



# ENVIRONMENTAL TAXATION

within the Spanish white  
book on tax reform

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Seville, 16 May 2022

- **The White Book**
  - (National Recovery and Resilience Plan)
  - Mandate: timing and topics
  - Team
  - Common misinterpretations
  - (A future English version?)

- **‘Philosophy’**
- **Diagnosis**
- **Principles and guidelines**
- **Proposals**
- **(my) Messages and Postscript**

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

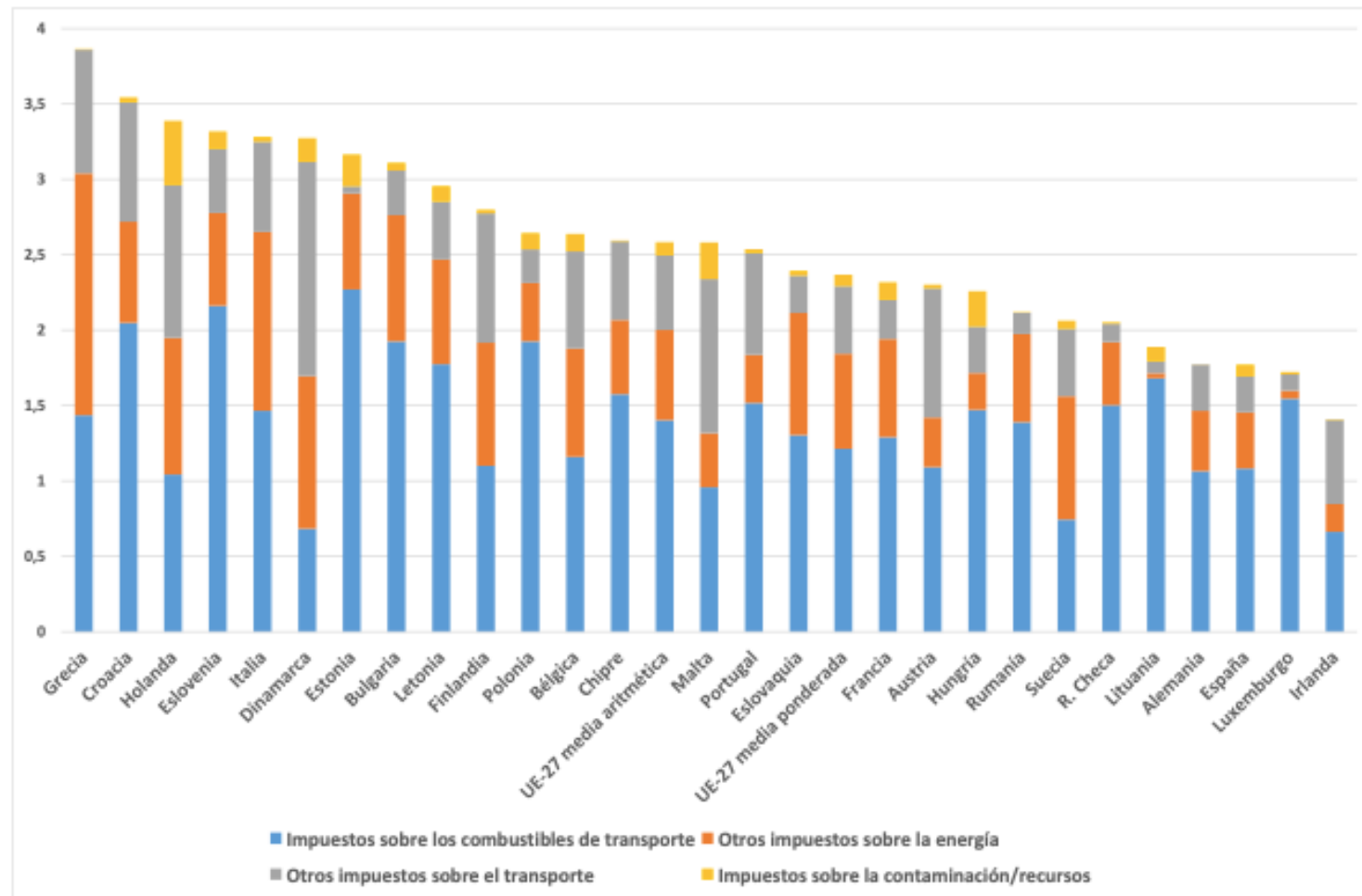
- Realistic and feasible solutions
- Non on a blank page (*reform*)
- Roadmap for policymakers: it does not substitute in-depth exploration
- Academic method: foundations, evidence and empirical illustration

- 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)

**Table 12. Current situation of energy taxation in the EU-27.**

Country	Gasoline			Automotive diesel			Electricity			Natural gas		
	IE c€/l	VAT %	Total c€/l (EU-27)	IE c€/l	VAT %	Total c€/l (EU-27)	IE (No R) €/MWh	VAT % VAT	Total €/MWh (EU-27)	IE (No R) €/GJ	VAT % VAT	Total €/GJ (EU-27)
Germany	69	16	91,5 (106,1)	50,1	16	69,5 (96,7)	20,5 (15,37)	19	160,8 (188,7)	1,5 (1,1)	19	4,29 (77,4)
Spain	47,4	21	72,3 (83,9)	38	21	60,2 (83,8)	6,0 (4,0)	21	109,7 (128,7)	0,65 (0,15)	21	5,5 (100,1)
France	69,1	20	95,4 (110,7)	60,9	20	84,9 (118,1)	22,5 (22,5)	20	64,9 (76,2)	2,3 (2,3)	20	6,0 (108,6)
Netherlands	82,1	21	114,2 (132,5)	53	21	78,8 (109,7)	124,3 (124,3)	21	-12,1 (-14,2)	12,3 (12,3)	21	16,5 (298,7)
Italy	72,8	22	102,8 (119,2)	61,7	22	88,9 (123,7)	22,7 (12,5)	10	89,6 (105,1)	1,2 (0,3)	10	8,2 (147,5)
Poland	36,8	23	60,5 (70,2)	32,5	23	55,3 (77)	1,1 (1,1)	23	57,1 (67,0)	0,3 (0,3)	23	2,4 (44,1)
Portugal	66,8	23	98 (113,7)	51,3	23	78,7 (109,5)	1,0 (1,0)	23	104,9 (123,1)	1,7 (1,7)	23	7,0 (125,9)
Romania	36,9	19	56,1 (65,1)	33,9	19	52,6 (73,2)	1,1 (0,5)	19	41,1 (48,2)	0,3 (0,2)	19	1,42 (25,6)
Sweden	61,1	25	94 (109,1)	43,2	25	78,2 (108,8)	34,0 (0,6)	25	68,2 (80,0)	8,3 (1,6)	25	14,8 (266,9)
EU-27	60,3	20,6	86 (100)	48,3	20,6	71,9 (100)	19,1 (14,1)	19,0	85,2 (100)	1,9 (1,6)	19,0	5,5 (100)

**Data sources:** Fuels: MITECO (2021) *Fuel and Fuel Prices*. Data as of September 2021; **Electricity and Natural Gas:** European Commission (2021). *Excise Duty Tables. Part II. Energy Products and Electricity*. For the total levy, total tax burden data on electricity and natural gas are considered from Eurostat (2021) *Energy Database. Prices of Natural Gas and Electricity*.

**Notes:** The EU-27 average is calculated as the population-weighted average of the taxes applied. In countries where different tax rates are applied depending on consumption, the higher tax rate is considered.



- **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)

