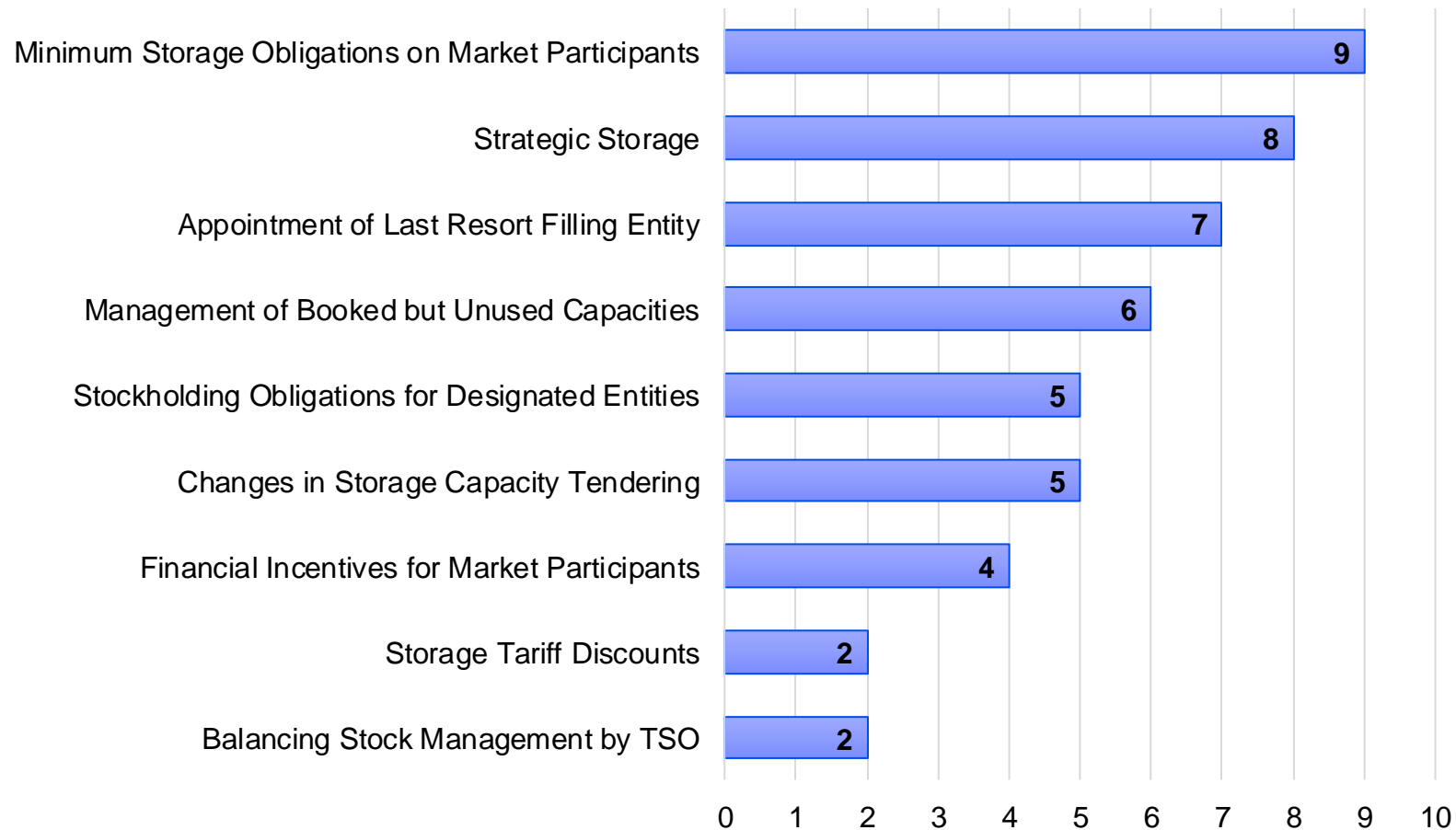


Study on the impact of the measures included in the EU and National Gas Storage Regulations for ACER

October 2023

Measures of EU Gas Storage Regulation by Member States with storage



- Most Member States **establish gas stocking obligations** (on market participants or other entities, strategic storage, last resort filling entities)
- Some measures **incentivise booking and utilisation** of storage capacity (tariff discounts, subsidies, contracts for differences, management of booked but unused capacities, tendering of storage capacity).

