

Energy Crisis and e-infrastructure – Case of University Computing Centre SRCE

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e-IRG Workshop, 12 December 2022, Prague



University Computing Centre SRCE

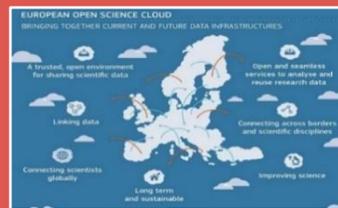
... Builds national **e-infrastructure**, from data centers, through network, computer and storage resources, all the way to information services



... Provides **digital services**, education of users and advanced user support



... Builds **bridges** to international infrastructures and initiatives

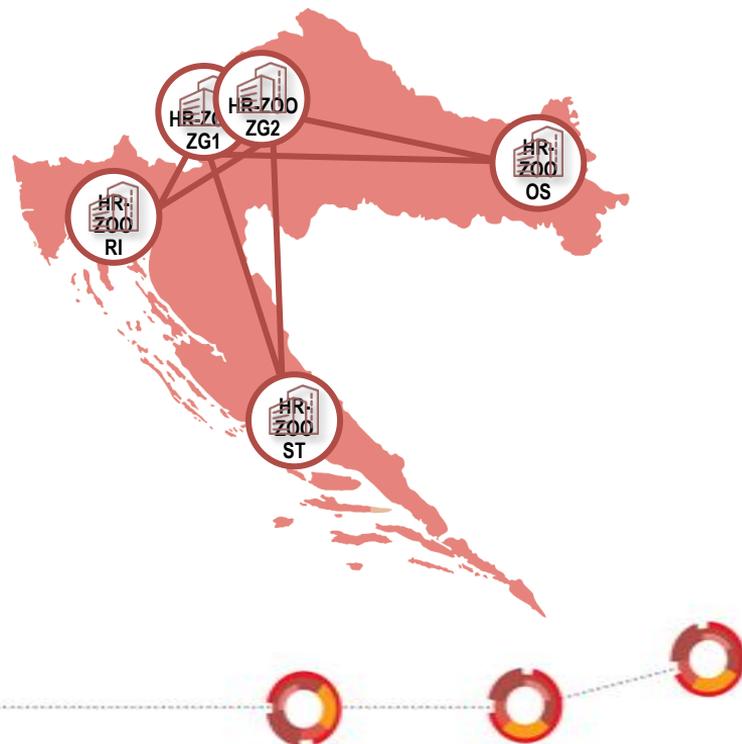


... is a synonym for a **digital transformation** of science and higher education



Croatian Scientific and Educational Cloud HR-ZOO

- Croatian Scientific and Educational Cloud (HR-ZOO project)
 - **national e-infrastructure** (for Science and HE) in Croatia
- Network of five modern data centres connected with 100 Gbit/s links; computing (HPC, HTC, HSC) and storage resources, with dedicated support for researchers
- DCs opened in 2022, computing and storage resources up and running in Q1 2023



Government measures for tackling the energy crisis

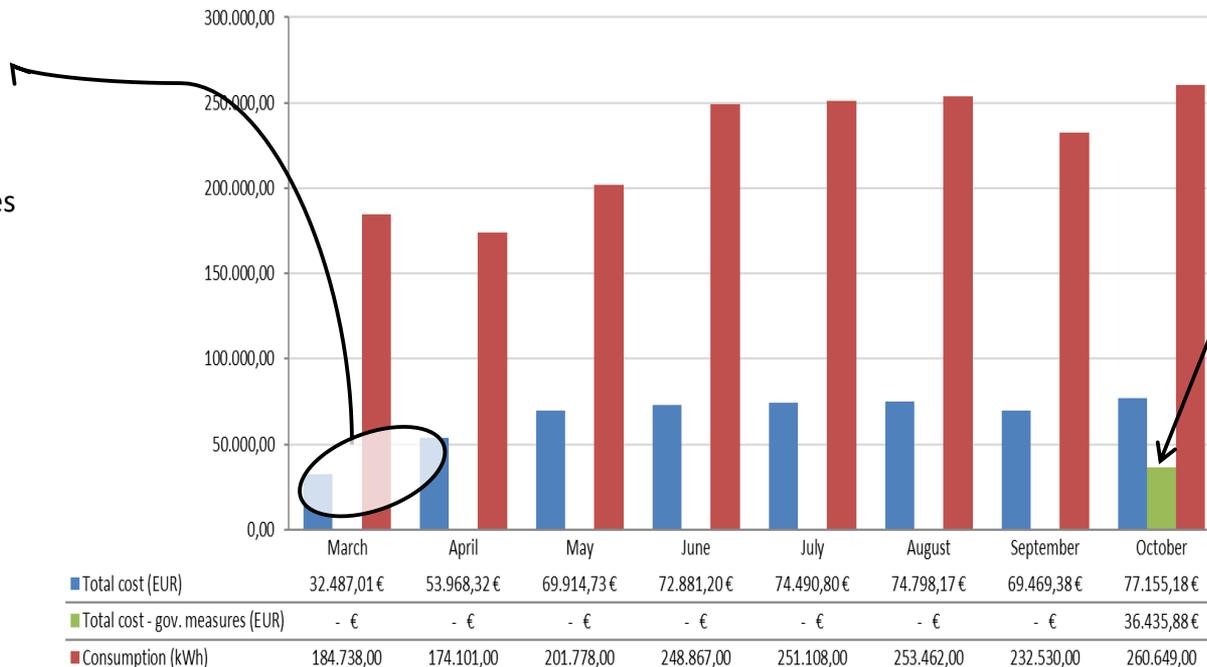
- September 2022 - **comprehensive package of measures**
- Limited price of electricity – price **level of household service** (before – price level for business!), with an average price of 62 euros per MWh
- Ensuring stable functioning of public and non-profit institutions, **including universities and research institutes**
- In force until the **end of March 2023**



HR-ZOO data centres energy consumption and cost

Cost of energy/consumption - total (2022)

- **March/April 2022** - huge increase in prices of electrical energy in Croatia, almost 40% up
- **October 2022** – all 5 HR-ZOO data centres - 260.649 kWh /without the new HPC resource
- **October 2022** - 77k EUR without government measures - 36k EUR with government measures
- we are now paying **less** than before the price increase in April, proportionally to energy consumption



e-infrastructure in Croatia and energy crisis

- A&R public institutions in Croatia are state budgeted (incl. cost for electric power)
- Increase in SRCE budget, to cover the increased costs
- No impact so far on our services and operations!
- Question remains – what will happen **after March 2023?**
- Discussion on using RRF and ERF funds for installing and using alternative/renewable sources of energy (e.g.solar) are ongoing
- We are on a position that state should cover costs of national e-infrastructure (e-commons) operated by public institutions
- **e-infrastructure is the solution, not the expense!**



THANK YOU!

QUESTIONS?

Slaven Mihaljević, SRCE

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