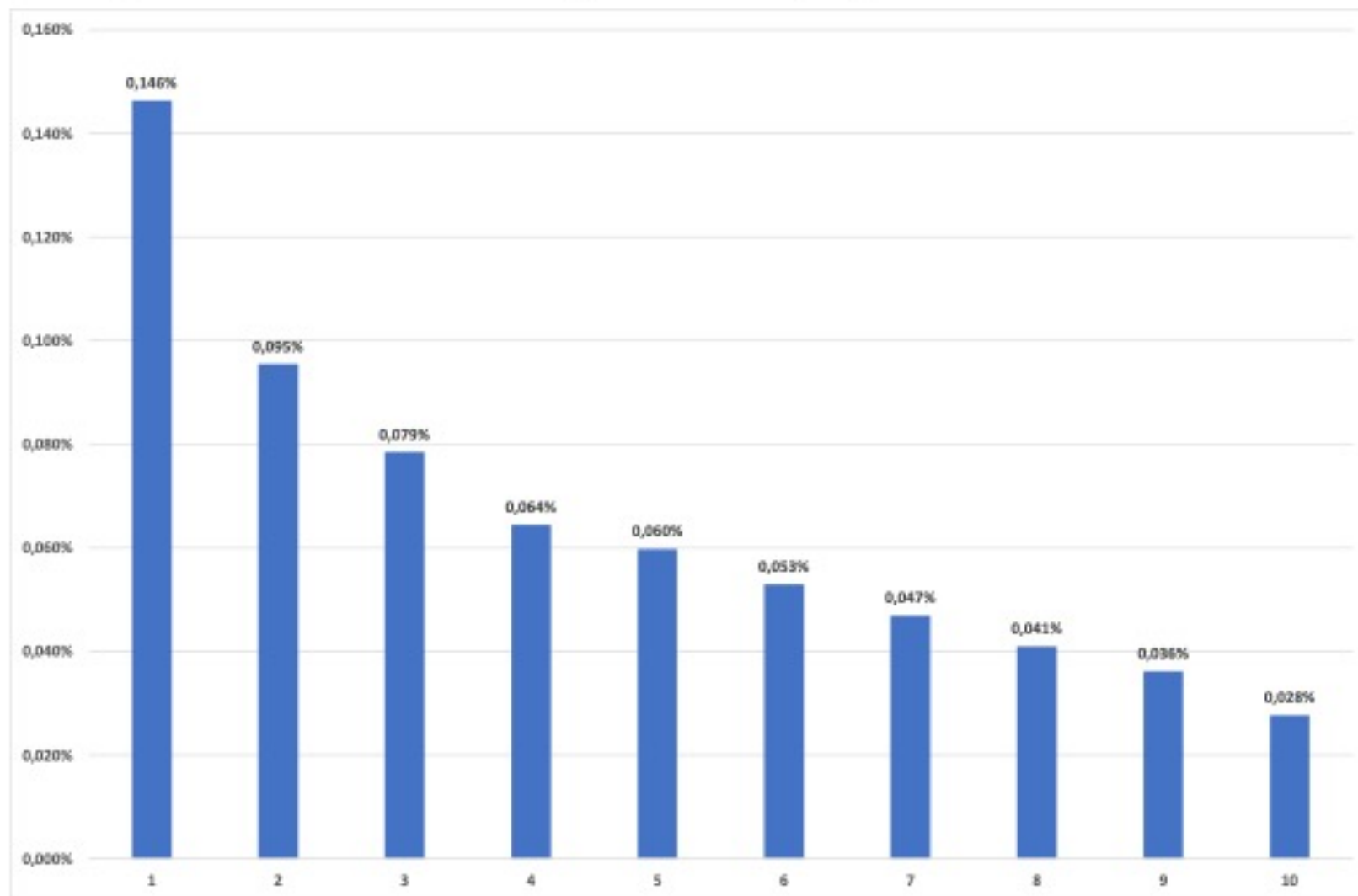
- Assessment
  - Revenue and emissions impacts
  - Distributional impacts and compensations (households)
  - Particularly in electrification and mobility
  - In other areas, generic or no assessment

- **Proposals**
- **Sustainable electrification**
  - Why?
  - How? Removing barriers to electrification, but full coverage of environmental costs
  - *Supression 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**

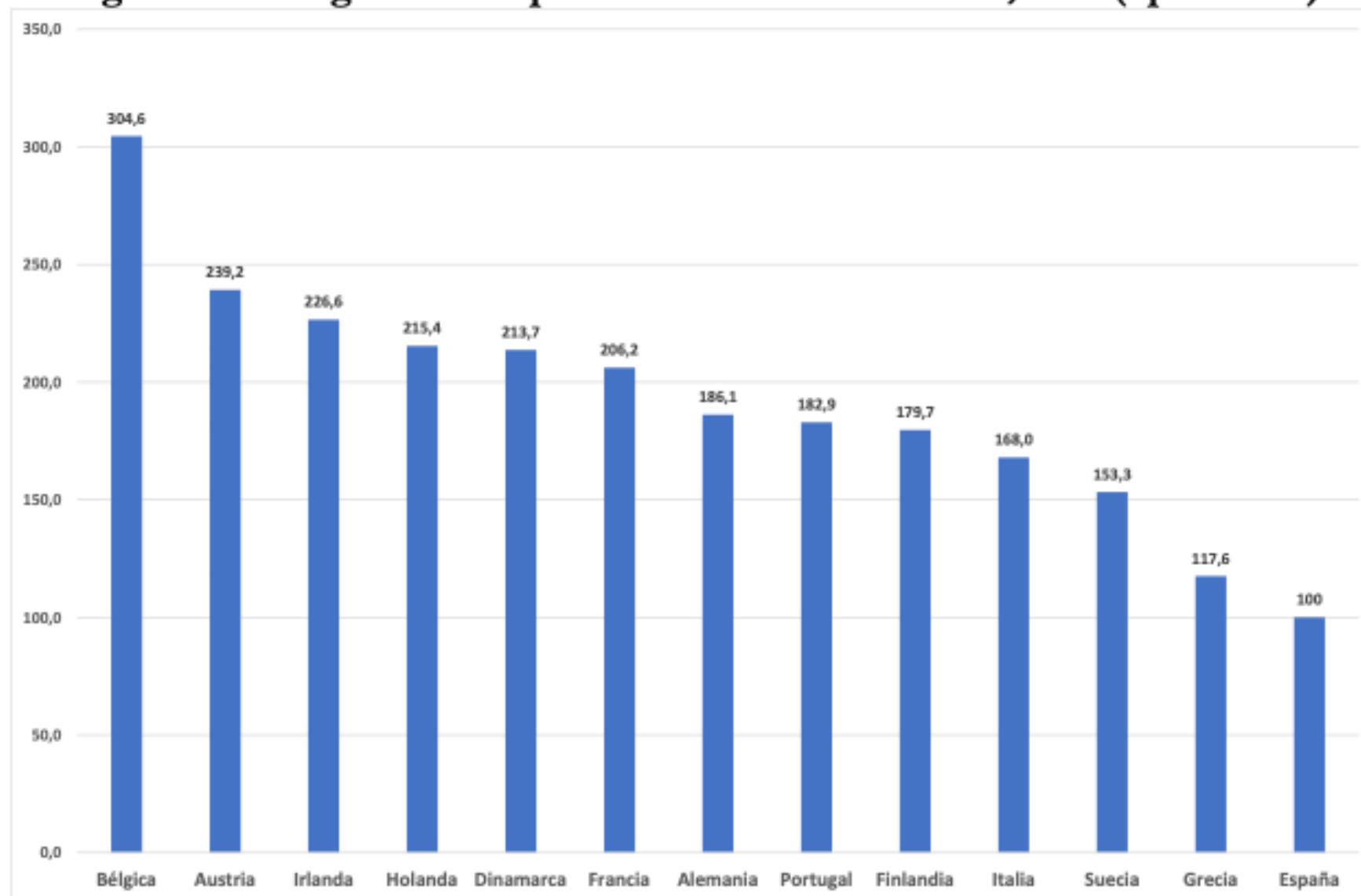


**Note:** Average percentage change in equivalent income by income deciles.



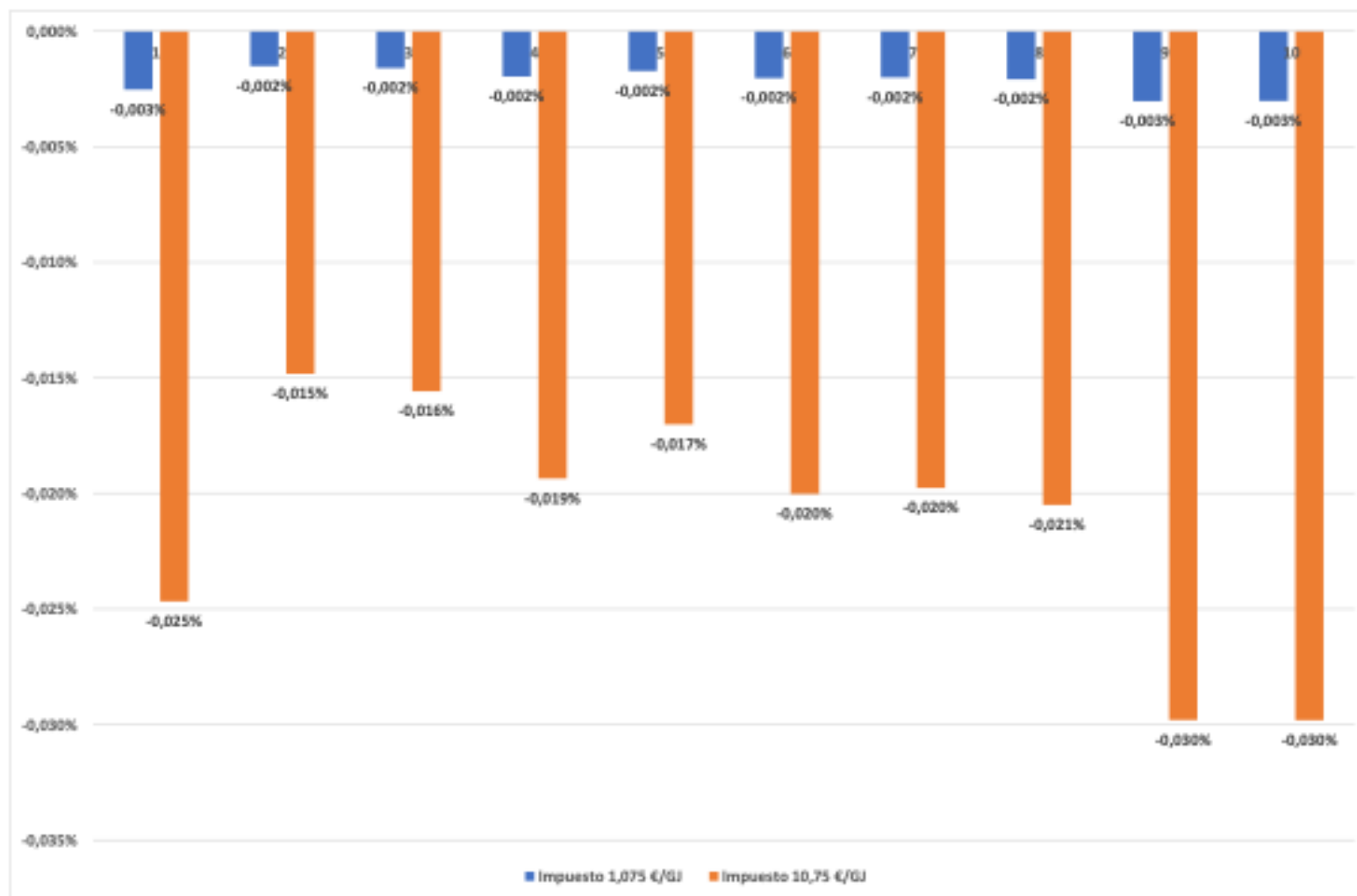
- **Mobility compatible with the transition**
- Why? →
- How? Generalized actions on tax rates on transport modes, fuels and vehicles
- *Taxation of aviation, maritime and agriculture-related fuels (P4)*
- *Equalization of excise taxes on diesel and gasoline (P5)*