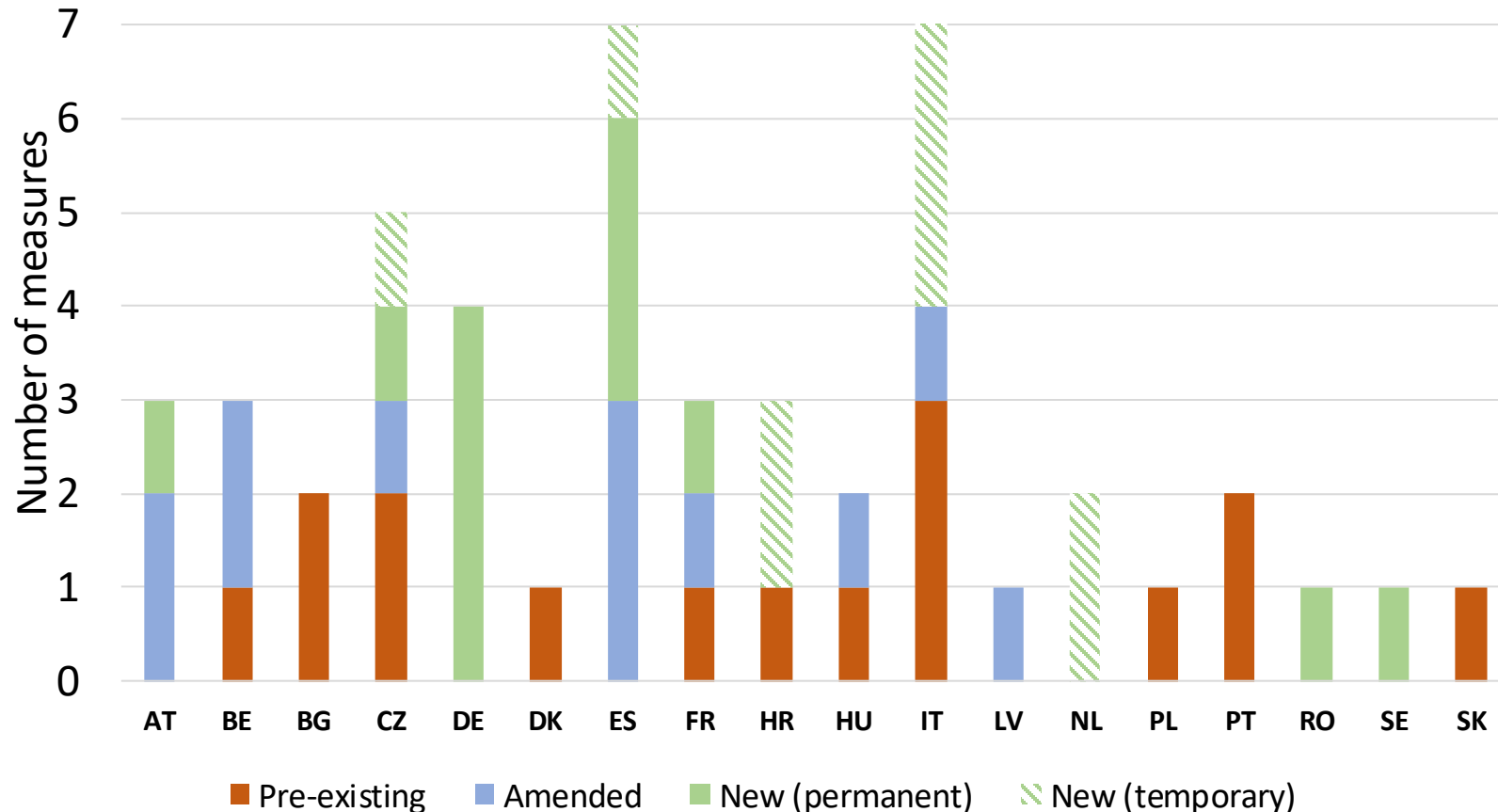
Overview of Measures of EU Gas Storage Regulation taken by Member State

