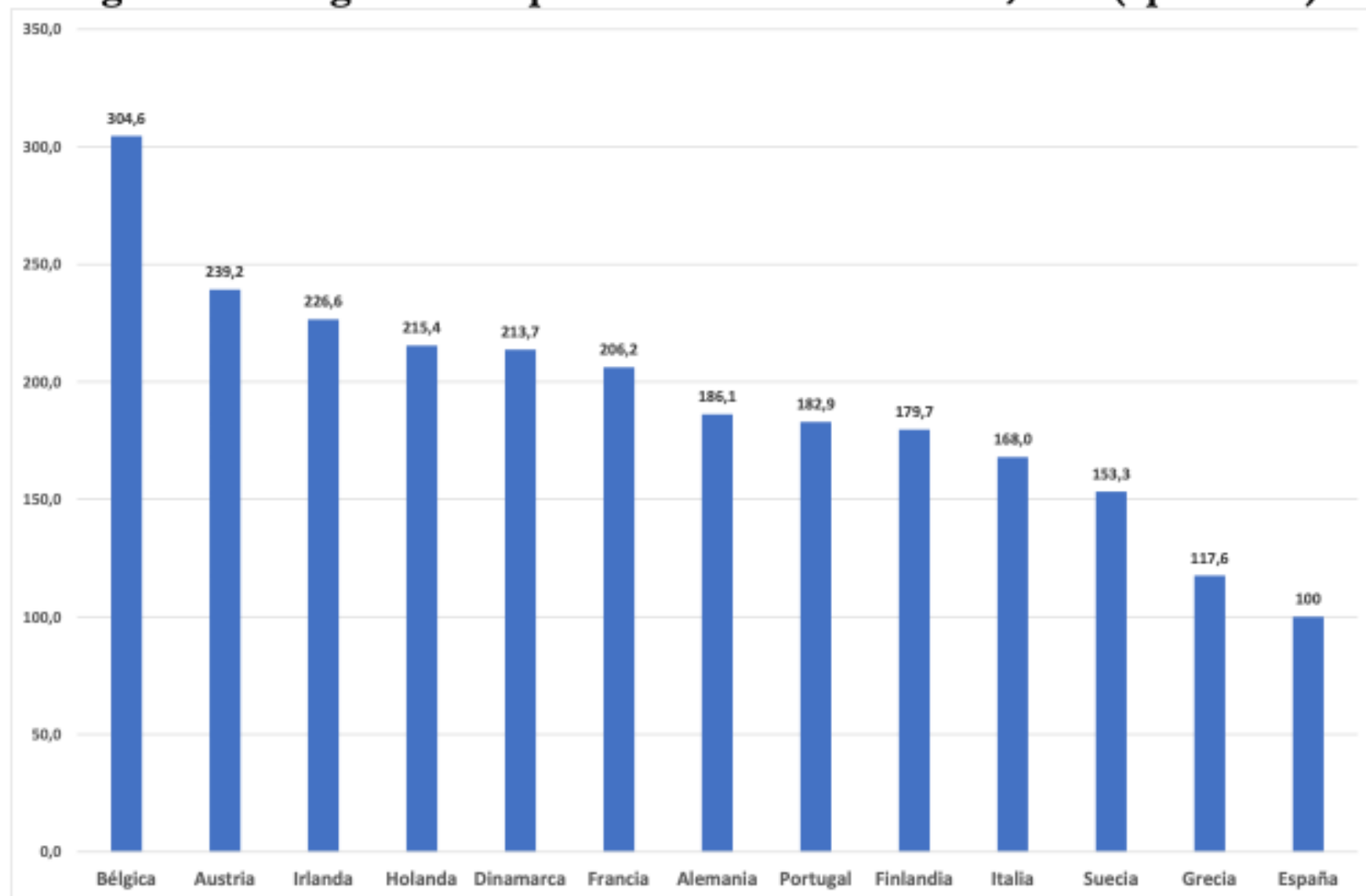


- All EU countries must reduce greenhouse gas emissions in line with a stricter trajectory
- Fewer possibilities to transfer, borrow and bank emission allowances
- More transparency: information on national actions to be made public

**Parliament and Council agree on stricter regulation of greenhouse gas emissions in member states including less flexibility and more transparency.**



**Figure 4. Average revenue per vehicle in EU countries, 2019 (Spain=100)**

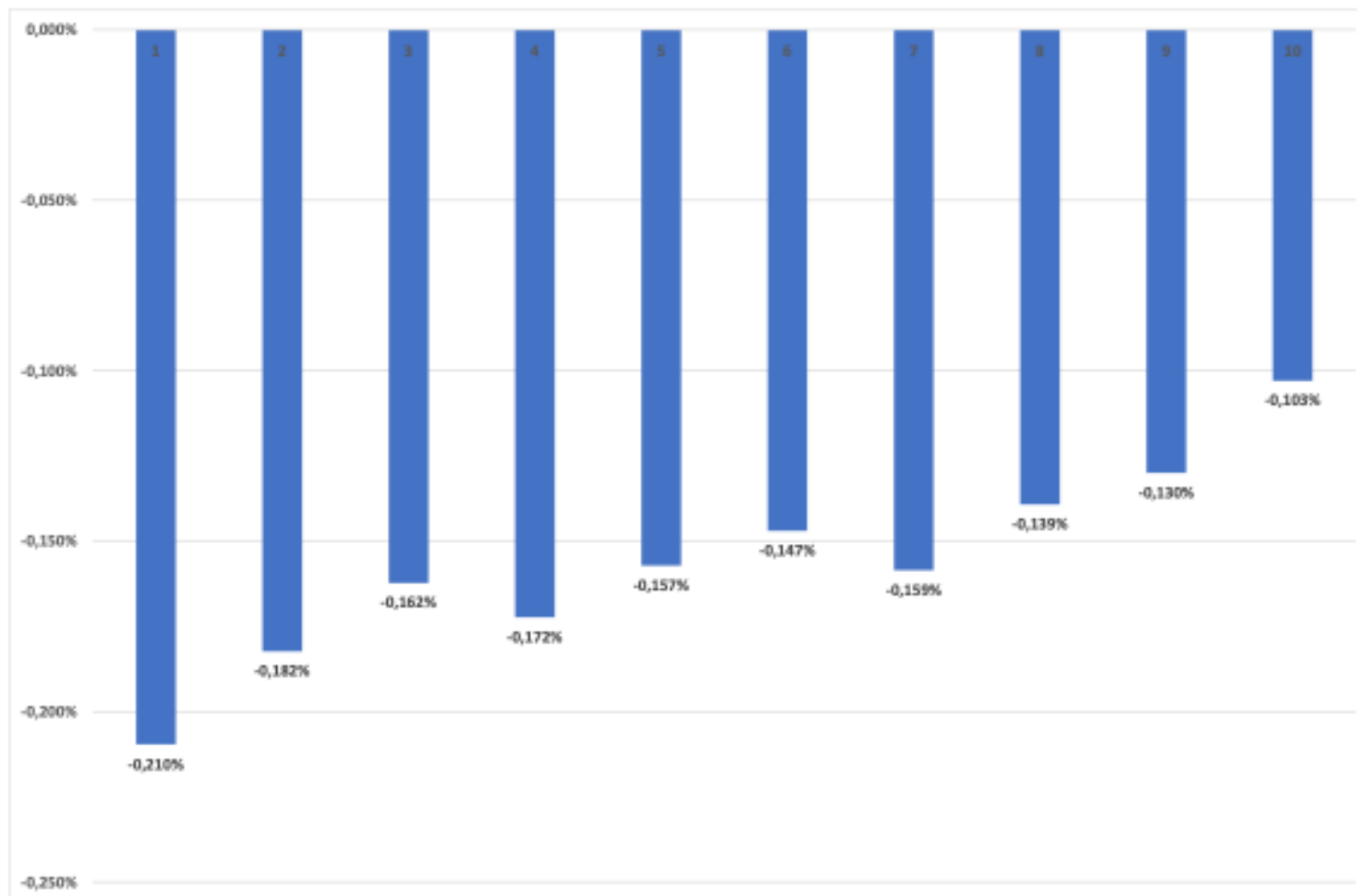


**Sources:** Revenue from motor vehicles (VAT on sales, services and repairs, sales and registration taxes, road taxes, fuel taxes, and others) from ACEA (2021a) divided by vehicle stock from Eurostat (2021d).