**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).

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

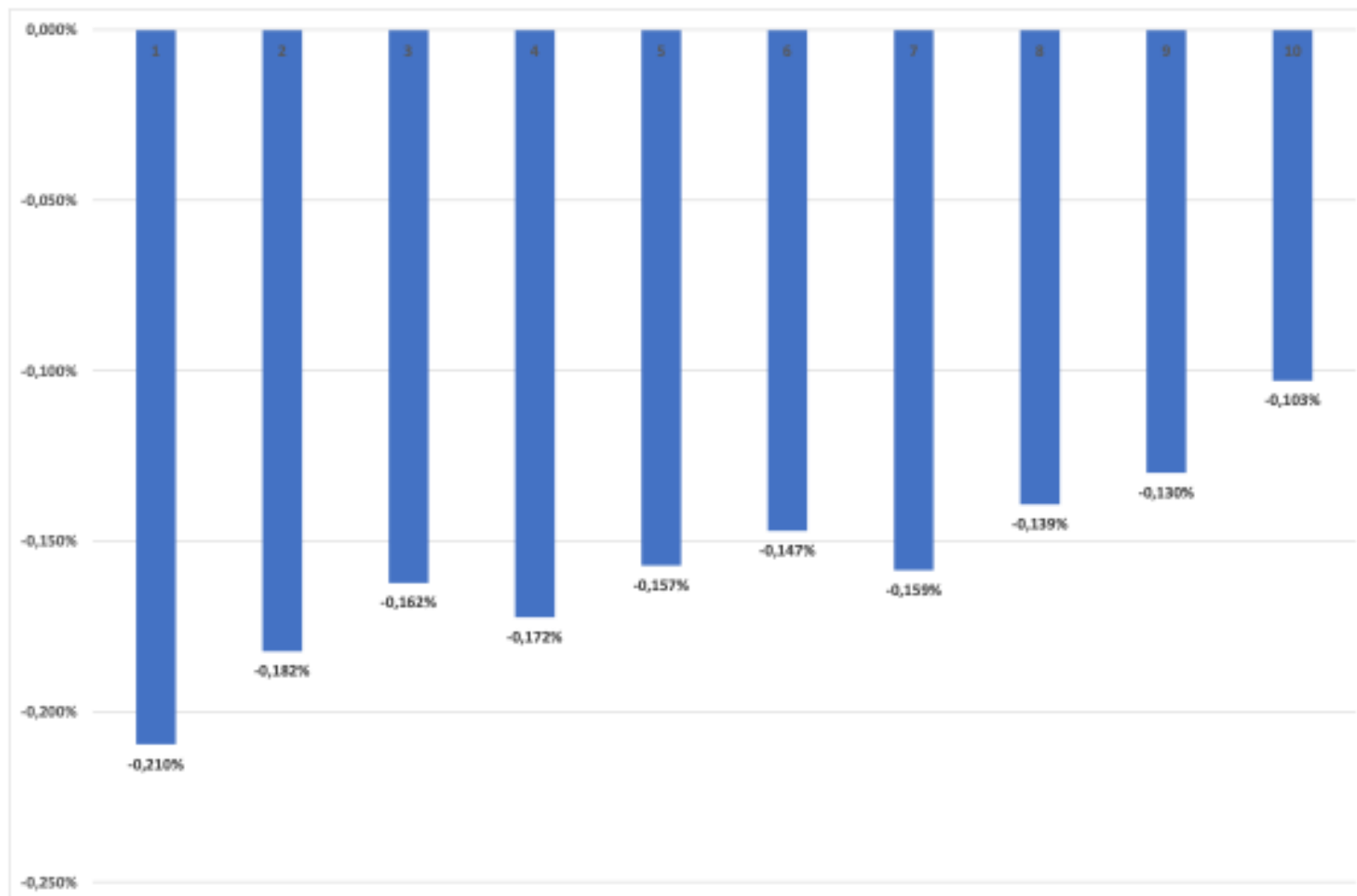


**Note:** Average percentage change in equivalent income by income deciles.

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

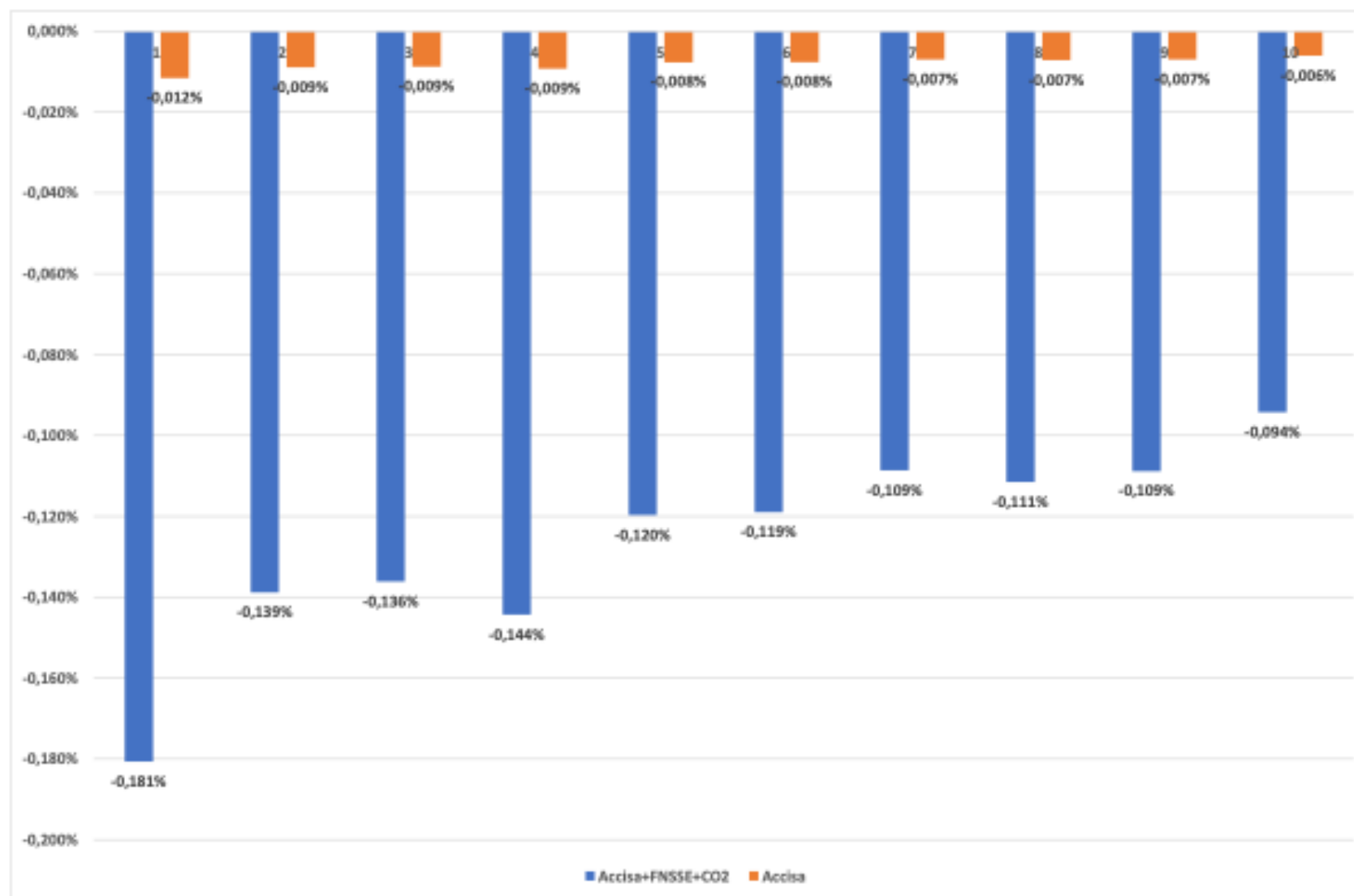
	Final price (%)	Consumption (%)	CO <sub>2</sub> emissions (%)	Additional revenues (Millions of euros)		
				I.E.H	VAT	Total
<b>Residential diesel</b>	9,34%	-1,88%	-1,88%	1.471	266,24	1.737,24 (17,0%)
<b>Non-residential diesel</b>	9,82%	-1,97%	-1,97%	884,08	-	884,08 (25,9%)
<b>Total</b>	-	-1,65%	-1,60%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

