

Experience exchange between Member States on taxation

Excise and tax measure for fuels Lithuanian case

Tadas Norvydas, Lithuanian Energy Agency



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Directive 2012/27/EU – **Article 7** – Energy efficiency obligation schemes

1. Each Member State shall set up an energy efficiency obligation scheme...

...

9. **As an alternative** to setting up an energy efficiency obligation scheme under paragraph 1, Member States may opt to take **other policy measures** to achieve energy savings among final customers ...

The policy measures referred to in the first subparagraph may include ...

(a) **energy or CO₂ taxes** that have the effect of reducing end-use energy consumption

... thus – Excise and tax measure

Common methods and principles for calculating ... energy savings

3. In determining the energy saving ... the following principles shall apply:

- (a) ... energy savings from taxation measures **exceeding the minimum levels** of taxation applicable to fuels ...;
- (b) recent and representative official data on **price elasticities** shall be used for calculation of the impact; and
- (c) the energy savings from instruments, including fiscal incentives or **accompanying taxation policy** payment to a fund, shall be accounted separately.



Measure *de facto*: It is allowed
It is eligible

Measure *de jure*: Excise duties on
fuels
Taxes (VAT) on
fuels

Fuel	Excise EU	Excise LT	VAT EU	VAT LT
Gasoline	0,36	0,43	0,15	0,21
Diesel	0,33	0,33	0,15	0,21
LPG	0,16	0,16	0,15	0,21

Measure notified to the EC in **2015**

Calculation methodology approved by the ministerial order “On the approval of energy savings calculation and monitoring of energy efficiency measures”.

Last amendment 2020 08 25.

1. Fuel price difference

$$\Delta p = \frac{E_{TaxP} - E_{EUminTaxP}}{E_{EUminTaxP}}$$

Δp – fuel price difference

E_{TaxP} – fuel price with LT taxes

$E_{EUminTaxP}$ – fuel price with EU taxes

2. Estimated fuel consumption

$$E_{Cons\ no\ Tax} = \frac{1}{1 + \Delta p * el_{Accepted}} * E_{ActualCons}$$

$E_{Cons\ no\ Tax}$ – estimated fuel consumptions if no additional LT taxes were applied (only min EU taxes)

$E_{ActualCons}$ – Actual fuel consumption

$el_{Accepted}$ – fuel demand elasticity coefficient

3. Energy savings

$$E_{savings} = E_{Cons\ no\ Tax} - E_{ActualCons}$$

Elasticity study 2014–2018

Year	Gasoline		Diesel		LPG	
	Short	Long	Short	Long	Short	Long
2014	-0,67	-1,49	-0,28	-0,17	-0,40	-3,16
2015	-0,46	-1,01	-0,41	-0,26	-0,05	-0,31
2016	-0,48	-1,14	-0,40	-0,26	-0,04	-0,24
2017	-0,48	-1,13	-0,39	-0,25	-0,04	-0,25
2018	-0,43	-1,02	-0,38	-0,25	-0,03	-0,21
2019	-0,42	-1,03	-0,37	-0,24	-0,05	-0,27
2020	-0,29	-0,71	-0,31	-0,20	-0,06	-0,34
2021	-0,43	-1,05	-0,45	-0,30	-0,11	-0,66
2022	-0,44	-1,08	-0,43	-0,28	-0,05	-0,28
2023	-0,43	-1,06	-0,24	-0,16	-0,07	-0,43
2024	-0,49	-1,19	-0,35	-0,23	-0,03	-0,15
2025	-0,41	-1,00	-0,38	-0,25	-0,08	-0,45
2026	-0,37	-0,90	-0,42	-0,28	-0,05	-0,31
2027	-0,33	-0,79	-0,44	-0,29	-0,04	-0,22
2028	-0,32	-0,78	-0,45	-0,30	-0,06	-0,33
2029	-0,34	-0,82	-0,43	-0,28	-0,05	-0,28
2030	-0,32	-0,79	-0,46	-0,30	-0,05	-0,32

Europe Economics, 15 December 2016, Evaluation of Fiscal Measures in the National Policies and Methodologies to Implement Article 7 of the Energy Efficiency Directive (*no longer used*)

2020 Study – Evaluation of Lithuanian taxes impact on energy and energy sources consumption



Lietuvoje taikomų mokesčių įtakos energijos ir energijos išteklių suvartojimui įvertinimas

Studija

Užsakovas – Lietuvos Respublikos Energetikos ministerija

2020 m.



Elasticity used in 2014–2018

Year	Gasoline	Diesel	LPG
2014	-0,49	-0,17	-0,17
2015	-0,58	-0,25	-0,26
2016	-0,58	-0,25	-0,26
2017	-0,58	-0,25	-0,26
2018	-0,58	-0,25	-0,26

Elasticity study 2014–2018

Year	Gasoline	Diesel	LPG
	Long t.	Long t.	Long t.
2014	-1,49	-0,17	-3,16
2015	-1,01	-0,26	-0,31
2016	-1,14	-0,26	-0,24
2017	-1,13	-0,25	-0,25
2018	-1,02	-0,25	-0,21