	a. Minimum volume in gas storage	b. Tender of capacities ²⁰	c1. Balancing stock managed by TSO	c2. Obligations imposed on designated entities	d. Coordinated instruments	e. Voluntary joint procurement mechanisms	f. Financial incentives for market participants	g. Unused booked capacities	h. Strategic storage	i. Appointment of dedicated entity	j. Discounts on storage tariffs	k. Capital and operational expenditures ²¹
AT	✓							✓	✓			
BE		✓						✓			✓	
BG	✓								✓			
CZ	✓			✓			✓(t)	✓	✓			
DE				✓				✓	✓	✓		
DK				✓								
ES	✓	✓					✓	✓	✓	✓	✓(t)	
FR		✓								✓		✓
HR	✓(t)		✓							✓(t)		
HU	✓								✓			
IT		✓	✓(t)	✓(t)			✓(t)	✓	✓	✓(t)		✓
LV									✓			
NL							✓(t)			✓(t)		
PL				✓								
PT	✓	✓										
RO	✓											
SE										✓		
SK	✓											

- ✓: New measure implemented due to the Gas Storage Regulation
- ✓: Existing measure amended as a result of the Gas Storage Regulation
- ✓: Measure in place prior to the Gas Storage Regulation
- (t): Temporary measure (applied only in 2022/23 and/or 2023/24)

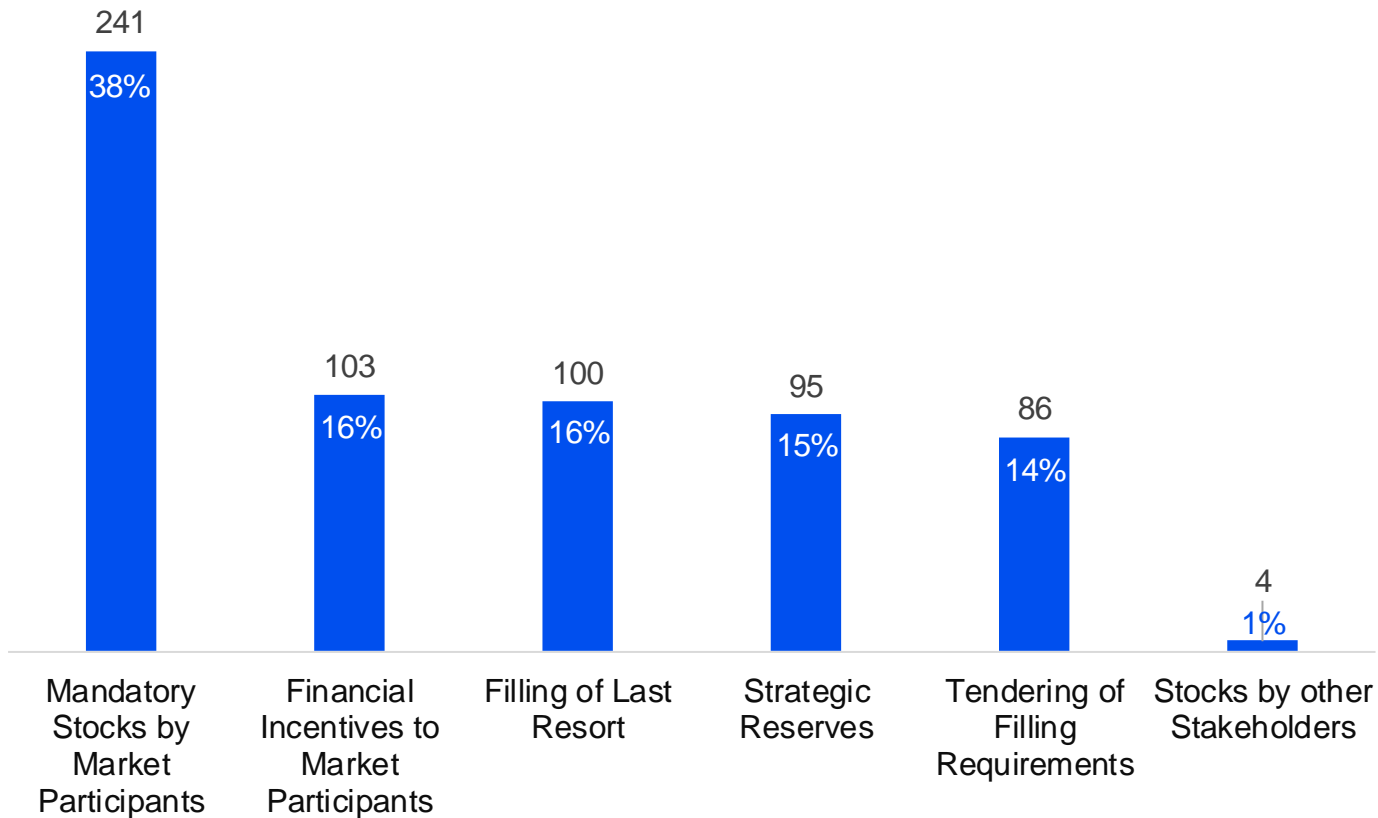
Measures taken by Member States with underground gas storage as defined in Article 6b of the EU Gas Storage Regulation.
Source: VIS analysis, based on NRAs' data.