**Table 8. Impacts on prices, demand, emissions and revenues of P5**

	Final price (%)	Consumption (%)	CO <sub>2</sub> emissions (%)	Additional revenues (Millions of euros)		
				I.E.H	VAT	Total
<b>Residential diesel</b>	9,34%	-1,88%	-1,88%	1.471	266,24	1.737,24 (17,0%)
<b>Non-residential diesel</b>	9,82%	-1,97%	-1,97%	884,08	-	884,08 (25,9%)
<b>Total</b>	-	-1,65%	-1,60%	2.355,09	266,24	2.621,33 (14,5%)

**Figure 7. Distributional impact by income deciles of equivalent income of P5**



**Note:** Average percentage change in equivalent income by income deciles.

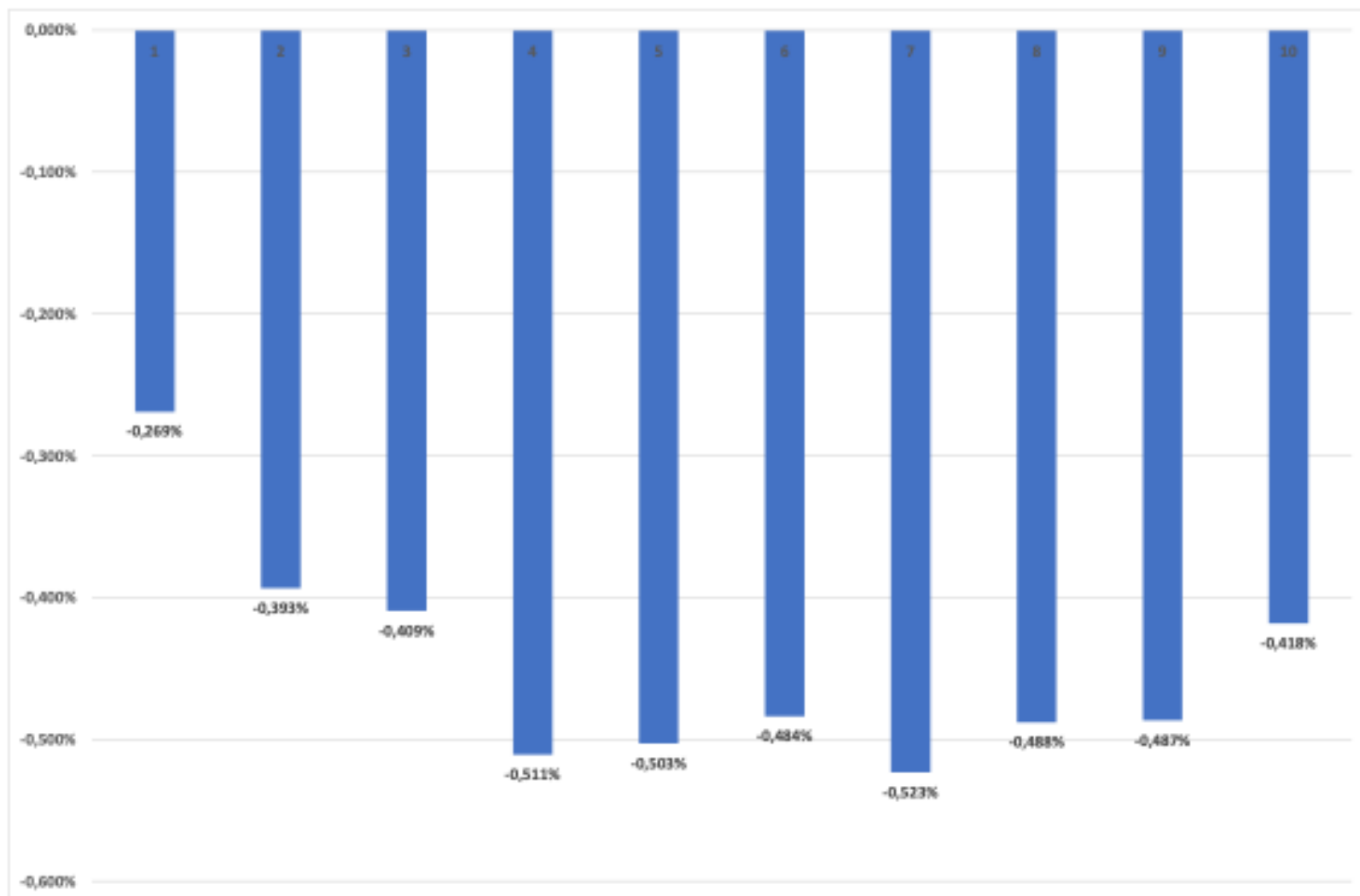
- *General increase in the taxation of hydrocarbons, on natural gas (P6A) and automotive fuels (P6B)*
- (joint analysis with reductions of electricity taxation)

Table 13. Impacts on prices, demand/emissions and revenues of P1, P3 and P6

	Final price (%)	Consumption and CO <sub>2</sub> emissions (%)	Additional revenues (Millions of euros)					
			IVPEE	LEE	I. CO <sub>2</sub>	FNSSE	VAT	Total
Residential electricity	-11,63%	2,36%	-372,31	-731,47	--	-912,12	-318,47	-1.422,25 (-31,7%)
Non-residential non-electro-intensive electricity	-17,37%	3,53%	-468,88	-583,69	--	-1.255,29	--	-1.052,57 (-94,8%)
Non-residential electro-intensive electricity	-14,18%	2,88%	-286,86	-53,60	--	-762,46	--	-340,45 (-98,5%)
Gasoline 95	15,47%	-3,91%	--	-116,63	692,87	311,42	155,37	1.043,03 (23,7%)
Residential diesel	27,76%	-5,58%	--	1.167,48	2.183,67	841,72	753,69	4.946,57 (48,4%)
Non-residential diesel	29,19%	-5,87%	--	713,21	1.300,58	501,32	--	2.515,11 (73,6%)
Residential natural gas	21,81%	-5,28%	--	42,58	503,48	276,64	129,76	952,45 (97,2%)
Non-residential natural gas Non-EU ETS sectors	48,55%	-11,75%	--	218,05	755,03	414,85	--	1.387,94 (2.733,8%)
Non-residential natural gas EU-ETS sectors	22,25%	-5,39%	--	311,72	--	583,91	--	895,63 (1.343,7%)
<b>Total</b>	--	-3,07% -3,90%*	-1.128,04	967,66	5. 435,63	--	720,34	8.925,47 (35,6%)