↑ **200%** ↓ **1,7%** ↓ **2,9%**

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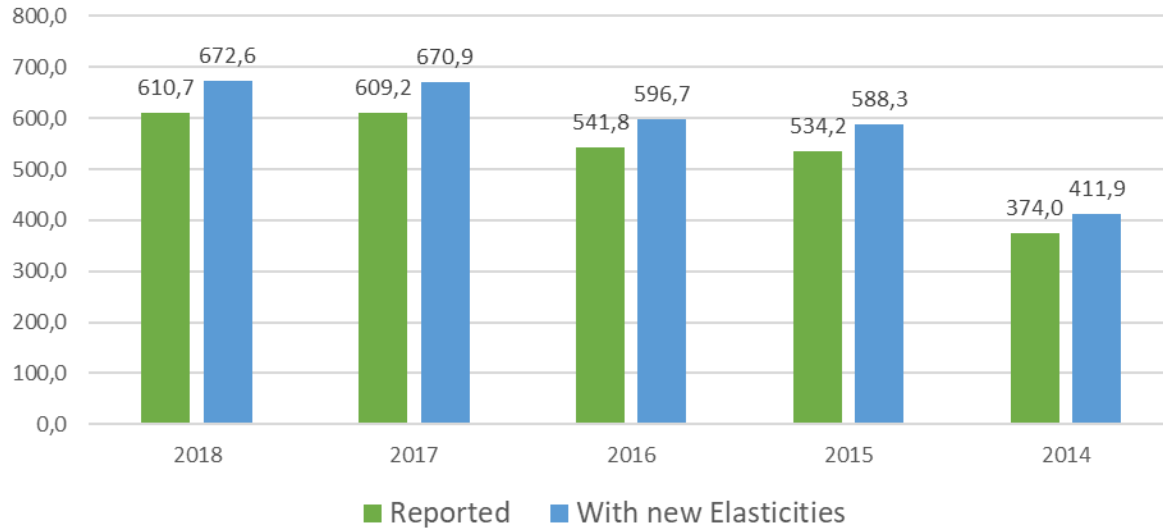
2020 m.



* Available in Lithuanian

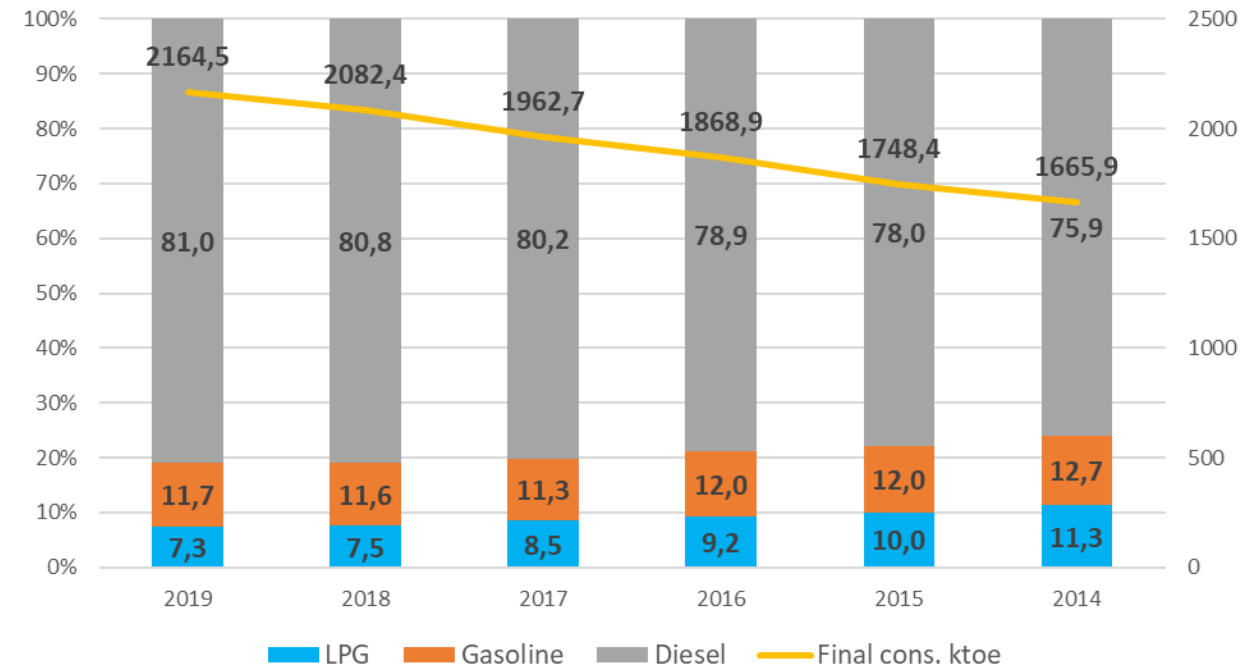
Measure	Impact, %	Energy savings in 2020, GWh
Multiapartment building renovation	32	2764
Excises and taxes on road fuels	31	2670
Energy saving agreements	14	1223
Climate and Environment fund	14	1175
Public building renovation	6	540
Energy information/behavior change	3	243
Municipality's actions	0,3	22
Total		8637

Energy savings, GWh



Year	Energy savings, GWh	
	Reported	With new elasticities
2018	610,7	672,6
2017	609,2	670,9
2016	541,8	596,7
2015	534,2	588,3
2014	374,0	411,9

Final fuel consumption



- Energy savings with new (recalculated) elasticity coefficients are **~9 %** bigger
- Can we “recalculate” energy savings for 2014–2018 retroactively?