

# **SECURITY OF GAS SUPPLY (SoS) IN SEE IN THE SHORT TERM**

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# Imported natural gas in % of imports by source

	ALB	B&H	BU	CRO	FYR	MN	RO	SER	TU	UNM	AU	GR	HU	IT	SLO
RUS. FED.		100	100	100	100		100	100	60		76	75	88	36	59
NORWAY											14				
GERMANY											10				
ALGERIA									19			25		34	37
UKRAINE													2		
FRANCE													4		
GERMANY/ AU													6		4
NORWAY														17	
TURKMENIS T.														7	
NIGERIA									5					6	
IRAN									16						
TOTAL	0	100	100	100	100	0	100	100	100	0	100	100	100	100	100

## Factors strengthening SoS in the SEE countries are presented in the following table

Security of supply features							
<i>Country</i>	<i>Multiple import sources</i>	<i>Multiple supply comp.</i>	<i>Multiple connections gas sources</i>	<i>Significant domestic production</i>	<i>LNG Term.</i>	<i>Significant storage/linepack</i>	<i>Long term cont.</i>
<b>Albania</b>	No	No	No	No	No	No	No
<b>Bos.&amp; Herz.</b>	No	No	No	No	No	No	Yes
<b>Bulgaria</b>	No	No	Yes	No	No	Yes	Yes
<b>Croatia</b>	No	No	Yes	Yes	No	Yes	Yes
<b>F.Y.R.o.M</b>	No	No	No	No	No	No	Yes
<b>Romania</b>	No	Yes	No	Yes	No	Yes	Yes
<b>Montenegro</b>	No	No	No	No	No	No	No
<b>Serbia</b>	No	No	No	Yes	No	No	Yes
<b>Turkey</b>	Yes	No	Yes	No	Yes	No	Yes
<b>UNMIK</b>	No	No	No	No	No	No	No
<b>Austria</b>	Yes	Yes	Yes	Yes	No	Yes	Yes
<b>Greece</b>	Yes	No	Yes	No	Yes	No	Yes
<b>Hungary</b>	Yes	No	Yes	No	No	Yes	Yes
<b>Italy</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Slovenia</b>	Yes	No data	Yes	No	No	No data	Yes

## Key figures of the gas industry in SEE/partially EU

<b>Key Figures of the gas industry in SEE/partially EU</b>							
<b>Country</b>	<b>Annual Consumption (bcm)</b>	<b>Number Storage plants</b>	<b>Storage Capacity (bcm)</b>	<b>hourly Capacity Mio./h</b>	<b>Supply out of Storage (average days)</b>	<b>Number of Entry points</b>	<b>supply routes</b>
<b>Bosnia &amp; Herzegovina</b>	0,18	0	0	0	0	1	1
<b>Bulgaria</b>	2,9	1	0,45	0,17	56	1	1
<b>Croatia</b>	2,65	1	0,558		77	1	1
<b>F.Y.R. of Macedonia</b>	0,11	0	0	0	0	1	1
<b>Romania</b>	18,3	7	2,5	0,8	< 50	2	2
<b>Serbia</b>	2,22	1	0,8	collection ongoing	>60	1	1
<b>Turkey</b>	21,2	1	1,3	Collection ongoing	22	4	4
<b>Austria</b>	8.9	5	2,3 -2,8	1,3	> 60	2	2
<b>Greece</b>	2,4	0	0	0	0	1	1
<b>Hungary</b>	14,56	5	3,36	1,8	> 60	2	2
<b>Italy</b>	76,4	9	12,42	collection ongoing	< 60	>4	>4
<b>Slovenia</b>	1,1	0	0	0	0	3	3

## CONCLUSIONS

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- **Identify** large customers - co-operate with industry
- Gas fired power plants with **other fuels**
- Could industry production be **reduced**
- Could **production** be **shifted** to another time of the day
- **Bringing forward** annual closing/maintenance
- **Increases** of domestic production/storage withdrawal capacity
- **Incentives** for providing all possible capacity to customers
- Determine institution which is the main partner in foreseeing and handling such shortages

## CONCLUSIONS

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- Make sure that this institution has the **following information**:
  - The daily forecasted natural gas **demand**
  - The daily possible natural gas **injection rate**
  - Forecasted gas demand for the next six weeks
  - Available **storage volume**
  - **Available linepack**
  - **Reserve storage withdrawal capacity**
  - **Pressure and flow data** of the grid
  - **Demand of electricity.**
  
- Determine the **information flow** between the TSOs
  
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- Gas grid system injection rate lower than demand, measures