Note: \*Change in CO<sub>2</sub>

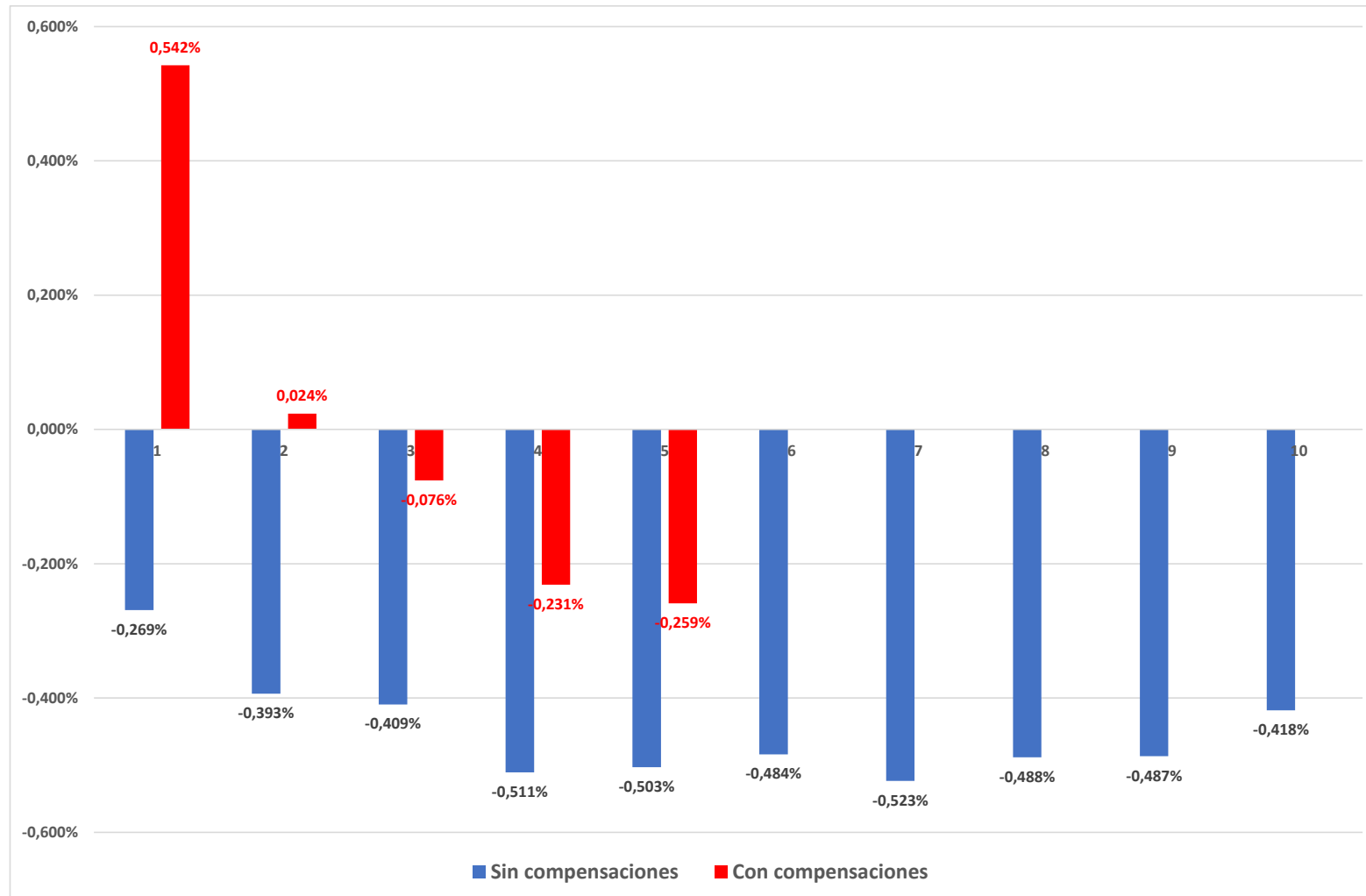
**Figure 15. Distributional impacts by equivalent income deciles of P1, P3 and P6**



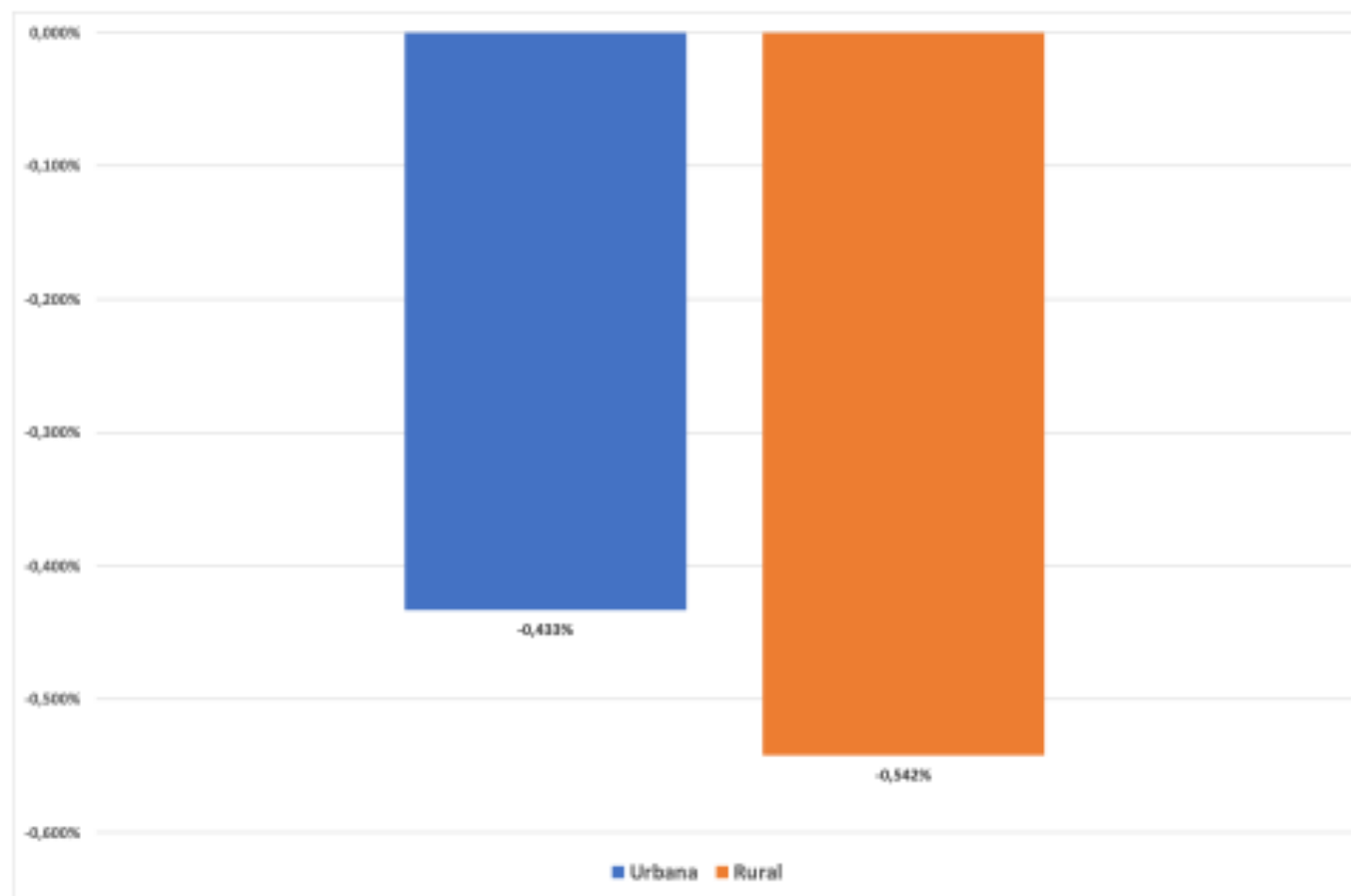
**Note:** Average percentage change in equivalent income by income deciles.



