

EU-Japan 100 Cities Event on Climate Action

Panel 1: Energy Security and Resilience | Wed, 25.01.2023.

Energy prices: near & long-term outlook in the time of severe uncertainty







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City of Zagreb – select key energy stats

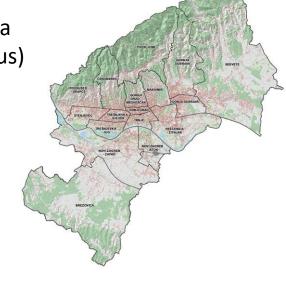
Total primary energy consumption						
				2020.		
	Unit	2020.		TJ	%	
Coal	10³ t	0,2		4	0,0%	
Natural gas	10 ⁶ m ³	856,6		29.825	50,0%	
Biomass	10³ m³	202,9		1.827	3,1%	
RES	TJ	1.137,9		1.138	1,9%	
Oil derivatives	10³ t	384,8		16.163	27,1%	
Electricity	GWh	2.974,5		10.708	17,9%	
TOTAL				59.665	100,0%	

- Capital of the Republic of Croatia

- 768.054 inhabitants (2021 census)

- ~20% of the population

- ~1/3 of the economy



Final Energy Consumption			
	2020.		
	TJ	%	
Industry	5.154	12,0%	
Transport	12.240	28,4%	
Households	16.624	38,6%	
Services	8.891	20,6%	
Agriculture	155	0,4%	
TOTAL	43.064	100,0%	

Final Energy Consumption (by fuel type)									
				2020.					
	Unit	2020.		TJ	%				
Coal	10³ t	0,2		4	0,01%				
Natural gas	10 ⁶ m ³	323,3		11.256	26,1%				
Biomass	10^3m^3	202,9		1.827	4,2%				
RES	TJ	659,2		659	1,5%				
Oil derivatives	10 ³ t	325,5		14.078	32,7%				
Heat	TJ	5.833,0		5.833	13,5%				
Electricity	GWh	2.613,2		9.408	21,8%				
TOTAL				43.064	100,0%				

Energy prices (2020. – 2022. period) – public sector

To illustrate the severity of the (ongoing) crisis, let's compare the energy prices (~420GWh/2y natural gas & ~500 GWh/2y electricity) for City of Zagreb-owned entities (municipal companies, schools, hospitals, ...) after <u>completed public</u> <u>procurement procedures</u> in two periods (2020. – 2022. & 2022. – 2024.):

Electricity (2020. – 2022.)

Projection before public procurement:

€51.5m ~ ¥8b



Natural gas (2020. – 2022.)

Projection before public procurement:

€18.1m ~ ¥2.56b



Winning bid:

€31.8m ~ ¥4.5b



€17.6m ~ ¥2.49b

Electricity (2022. – 2024.)

Projection before public procurement:

€103m ~ ¥14.6b

Natural gas (2022. – 2024.)

Projection before public procurement:

€25.5m ~ ¥3.61b



Winning bid:

...procurement <u>cancelled</u>...due to central government's price cap (*next slide*)

Winning bid:

€43.28 ~ ¥6.13b

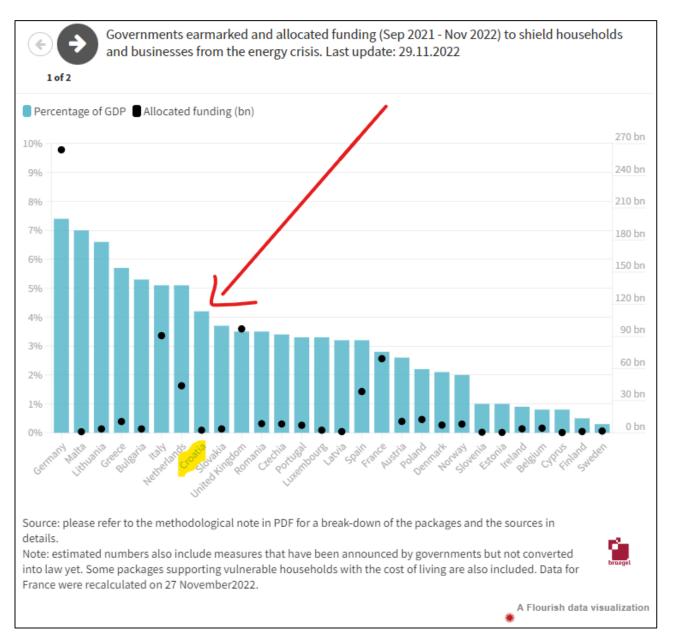
Central government's price cap & outlook (1)

On **8 September 2022**, the government announced a €2.8 billion (~¥396b) package that introduced a cap on energy prices. **From 1 October 2022 to 31 March 2023**, households will pay €59 /MWh (~¥8352), or €88/MWh (¥12454)when consuming above 2,500 kW. Schools, kindergartens, universities, old people's homes, NGOs, **and** <u>administrative</u> <u>buildings (includes local and regional administration)</u> will pay a blanket price of €62/MWh.

For companies, prices will vary between €180/MWh or €230/MWh depending on consumption.

On **17 October 2022**, the government adopted a new Regulation establishing the highest retail prices of petroleum products. Price caps on fuel(s) are adjusted every two weeks.

Central government's price cap & outlook (2)



Zagreb's Energy Poverty Mitigation Programme

Originally conceived to set up the multi-year process for alleviating the upcoming **EU ETS2** introduction (**carbon tax on fossil fuel use in heating and transport**), since the onset of the crisis the Programme pivoted to a more **near-term local fiscal transfer** for the most vulnerable households approach with yearly updates and ongoing monitoring.

2023 is the preparatory year (mapping all vulnerable households and future Programme users) while direct fiscal transfer start in FY2024 across a range of measures:

- energy consulting
- energy baskets
- replacement of household appliances
- energy refurbishment of homes and buildings
- renewable energy sources
- social housing development



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ありがとうございます!

Thank you!







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