**Figure 11. Distributional impact of P6A by equivalent income deciles**

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

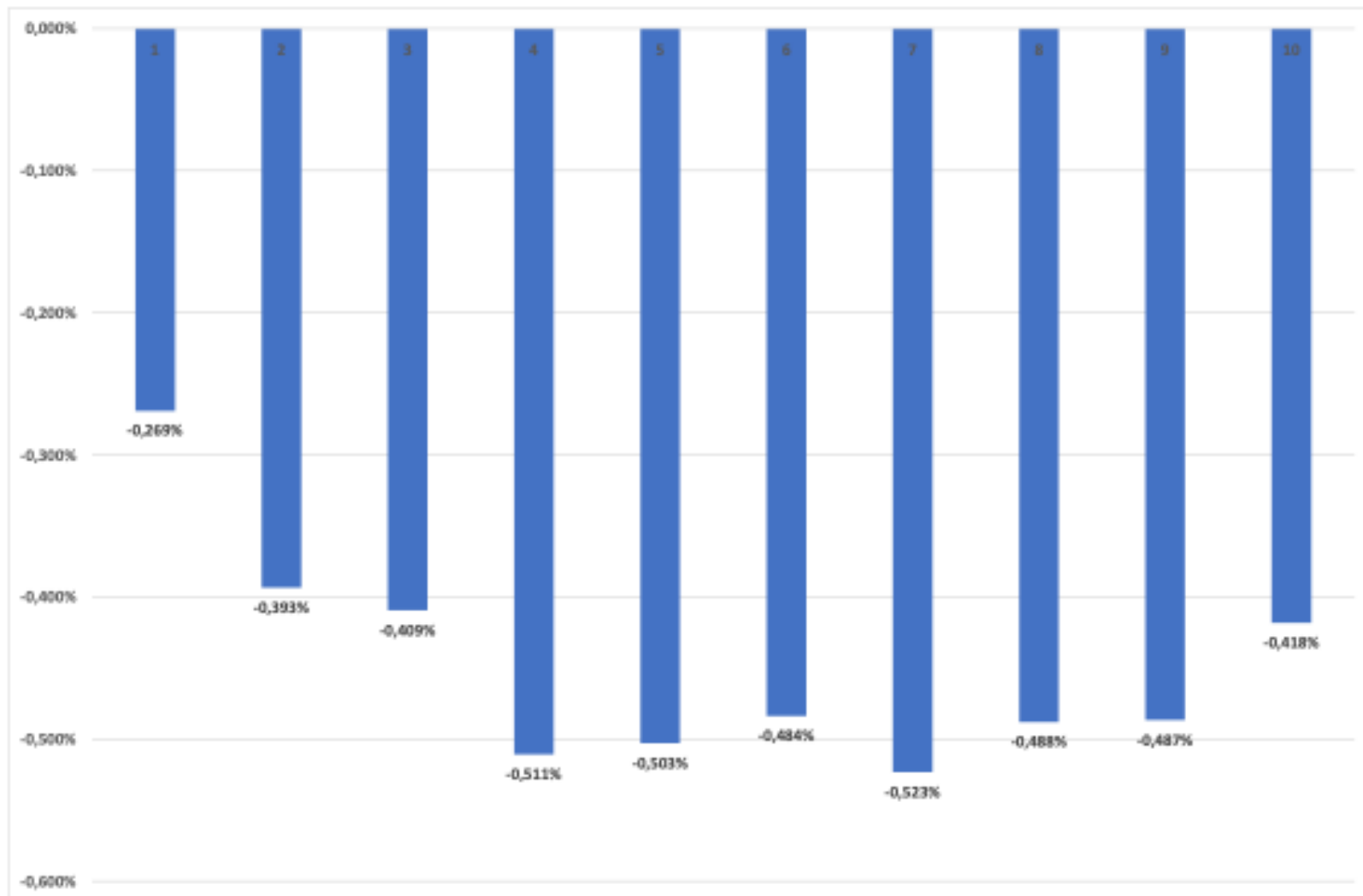
Table 13. Impacts on prices, demand/emissions and revenues of P1, P3 and P6