## Compensations through transfers unrelated to prices



**Figure 17. Impact on the equivalent income of rural/urban areas of P1, P3 and P6**



**Note:** Average percentage change in equivalent income by income deciles.

- *Changes in IEDMT to promote a sustainable fleet (P7)*
- *Changes in IVTM to penalize polluting technologies (P8)*
- *Creation of a local tax on (transport) congestion (P9)*
- *New charges for the use of motorways (P10)*

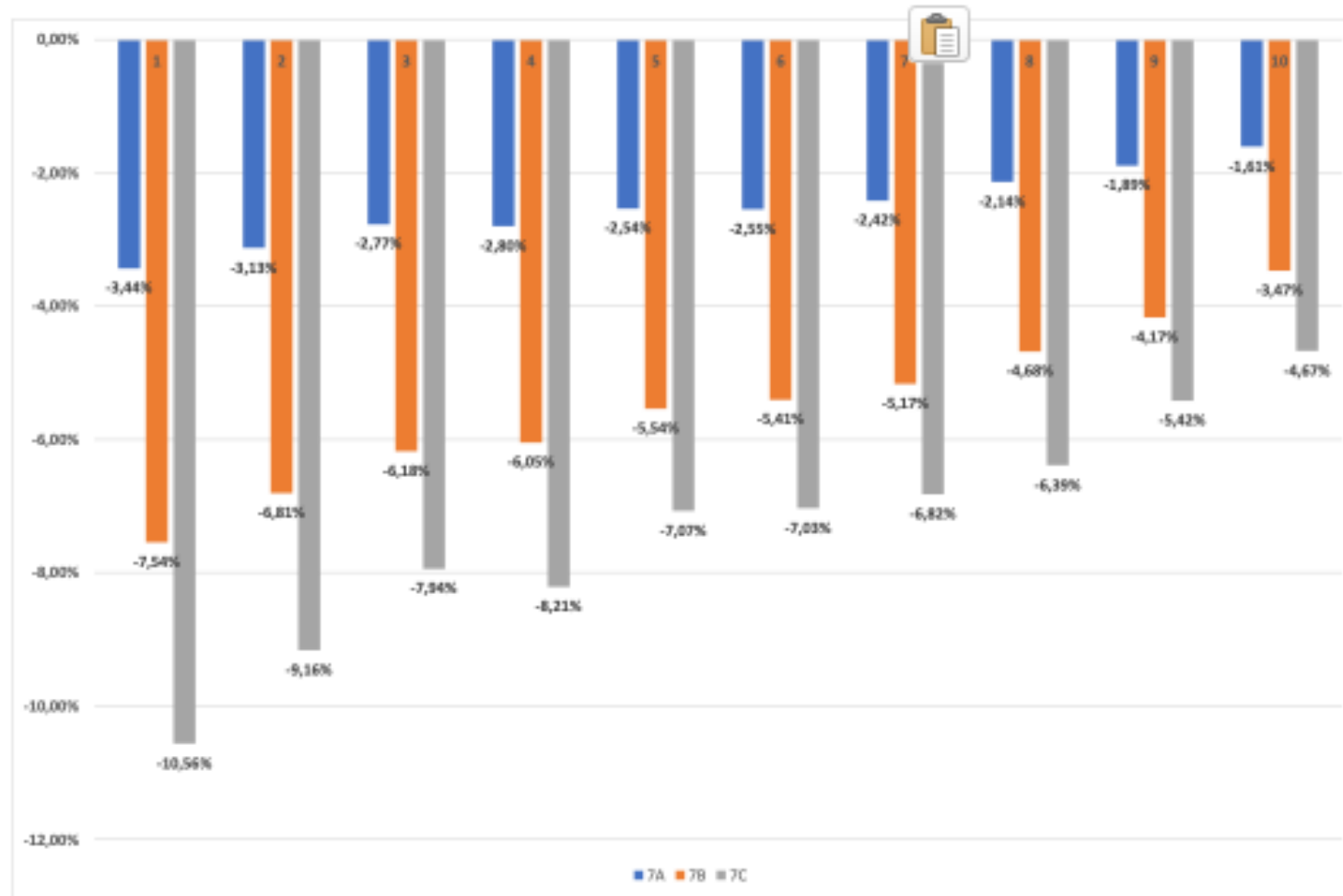
**Table 14. Current IEDMT tax rates and proposals 7A and 7B**

Current (gCO <sub>2</sub> /km <sub>2</sub> )	Current tax rate	Proposal (gCO <sub>2</sub> /km <sub>2</sub> )	Tax rate P7A	Tax rate P7B
≤ 120	0%	≤ 55	0%	0%
> 120-≤ 160	4,75%	>55-≤ 127	0%	5%
> 160-≤ 200	9,75%	>127-≤ 152	5%	10%
>200	14,75%	>152-≤ 175	10%	15%
		>175	15%	20%
		Vehicle weight	Type	
		>1800 kg	10 €/kg additional	