Number of Measures of EU Gas Storage Regulation taken by Member State



- Some Member States continued applying measures that existed before the EU Gas Storage Regulation.
- Other Member States have amended the existing measures and/or adopted new measures in 2022, of which many are temporary and related to the challenging market conditions from 2022-2024.

Gas volumes stored due to storage measures in 2022



- In 2022, as a result of the measures, Member States' underground facilities **collectively stored over 630 TWh of gas.**
- **Mandatory stocks** established by market participants accounted for almost **40%**.
- **Significant** gas volumes had to be procured **as a last resort** due to insufficient market-based storage filling.
- The application of use-it-or-lose-it (**UIOLI**) mechanisms resulted in the release of 25 TWh of storage capacity re-used by other players.



85 TWh / 885 million € / procurement of storage services

The procurement of services for gas storage filling through public tenders secured around 85 TWh of gas in storage, of which costs 95% are in Germany and 5% in Denmark. This cost concerns only the fee paid to the filling service providers for keeping gas in storage on specific dates. It does not include the cost for procuring the gas to be stored.



105 TWh / 19 billion € * / gas filling in AT, DE and IT

Establishing strategic gas reserves in Austria as well as last-resort filling in Germany and Italy during Q3 2022, secured 105 TWh at an estimated cost of 19 billion €. This substantial cost was due to high prices of gas, ranging between 175 and 200 €/MWh in Q3 2022.*

***Note:** It is important to mention that these figures only account for the cost of gas procured. Calculation of the measure's actual cost should consider the revenues from selling the stored gas quantities back to the market. However, it is expected that only a portion of these costs can be recovered from the market. This expectation is based on the gradually decreasing gas prices following the peak in August 2022, after which prices dropped and remained below 70 €/MWh since the beginning of 2023.

01

FINANCIAL INCENTIVES

Offering financial incentives for storage users facilitated the utilisation of storage capacity. Incentives such as tariff discounts and direct subsidies have proved to be effective. On the other hand, the interest of market participants in taking part in more elaborate incentive schemes, such as signing contracts for differences, was limited.

02

STOCKHOLDING OBLIGATIONS

Imposing stockholding obligations help guaranteeing that storing filling targets can be achieved. However, when positive market price signals incentivise market participants to store gas, there is the risk they can reduce the overall flexibility of the gas system (if stockholding obligations account for the largest part of the storage capacity).

03

LAST RESORT STORAGE ENTITIES

Appointing an entity to provide storage filling of last resort contributes to safeguard security of supply, in case the market would not act, but it comes at a cost. The mechanism should be made efficient by planning when the entity should act, volume requirements, and introducing risk reduction mechanisms (e.g., price hedging by the designated entity).

04

USE-IT-OR-LOSE-IT MECHANISMS

Implementing these mechanisms enabled the swift release of booked but unused capacity and contributed considerably to storage filling.

EU Gas storage regulation and its implementation