	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>

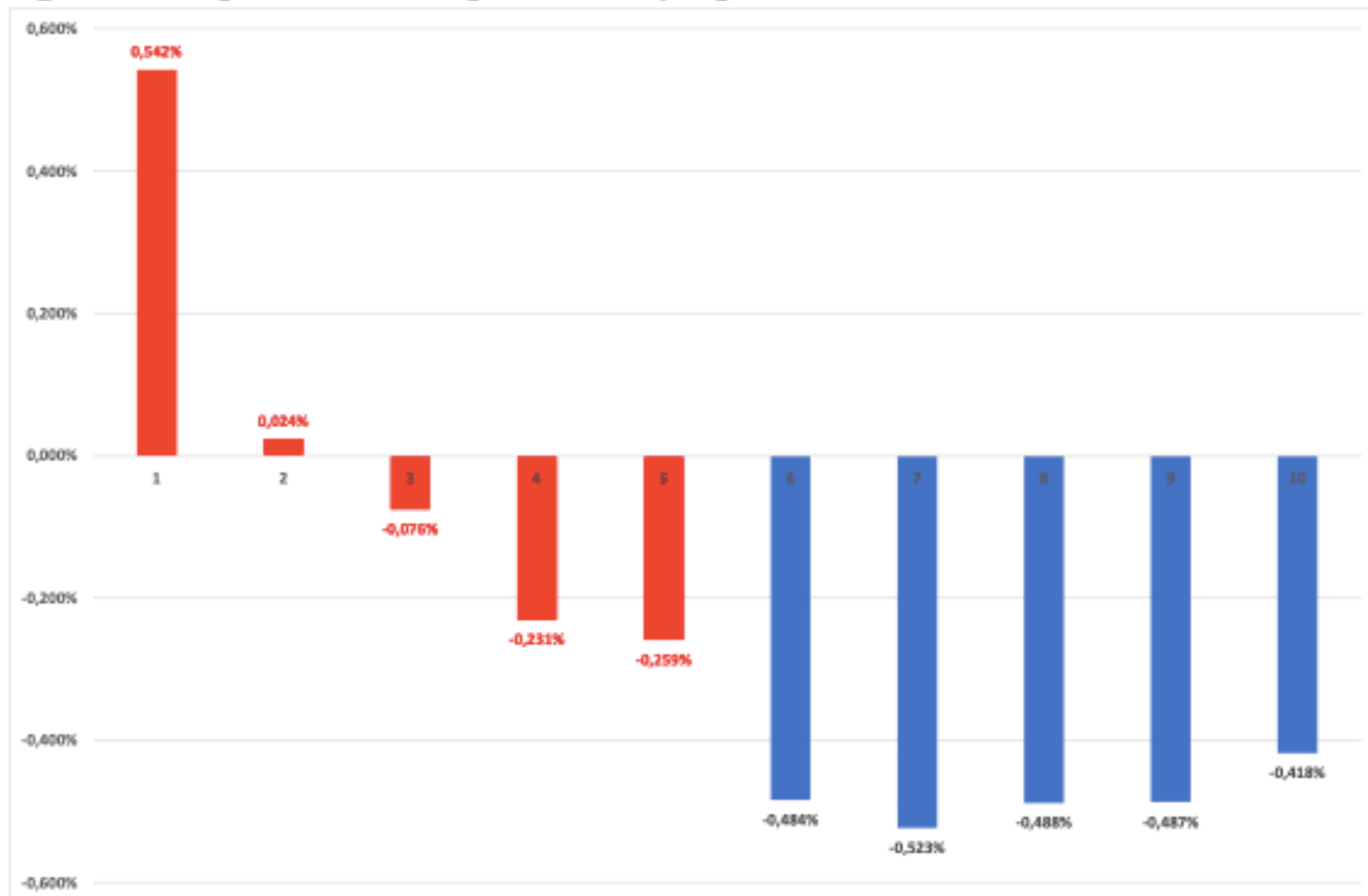


**Figure 15. Distributional impacts by equivalent income deciles of P1, P3 and P6**



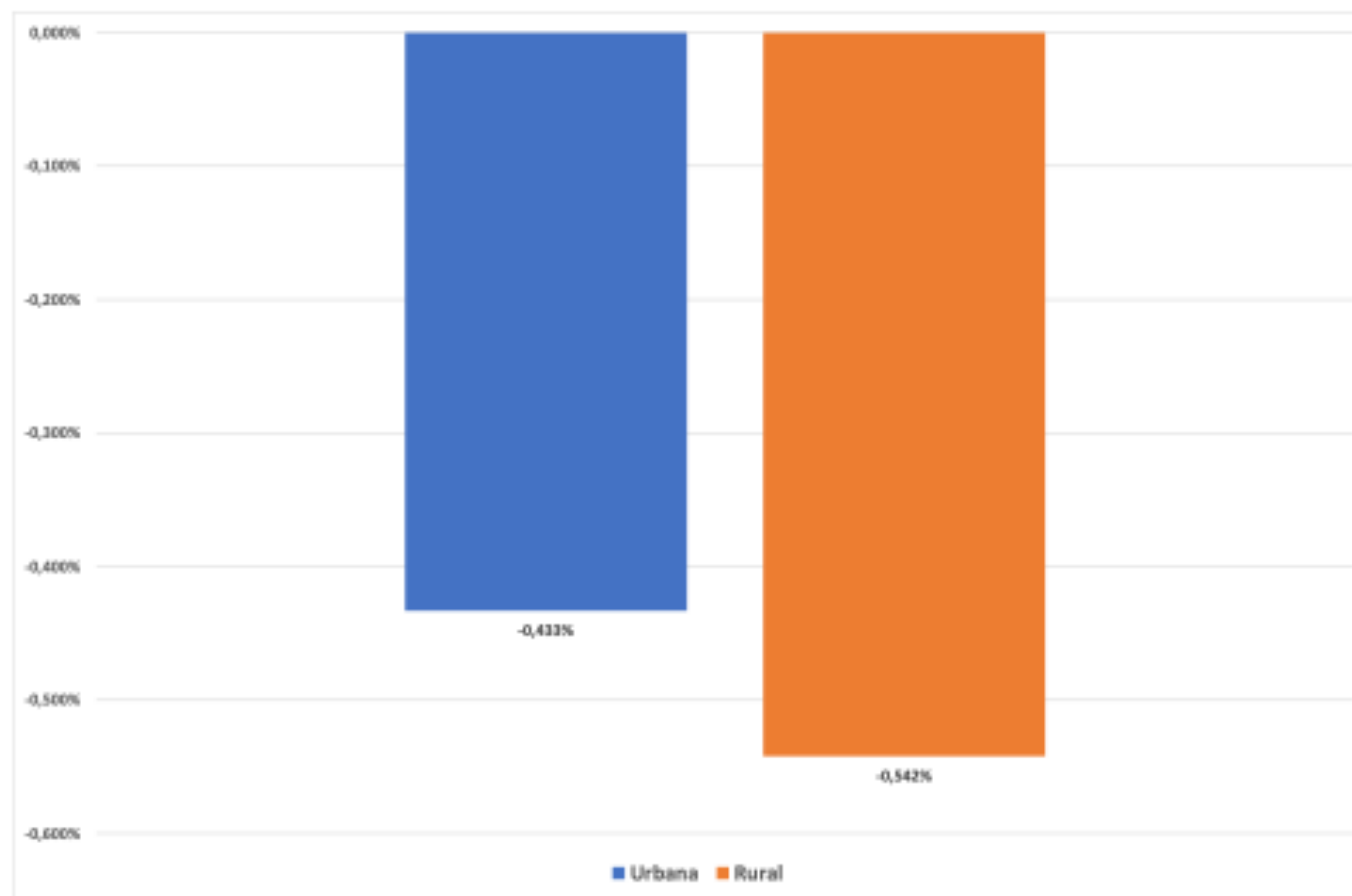
**Note:** Average percentage change in equivalent income by income deciles.

**Figure 16. Impacts with compensation by equivalent income deciles of P1, P3 and P6**



Note: In red the deciles in which there is variation because of the compensatory scheme.

**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/km <sub>2</sub> )	Current tax rate	Proposal (gCO/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	

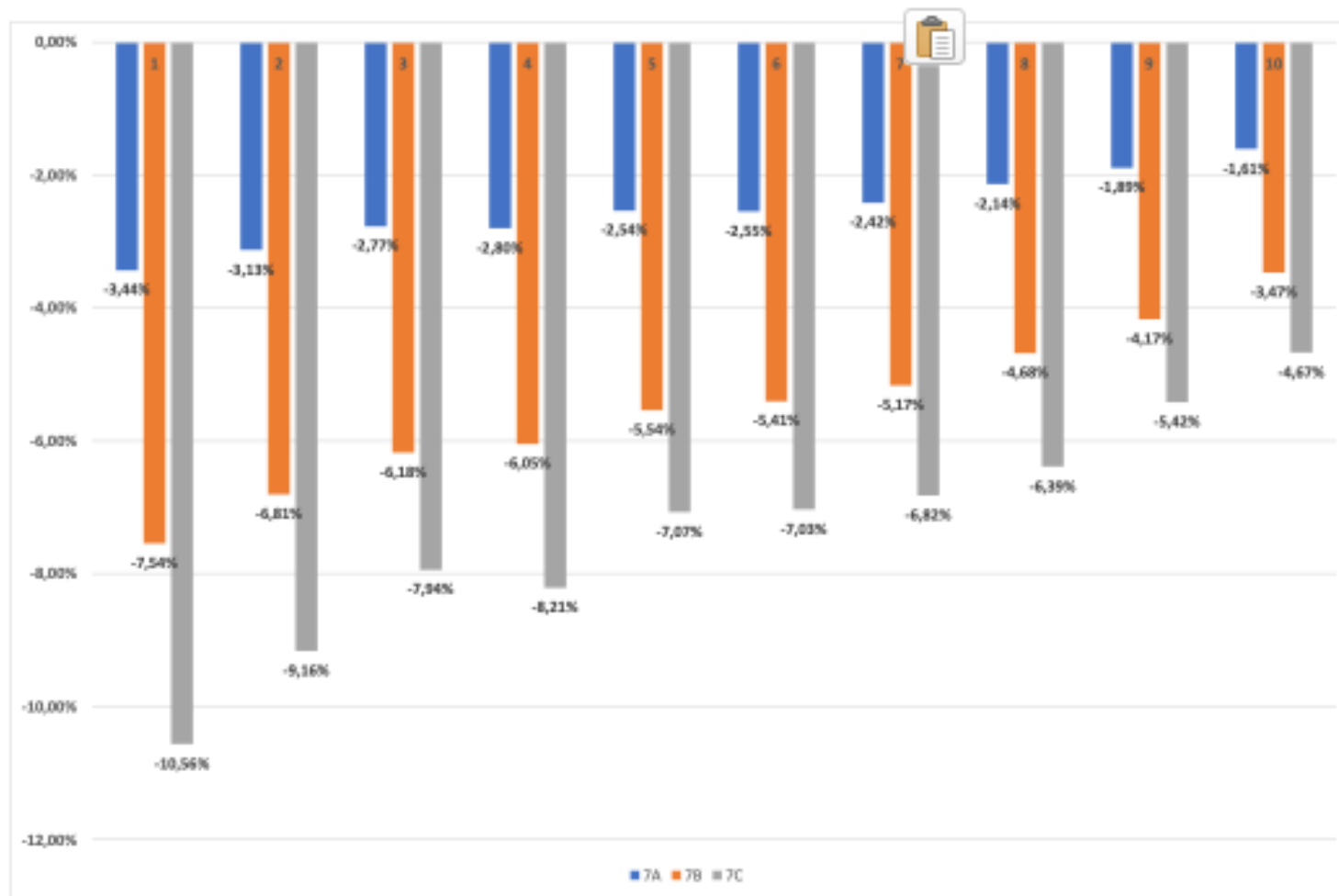
**Table 15. IEMDT as a unitary tax on expected emissions (P7C)**

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

**Table 16. Additional Revenues from P7 (millions of euros)**

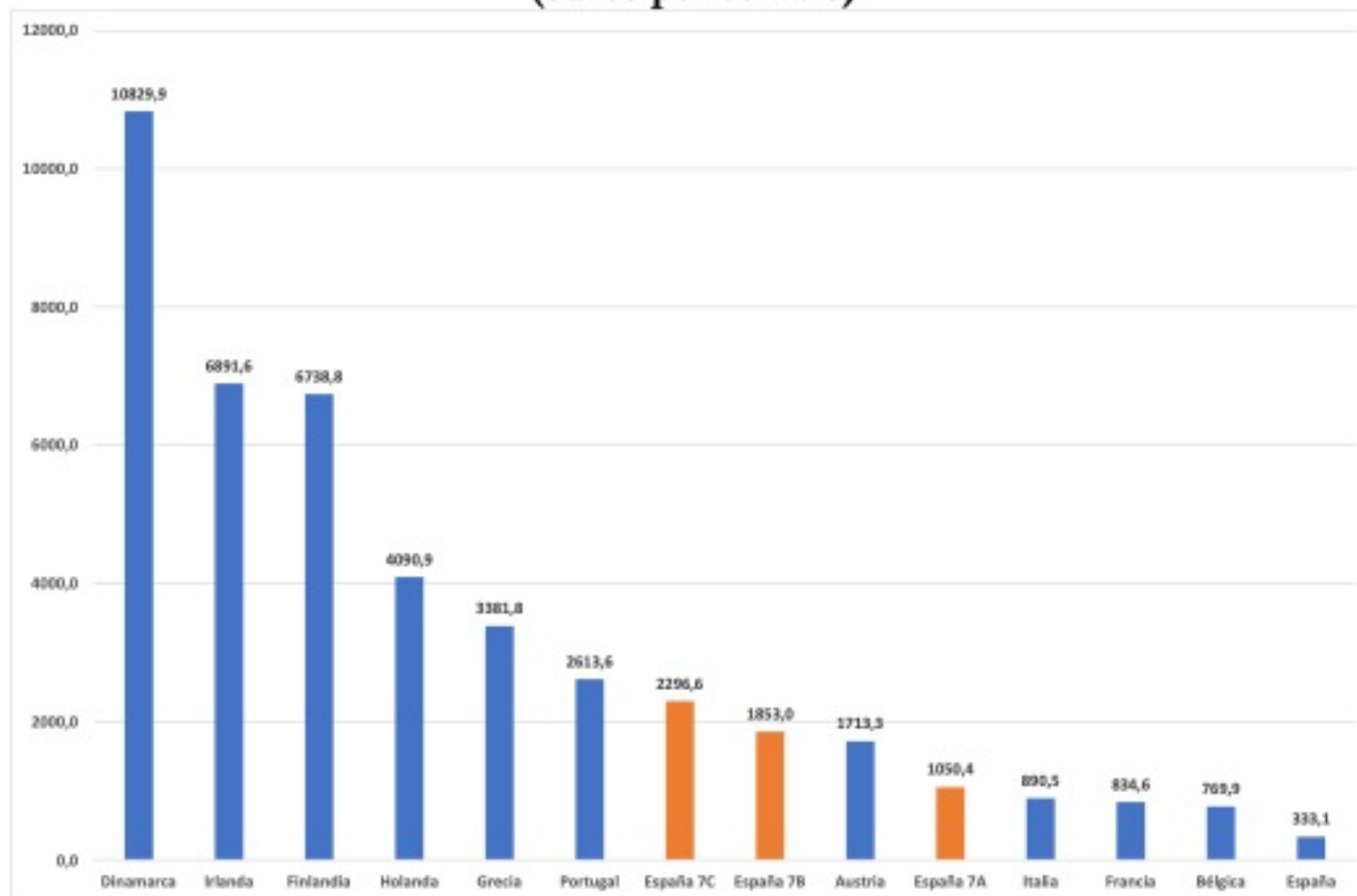
<i>Ad Valorem (7A, 7B)</i>			<i>Unitary (7C)</i>	
Emissions (gCO/km <sub>2</sub> ) for	P7A	P7B	Emissions (gCO/km <sub>2</sub> )	P7C
≤ 55	0,01	0,01	>0-≤ 86	0,11
>55-≤ 120	0,02	98,97	>86-≤ 111	23,10
>120-≤ 127	-119,05	-56,64	>111-≤ 120	44,52
>127-≤ 152	293,56	793,59	>120-≤155	1.023,92
>152-<160	203,22	320,66	>155-<160	159,08
≥160-≤175	111,27	190,23	≥160-≤172	206,60
>175-<200	318,37	422,56	>172-<200	686,16
≥200	55,24	77,56	≥200	191,63
<b>Total</b>	862,63	1.846,93	<b>Total</b>	2.335,13