**Table 15. IEMDT as a unitary tax on expected emissions (P7C)**

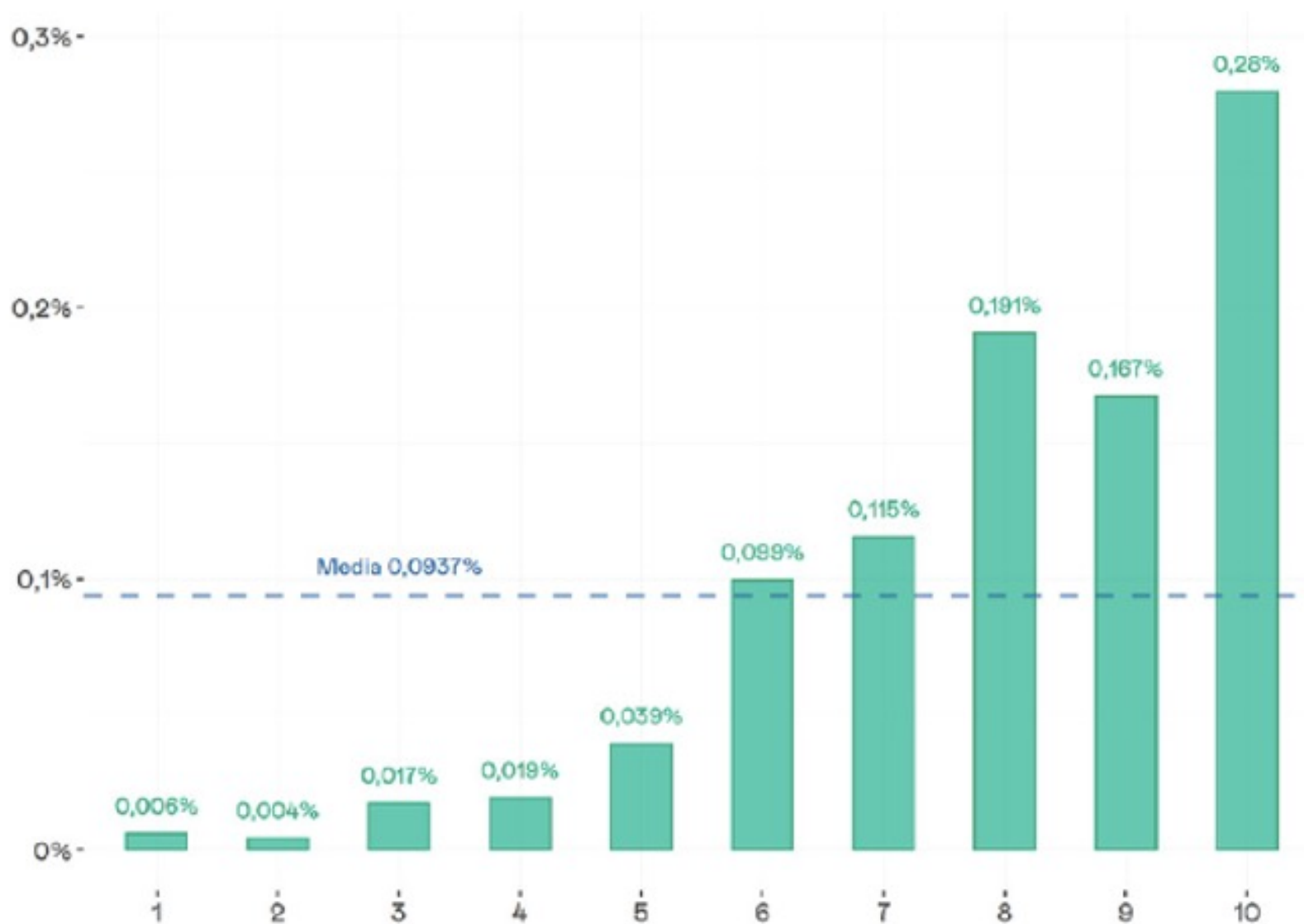
Emissions (g/km)	Tax rate (euros per g/km)
0	-
1-86	0,33
87-111	20
112-155	44
156-172	72
≥173	144
Car weight	Tax rate
> 1800 kg	10 €/kg additional

**Figure 18. Distributional impact of P7A, P7B and P7C by equivalent income deciles**



**Note:** Average percentage change in equivalent income by income deciles.

### Impacts of subsidies to purchase “clean” automobiles by deciles of equivalent income



Datos de Gago et al. (2020a) | EsadeEcPol





MARTES, 5 DE ABRIL DE 2022

🕒 TIEMPO DE LECTURA 5 MIN

**Tribuna de opinión firmada por José López-Tafall, director general de ANFAC; Marta Blázquez, vicepresidenta ejecutiva de Faconauto; José Portilla, director general de Sernauto; José María Riaño, secretario general de Anesdor y Jaime Barea, director corporativo de Gantam publicada en *Expansión* el 5 de abril de 2022**

Imagen diseñada por *Freepik*

La ciudadanía está viviendo un claro proceso de cambio en sus opciones para ejercer el derecho a la movilidad. Como sabemos, este cambio nace vinculado a dos elementos fundamentales: **el desarrollo tecnológico y la transición ecológica y digital**.

En este contexto, donde la reflexión y el análisis riguroso deben adquirir un protagonismo sustancial, acabamos de conocer el contenido del **“Libro Blanco para la Reforma del Sistema Tributario”**, elaborado por el comité de expertos seleccionado por el Gobierno de España. En lo que respecta a nuestro sector, la puesta en marcha de esta iniciativa suponía una oportunidad para aportar certidumbre y definir unas nuevas bases sobre las que avanzar hacia la descarbonización de la movilidad, que es el objetivo compartido por todos. Sin embargo, consideramos que no ha sido así.

Desde nuestro punto de vista, **la reforma fiscal planteada por el comité de expertos parte de una lectura equivocada del proceso y, en consecuencia, ofrece un diagnóstico erróneo y una solución inconveniente, al menos para España**. Se propone una fiscalidad que se limita a incrementar todos los costes de la movilidad para los ciudadanos y compromete la hoja de ruta de la descarbonización asumida por España y la Unión Europea. Más aún, creemos que pone en riesgo el futuro desarrollo de la automoción, un sector que hoy es estratégico para la economía y el empleo de nuestro país.

**«La reforma fiscal planteada por el comité de expertos pone en riesgo el futuro desarrollo de la automoción, un sector que hoy es estratégico para la economía y el empleo de nuestro país»**

- *New developments in road taxation (R3)*
- *Creation of a tax on air tickets (P11)*

LA VANGUARDIA

LOS EXPERTOS DE HACIENDA LO RECOMIENDAN

## Las aerolíneas presionan para frenar el impuesto de 7,85 euros por billete

• Garamendi defiende la ampliación de El Prat y reclama un impulso decidido al Perte del sector



Las aerolíneas presionan para frenar el impuesto de 7,85 euros por billete (Dani Duch)

FERNANDO H. VALLS  
26/09/2022 15:04 | Actualizado a 26/09/2022 15:26

vuelina

AEROLÍNEAS >

## Las aerolíneas denuncian que las nuevas medidas fiscales costarán 11 millones de turistas y 430.000 empleos

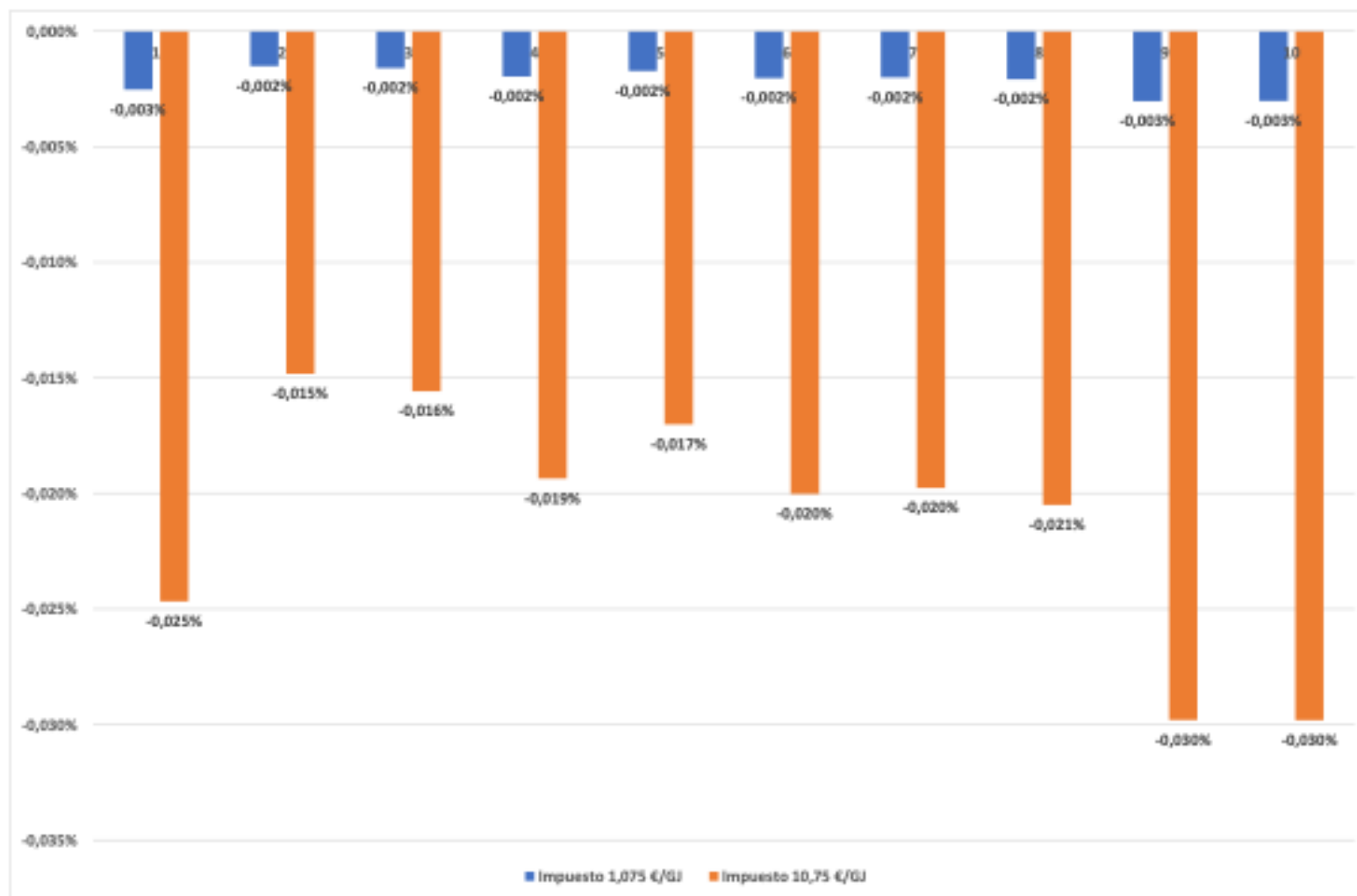
Solo la tasa de 7,85 euros por billete que propone Hacienda disminuiría el gasto turístico en 12.000 millones hasta 2030, según un informe de Deloitte



Un avión de Iberia reposta con queroseno de Cepsa.

RAMÓN MUÑOZ  
Madrid - 26 SEP 2022 - 17:28 CEST

**Figure 6. Distributional impact of P4A by equivalent income deciles**



**Note:** Average percentage change in equivalent income by income deciles.

**Table 19. Potential revenues from a tax on vehicle use**

<b>External costs from vehicle use</b>	<b>Revenues in million euro (% of total)</b>
<b>Congestion</b>	7.114,64 (22,4%)
<b>Local air pollution</b>	2.136,01 (6,7%)
<b>Global air pollution</b>	2. 571,55 (8,1%)
<b>Accidents</b>	13.655,76 (43,0%)
<b>Noise</b>	3.261,08 (10,3%)
<b>Cost of infrastructure</b>	2.994,42 (9,4%)
<b>Total</b>	31.733,45

Sources: Van Essen *et al.* (2019), Schroten *et al.* (2019a), Ministry of Transport (2021a) and MITECO (2021a).

Table 25. Summary of results of environmental taxation proposals

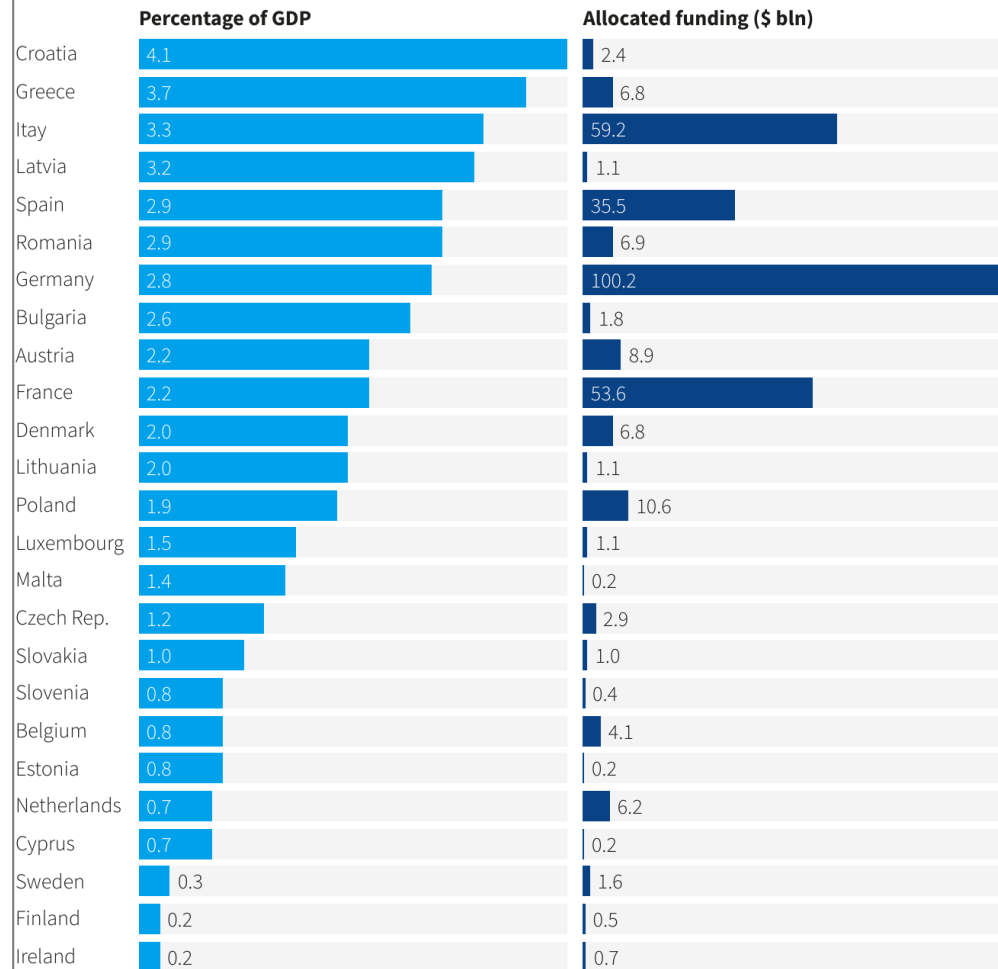
Proposal	Variation in revenues (millions of euros)	Variation in CO <sub>2</sub>	Distributional analysis
<b>P1. Suppression of IVPEE</b>	-1230,2	0,68%	Yes
<b>P3. Reduction of the IEE</b>	-1486,8	0,71%	Yes
<b>P4. Taxation of aviation, marine and agricultural fuels</b>	206,3 to 1.701	-1,52% to -12,90%	No
<b>P5/P6B. Diesel and gasoline taxation</b>	2621,3 to 6850,2	-1,60% to -5,40%	Yes
<b>6PA. Increase natural gas excise</b>	634,1 to 1960,6	-1,56% to -7,53%	Yes
<b>P7. IEDMT Modification</b>	862,6 to 2335,1	ND	Yes
<b>P8. Modification of IVTM</b>	276,0 to 610,8	ND	No
<b>P10. Charges on road infrastructure</b>	1172,8 to 1397,9	ND	No
<b>P11. Taxation of airline tickets</b>	951,8	-5,59%	Yes
<b>P13. Municipal waste tax reform</b>	294,6	ND	Yes
<b>P14. Aggregates extraction tax</b>	426,4	ND	No
<b>P15. Tax on nitrogen fertilizers*</b>	279,9	-16,38%	No
<b>P16. Extension of emissions taxation</b>	932,3	ND	No
<b>Total</b>	5941,1 to 15023,6	ND	--

Notes: Proposals and reflections without evaluation are not included.  
The simulation of P15 includes nitrogen emission reductions.