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



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

**Figure 19. Registration tax revenues in selected EU countries in 2019 and P7A-C (euros per vehicle)**



**Sources:** ACEA (2021a,b)

**Notes:** Data for Austria and Greece are from 2020, Denmark from 2018.  
Simulation data for P7 only consider automobile revenues.



**Table 17. Increase in IVTM payment related to emissions**

CO <sub>2</sub> emissions (gCO <sub>2</sub> /km <sub>2</sub> )	Number of cars	Original revenues (million euros)	Tax increase (euros)		Increased revenues (million euros and %)	
			P8A	P8B	P8A	P8B
≤ 55	98.329	8,16	0,0	0,0	0,00	0,0
>55-≤ 127	2.481.215	206,00	0,0	10,0	0,00	24,82
>127-≤ 152	5.566.065	462,11	10,0	20,0	55,66	111,32
>152-≤ 175	2.724.510	226,20	15,0	30,0	40,87	81,74
>175	3.398.287	282,14	20,0	50,0	67,97	169,92
Enrolled before 2007	11.147.833	925,53	10,0	20,0	111,47	222,96
Total	25.416.239	2.110,14	--	--	275,97 (13,80%)	610,76 (28,94%)

**Note:** 2019 proceeds are distributed per vehicle assuming the average annual fee of 83.02 euros.



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

**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

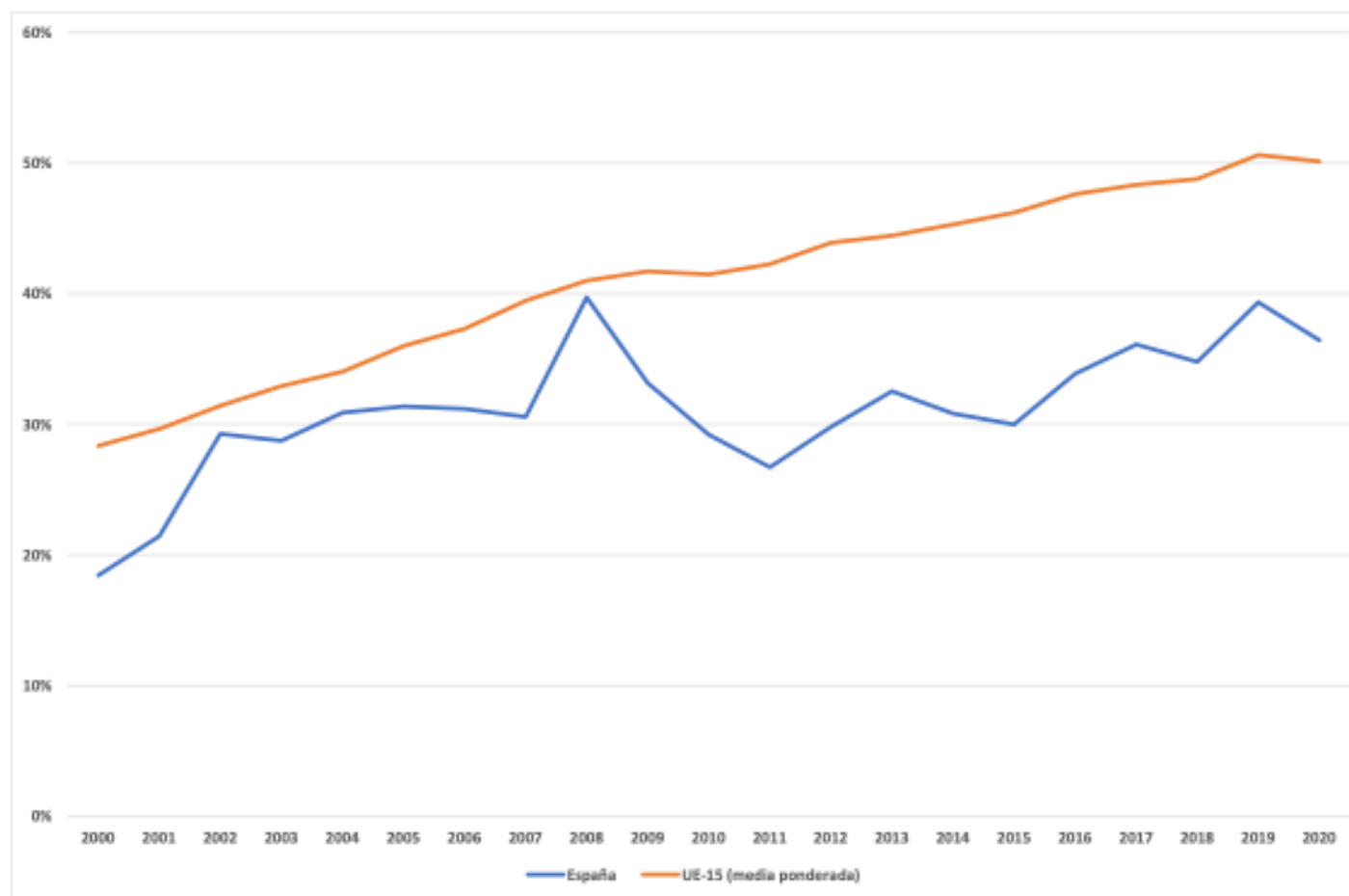
Sources: Van Essen *et al.* (2019), Schroten *et al.* (2019a), Ministry of Transport (2021a) and MITECO (2021a).

**Table 20. Impacts on prices, travelers, emissions and revenue of P11**

<u>Consumer</u>	Type of flight	Final price	Travelers (CO <sub>2</sub> emissions)	Additional revenues (million euro)		
				<u>Aviation tax</u>	VAT	Total
Residential	Domestic	14,97%	-20,96%	209,68	-16,17	193,51
	International	6,67%	-6,23%	185,19	-	185,19
Non-residential	Domestic	14,97%	-12,70%	59,47	0,17	59,64
	International	6,67%	-2,54%	513,49	-	513,49
Total		-	-8,50% (-5,59%)	967,83	-16,00	951,83

- **Increase in circularity**
- *Why? →*
- *Extension and increase of taxes included in the LRySC (P12)*
- *Local taxation based in payment on waste generation (P13)*