# U-turn: Spanish responses to the crisis

## Europe's soaring energy bill

Governments' allocated funding to shield households, companies from energy crisis. Data collated since Sept 2021.



Note: estimated numbers also include measures that have been announced by governments but not converted into law yet. Some packages supporting vulnerable households with the cost of living are also included. Measures to shield consumers already in place before September 2021 are not included. Data for France, Italy and Lithuania were recalculated on 19 September 2022.

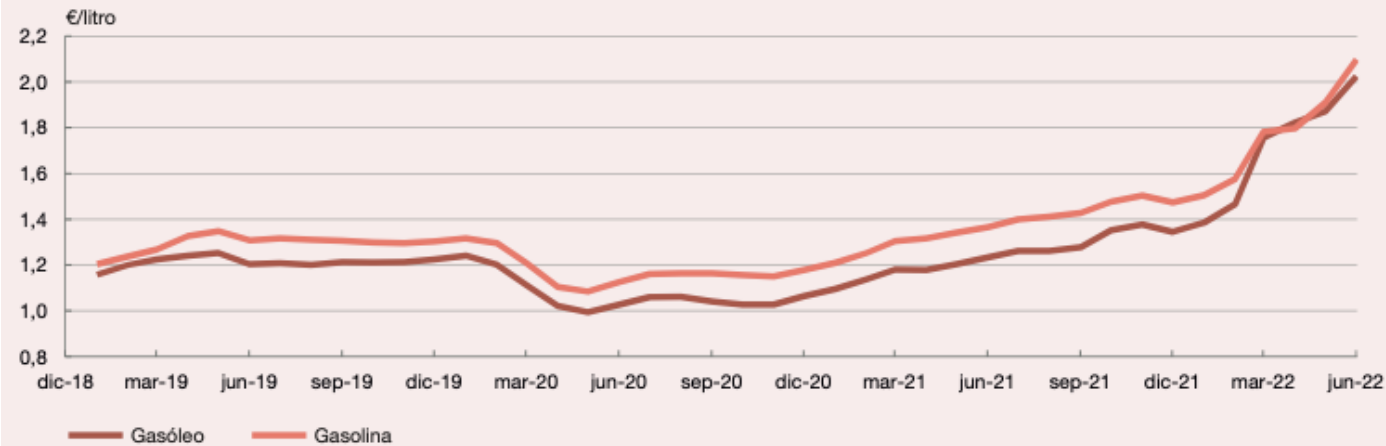
Source: Bruegel | Reuters, Sept. 21, 2022 | By Vincent Flasseur

## Evolution of gasolina/diesel demand in Spain

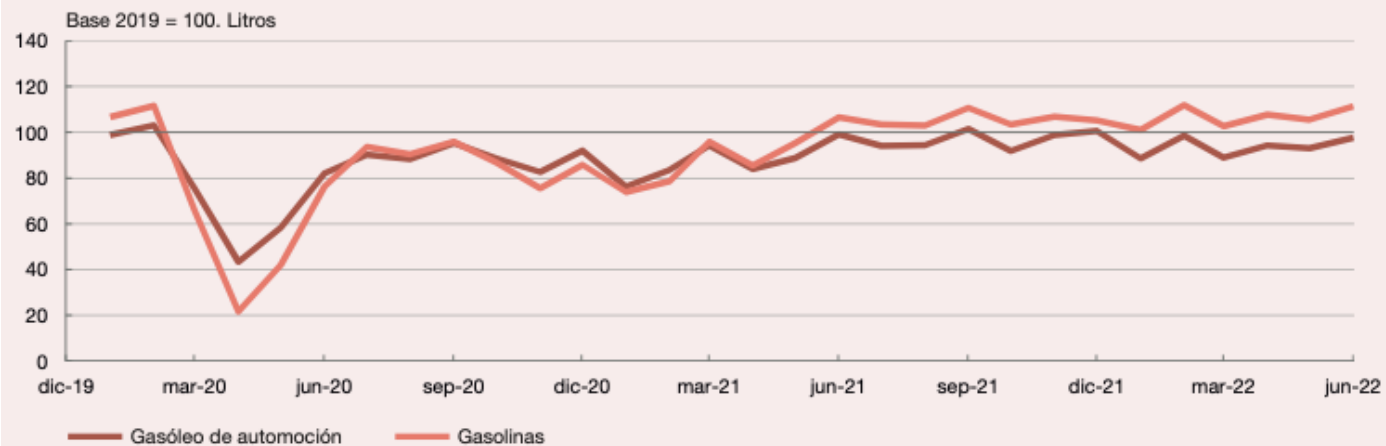
Gráfico 1

Las subidas del precio de los carburantes no han derivado en caídas de su consumo, especialmente en gasolinas

1 Precio mensual medio de venta al público de carburantes desde enero de 2019 hasta junio de 2022 (a)



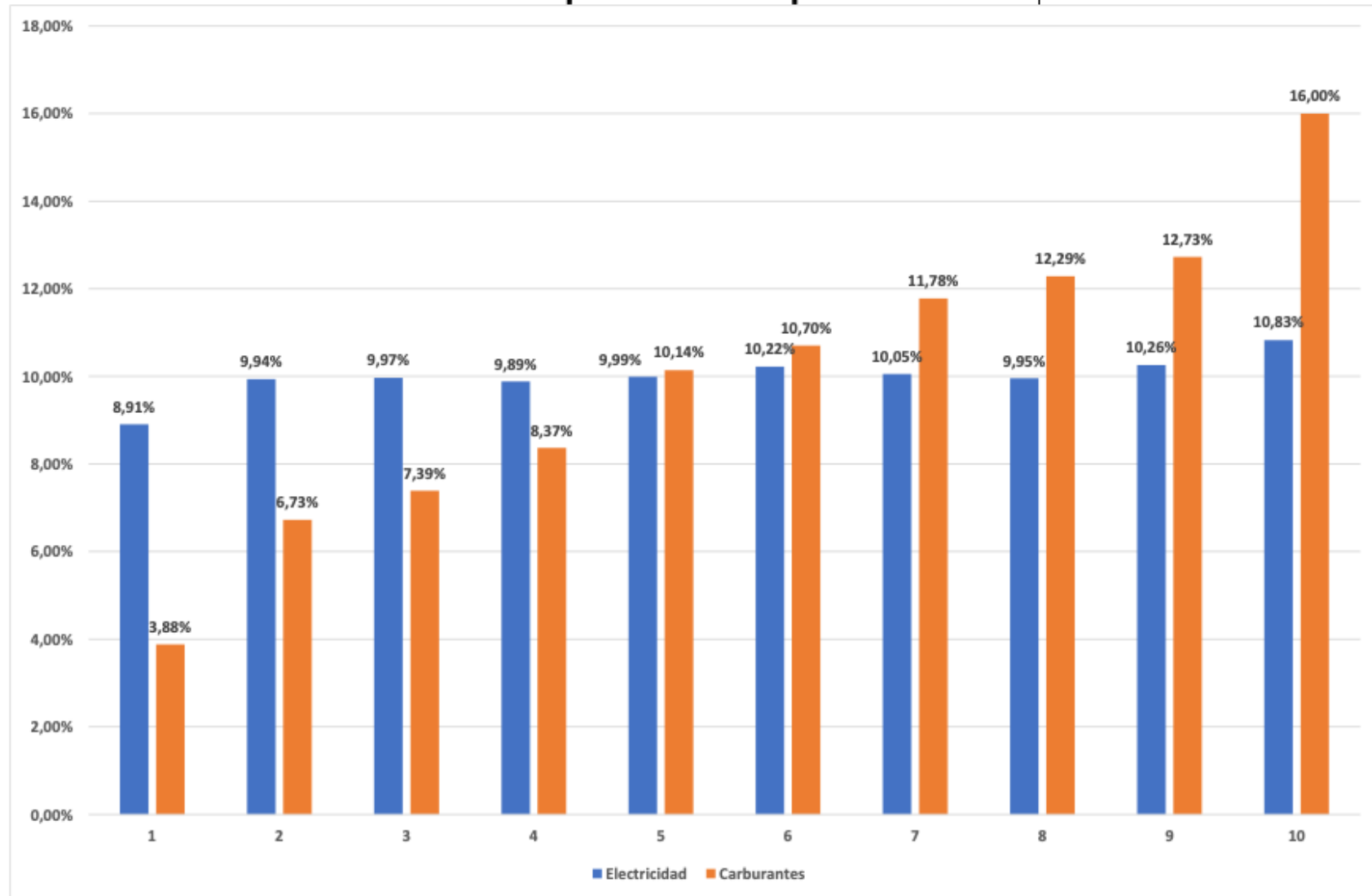
2 Cambios en los consumos mensuales de carburantes respecto a 2019 (b)



FUENTES: Comisión Nacional de los Mercados y la Competencia, y Agencia Tributaria.

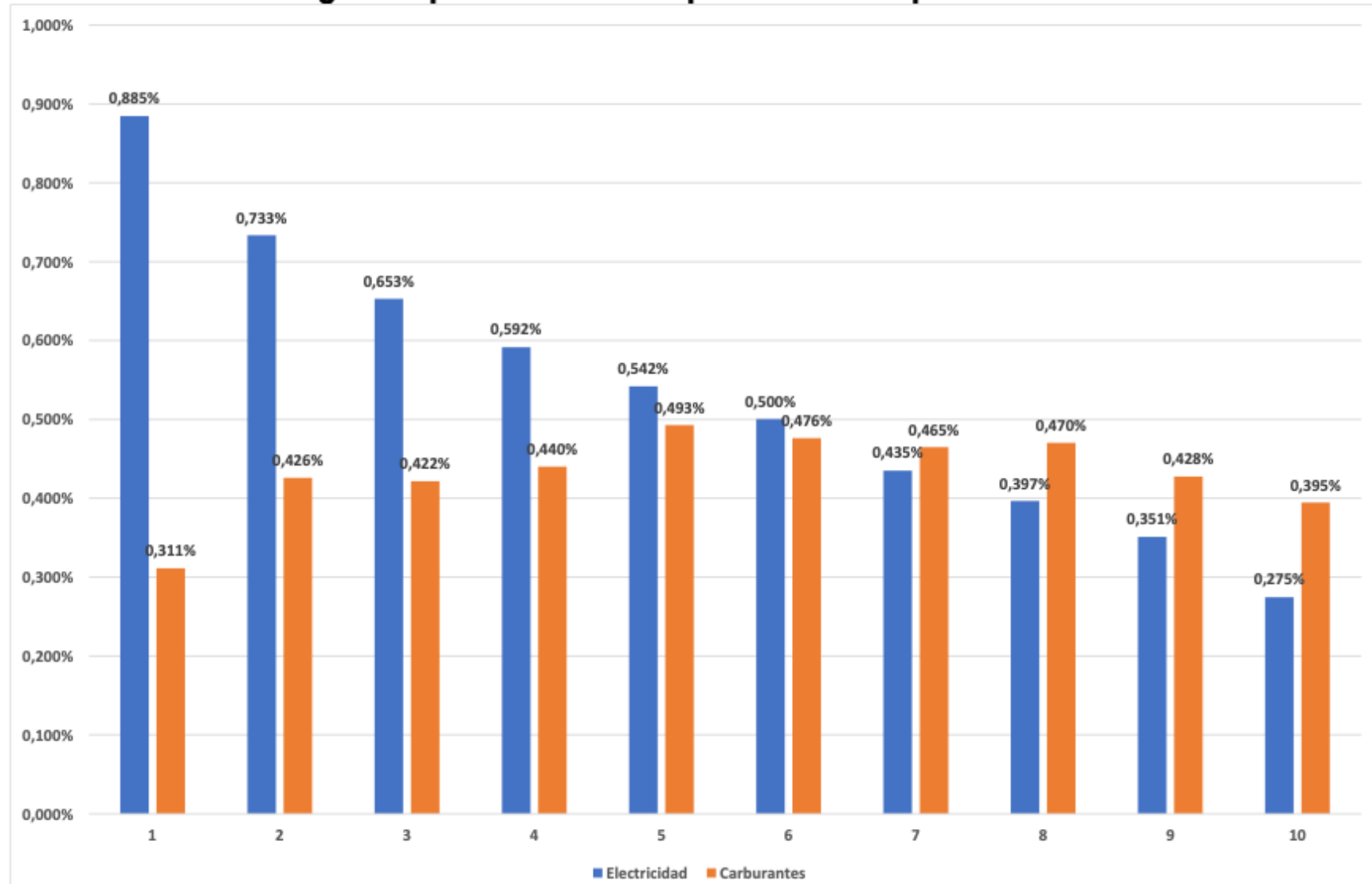
Source: Bank of Spain (2022)

### Revenue loss per decile of equivalent income





## Change in equivalent income per decile of equivalent income



Cop27



Fiona Harvey in Sharm el-Sheikh

Sun 20 Nov 2022 17.32 GMT



## A deal on loss and damage, but a blow to 1.5C – what will be Cop27's legacy?



📷 The Sunday morning deal that was greeted with euphoria by developing countries was greeted with disappointment by most of the rich world. Photograph: Sedat Suna/EPA

Anger at western hypocrisy heated to boiling point in Sharm el-Sheikh, but after intense talks the impasse was finally broken

Analysis

## The 1.5C climate goal died at Cop27 – but hope must not

*Damian Carrington*

*Environment editor*

Every fraction of a degree increases human suffering, so the fight to end the fossil fuel industry must ramp up

● [Cop27 live – latest news updates](#)



📷 Climate activists take part in a protest at the Cop27 summit in Sharm el-Sheikh, Egypt, on Saturday. Photograph: Mohamed Abd El Ghany/Reuters

When the history of the climate crisis is written, in whatever world awaits us, **Cop27** will be seen as the moment when the dream of keeping global heating below 1.5C died.

- **Main Messages**

- Gradualism, but “from words to facts” or modify commitments
- *Each emission reduction counts here and now*
- A new opportunity for environmental taxation in the current crisis? Yes, with adequate compensations

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