**Graph 21. Percentage of urban waste recycled in Spain and EU-15 (2000-2020)**

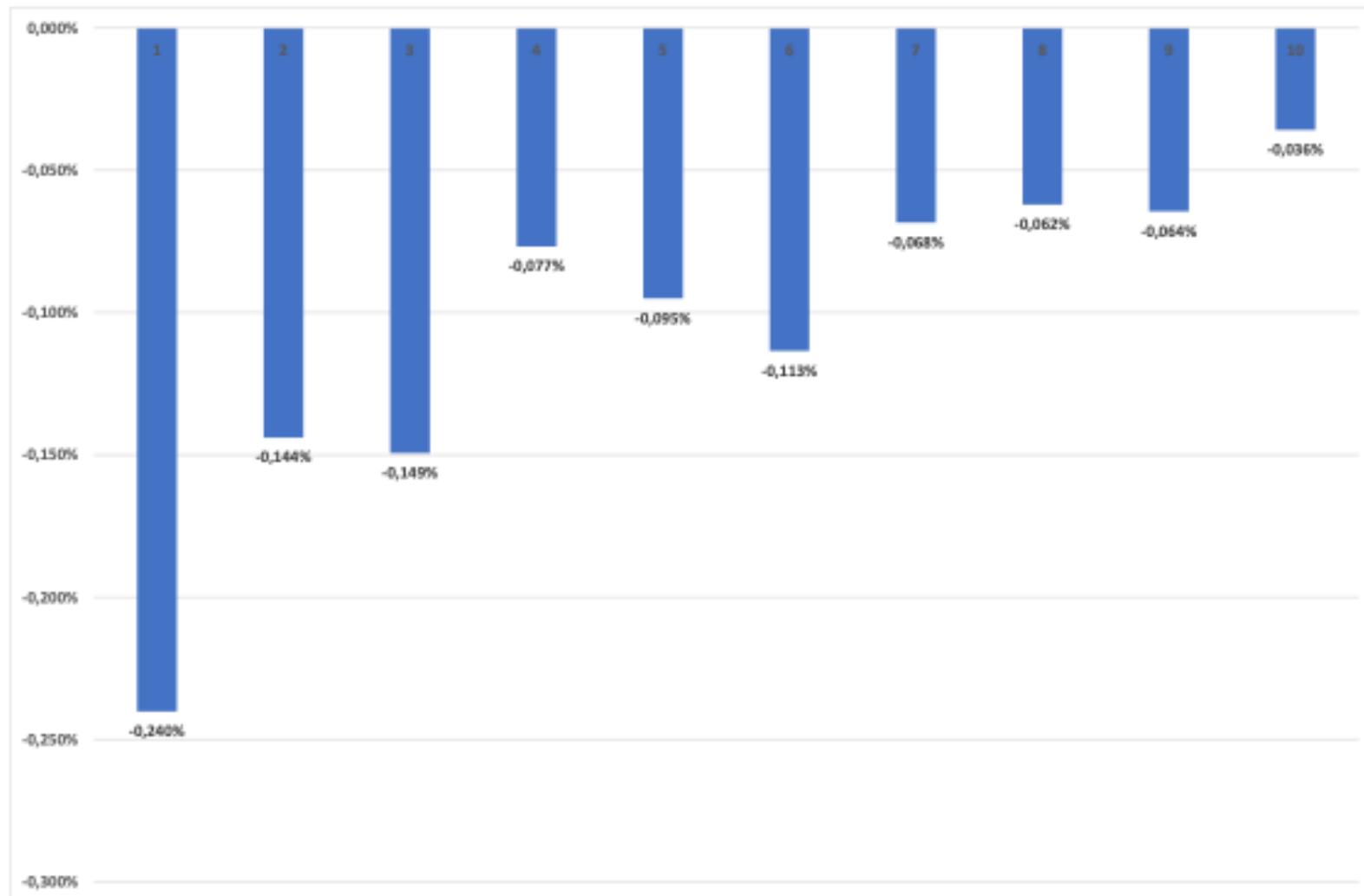


**Source:** Eurostat (2021c)

**Notes:** Population-weighted average of EU-15 countries.

Data are not available for Denmark (2012) Ireland (2013, 2015, 2019 and 2020), Greece, Italy and Austria (2020) and United Kingdom (2019 and 2020), so they are not included in the averages for the corresponding years.

**Figure 22. Distributional impact of P13**



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

- *Creation of an aggregates tax (P14)*
- *Creation of a tax on nitrogenous fertilizers (P15)*
- *Extensión y armonización de la fiscalidad de emisiones de grandes instalaciones industriales y ganaderas (P16)*



**Table 22. Impacts on consumption and collection of P15**

<b>Fertilizer</b>	<b>Tax rate</b>	<b>Final price</b>	<b>Consumption/emissions</b>	<b>Additional collection (Millions of euros)</b>
<b>Ammonium nitrate</b>	0,268	26,45%	-7,01%	11,34
<b>Calcium ammonium nitrate</b>	0,219	23,00%	-6,09%	39,58
<b>Ammonium nitrosulfate</b>	0,487	35,15%	-9,32%	13,07
<b>Nitrogen solutions</b>	0,503	58,06%	-15,39%	39,74
<b>Ammonium sulfate</b>	0,705	67,68%	-17,94%	32,49
<b>Urea</b>	0,740	99,35%	-26,33%	143,69
<b>Total</b>		-	-14,49% (-16,38%)	279,92

Note: Overall emission reductions in parentheses.

**Table 23. Emissions, tax rates and revenue from P16**

<b>Pollutant</b>	<b>Emissions (tons)</b>	<b>Tax rate (€/kg)</b>	<b>Revenues (million euros)</b>
NH <sub>3</sub>	2.783,50 <i>66.449,4</i>	3,5	9,74 <i>232,57</i>
COVDM	52.925,07	0,23	12,17
CH <sub>4</sub>	165.640,36 <i>232.380,2</i>	0,348	57,64 <i>80,87</i>
CO	261.026,34	0,011	2,75
N <sub>2</sub> O	2.220,21 <i>987</i>	3	6,66 <i>2,96</i>
NO <sub>x</sub>	178.012,09	2,96	526,91
Total	810.740,56	-	615,88 <i>316,41</i>

**Note:** In italics P16B, rest P16A.

- **Incorporation of environmental costs associated to water use**
- Why? →
- *Improvements in regional taxes on environmental impacts on waters (P17)*
- *Reform in charges for cost coverage of water infrastructures (P18)*
- *Creation of a tax on the extraction of water resources (P19)*

**Table 24. Annual water costs and revenues (million euro)**

Hydrological region	Financial Cost			Environmental cost AEC	Total Cost	Revenues	Cost recovery rate
	Operating and maintenance costs	AEC of investment	Total				
Miño-Sil	55,98	101,19	157,17	6,42	163,59	143,46	87,69%
Western Cantabrian	288,94	223,71	512,65	35,17	547,82	473,83	86,49%
Eastern Cantabrian	210,61	226,34	436,95	34,80	471,75	347,35	73,63%
Duero	421,95	379,54	801,49	251,76	1053,25	664,20	63,06%
Tagus	1.071,05	672,74	1.743,79	202,45	1946,24	1.386,57	71,24%
Guadiana	245,67	292,14	537,81	48,57	586,38	353,06	60,21%
Guadalquivir	627,90	404,10	1.032,00	69,88	1101,88	870,76	79,02%
Segura	538,01	267,69	805,70	237,67	1043,37	700,02	67,09%
Júcar	1.032,85	348,67	1.381,52	184,54	1566,06	1.311,17	83,72%
Ebro	796,50	846,71	1.643,21	281,63	1924,84	1.317,00	68,42%
Ceuta	17,91	6,59	24,49	0,61	25,11	16,52	65,80%
Melilla	15,57	9,51	25,08	1,22	26,30	8,75	33,28%
Galicia Coast	n.a.	n.a.	260,13	41,95	302,08	189,78	62,82%
Eastern Cantabrian (PV)	178,21	199,58	377,80	15,74	393,54	294,00	74,71%
Andalusian Mediterranean	500,50	243,40	743,90	78,70	822,60	659,65	80,19%
Guadalete-Barbate	140,95	22,83	163,78	14,46	178,24	154,11	86,46%
Red, Odiel and Stones	95,75	25,40	121,15	10,47	131,62	109,37	83,10%
Catalonia	n.a.	n.a.	1.175,95	188,89	1364,84	1.080,20	79,14%
I. Balears	167,53	119,63	287,16	88,65	375,81	236,23	62,86%
Gran Canaria	167,82	36,15	203,97	7,54	211,51	165,61	78,30%
Lanzarote	33,04	12,29	45,33	3,47	48,79	33,30	68,26%
Fuerteventura	n.a.	n.a.	n.a.	n.a.	20,20	15,69	77,67%
Tenerife	255,68	67,94	323,62	n.a.	323,62	231,06	71,40%
La Palma	15,02	14,51	29,53	0,58	30,11	14,82	49,22%
La Gomera	2,44	6,44	8,88	0,78	9,66	2,58	26,70%
El Hierro	3,17	1,31	4,48	2,02	6,50	1,74	26,77%
<b>TOTAL</b>	<b>6.883,04</b>	<b>4.528,42</b>	<b>12.847,54</b>	<b>1.807,98</b>	<b>14.675,72</b>	<b>10.780,83</b>	<b>73,46%</b>

Note: CAE: Annual equivalent cost; n.a.: not available.

Source: Hydrological Plans (2022-2027) of the river basin districts (in approval process), available at:

[https://www.miteco.gob.es/es/agua/temas/planificacion-hidrologica/planificacion-hidrologica/PPHH\\_tercer\\_ciclo.aspx](https://www.miteco.gob.es/es/agua/temas/planificacion-hidrologica/planificacion-hidrologica/PPHH_tercer_ciclo.aspx).

- **(my) Messages**
  - Gradualism, but “from words to facts” (or modify commitments)
  - Priorities?
  - Compensations, but how?
  - Continuous assessment needed—data and teams!

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.

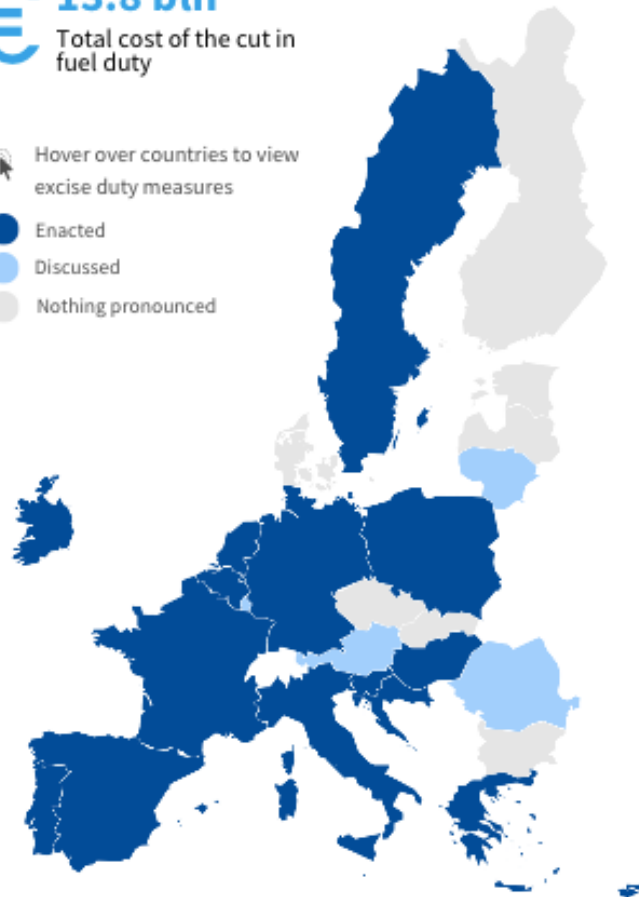
# • Postscript: responses to the crisis

## Fuel excise duty tracker: what measures have been taken and how much does it cost?

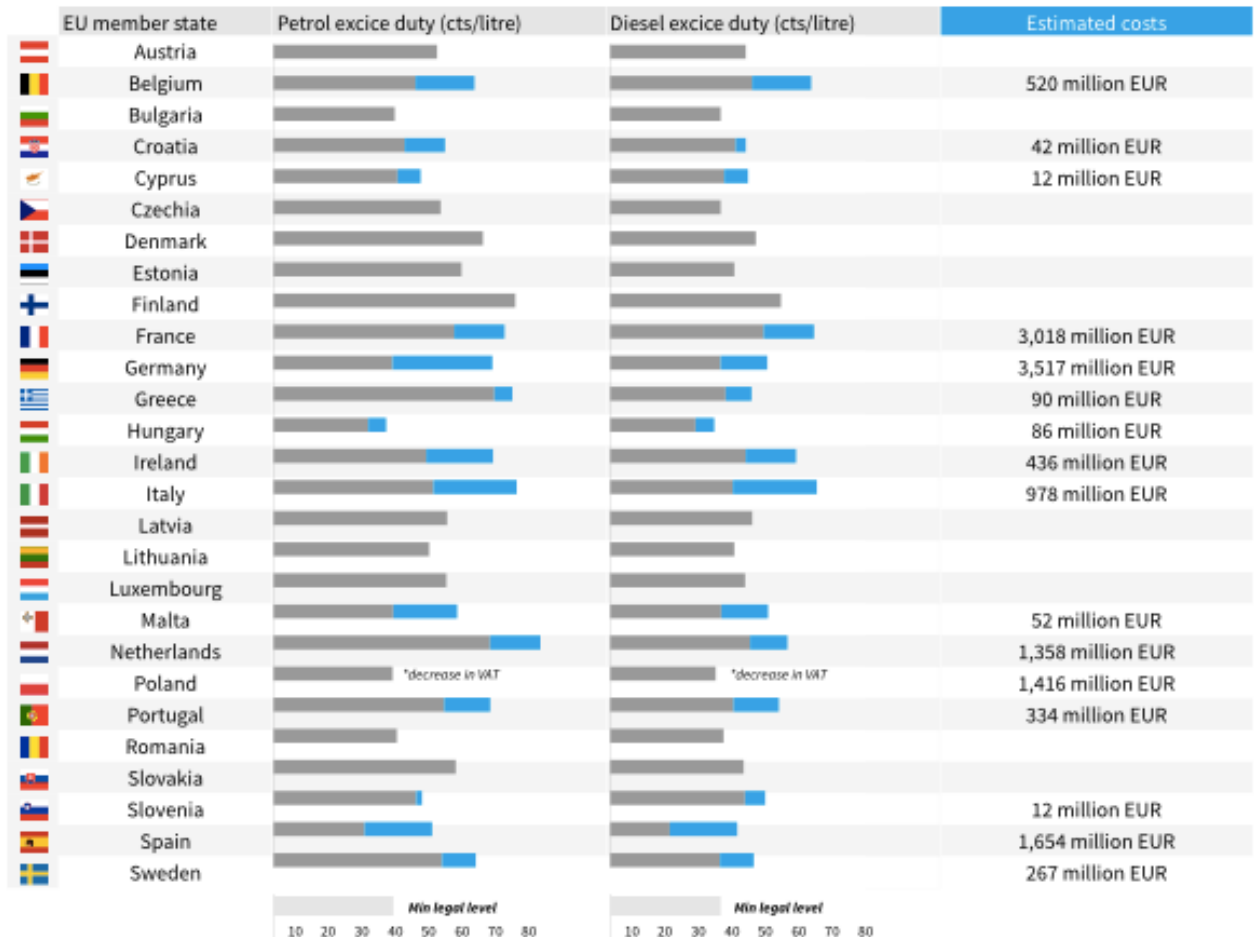
€ 13.8 bln  
Total cost of the cut in fuel duty

Hover over countries to view excise duty measures

Enacted  
Discussed  
Nothing pronounced



Note: in France and Spain the reduction is technically a rebate



Last updated on the 23/03/2022

Bar charts  
legend:

New excise duty  
Reduction in excise duty



ECONOMÍA

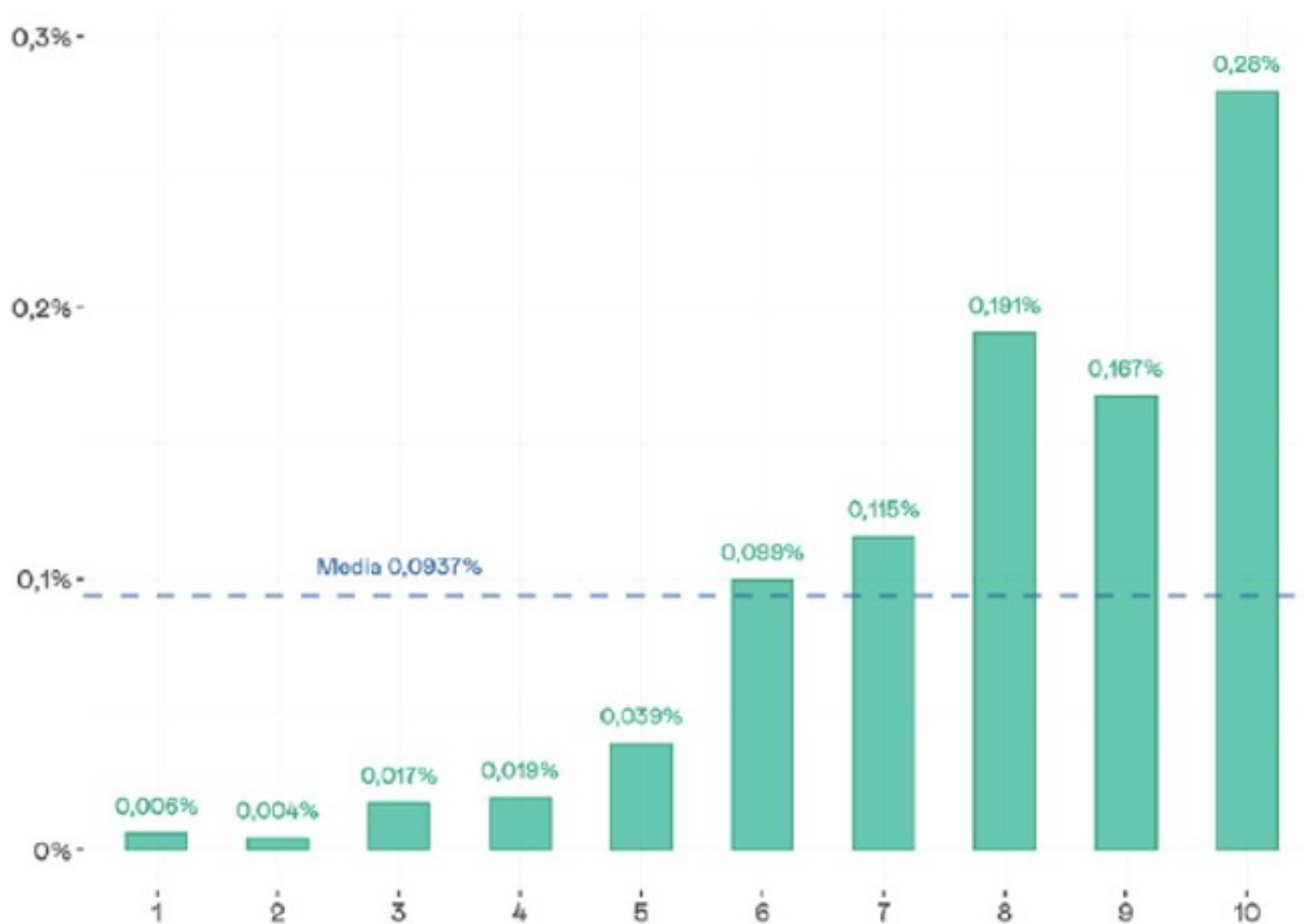
## Sombras del plan de choque contra la crisis energética

Xavier Labandeira, José María Labeaga Azcona

4 mins - 4 de Abril de 2022, 14:03



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



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

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