SYSTEM DEVELOPMENT MAP
2018 / 2019

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The System Development Map 2018 / 2019 presents existing infrastructure & capacity and planned infrastructure from the perspective of the year 2019.

The layout is based on the CAPMAP 2019 unless respective ENTSOG members provided update. Data presented in capacity matrix was extracted from Transparency Platform (with application of the 'Lesser of' Rule), then amended and approved by TSOs on 13 December 2019.

The 2018 / 2019 historical data on demand & supply are presented aggregated in form of charts (covering summer and following winter to allow investigate gas storage usage). Values were taken from the respective Summer and Winter Review Report. Information regarding gas storage fill rate was taken from GIE AGSI+.

The Country Profiles includes demand data represent actual country demand for the respective days/periods, storage & LNG capacities according to the interconnection to the country's transmission system and installed gas-fired power generation capacity (additional data sources: GSE 2018 Storage Map (including necessary updates), GLE 2019 LNG Map and ENTSO-E Statistical Factsheet). The gas production reflects the maximum deliverability achieved.

All data provided in the map are for information purposes and shall be treated as indicative only.
Under no circumstances shall they be regarded as data for commercial use.

Import & Transmission Capacity
2019 (GWh/d)

(Values submitted by TSO from Transparency Platform-the lowest value between the values submitted by cross border TSOs)

Key
DEg – market area GASPOOL
DEn – market area Net Connect Germany

Import Capacities

TO \ FROM	DZ	LNG	LY	NO	RU	TR	
AT							0
BE		288		488			776
BG							0
CH							0
CZ							0
DEg				511	1.792		2.303
DEn				729			729
DK							0
EE					36		36
ES	732	1.911					2.642
FI					220		220
FR		1.087		570			1.657
GR		204				49	253
HR							0
HU					517		517
IE							0
IT	1.150	602	440				2.192
LT		122			325		447
LU							0
LV					179		179
MD							0
MK							0
NL		385		963			1.348
PL		158			1.336		1.494
PT		200					200
RO					1.114		1.114
RS							0
RU							0
SE							0
SI							0
SK					2.028		2.028
SM							0
TR							0
UA							0
UK		1.671		1.499			3.170
Total	1.882	6.628	440	4.760	7.547	49	

Cross-Border Capacities

TO \ FROM	AT	BE	BG	CH	CZ	DEg	DEn	DK	EE	ES	FI	FR	GR	HR	HU	IE	IT	LT	LU	LV	MD	MK	NL	PL	PT	RO	RS	RU	SE	SI	SK	SM	TR	UA	UK	
AT						360											193														1.570					2.123
BE						132	268					270											1.437												652	2.759
BG													47													731										778
CH						318						223					441																			969
CZ					1.407																										400					1.807
DEg		130			335		57	87															332	933												1.873
DEn	390	160		173	907	442		4															1.117													3.193
DK						101	23																													124
EE																				168																168
ES												165													80											245
FI																																				0
FR		850		100			605			224																										1.779
GR			117																																	117
HR															78															54						132
HU	153																									3					127			517		800
IE																																			387	387
IT	1.149			635																										21						1.806
LT																				65																65
LU		49					38																													87
LV																	68																			68
MD																										1										1
MK			20																																	20
NL		394				341	162																													897
PL					28	234																														262
PT										144																										144
RO			8												52																					60
RS															142																					142
RU																	114																			114
SE								81																												81
SI	113													8			28																			149
SK	247				914																												250			1.410
SM																	4																			4
TR			477																																	477
UA																															416					416
UK		803																					494													803
	2.011	2.386	622	908	2.184	2.027	1.831	172	0	368	0	658	47	8	272	0	666	182	0	233	0	0	2.886	933	80	735	0	0	0	75	2.514	0	0	767	1.039	

KEYS

Countries
- ENTSOG Member Countries
- ENTSOG Associated Partner
- ENTSOG Observers
- Other Countries

Transport by pipeline
- under 24"
- 24" to 36"
- 36" and over
- project

Gas Reserve areas
- gas field
- drilling platform

Gas storage facilities
- Acquifer
- Salt cavity - cavern
- Depleted (Gas) field on shore / offshore
- Other type
- Unknown
- Gas storage projects
- Etzel* multiple storage facilities operated by different SSOs

Map points
- Trading Points / Market Areas
- Intra-country or intra balancing zone points
- Cross-border interconnection point within Europe or export point to non-EU country
- Cross-border interconnection point with third country (import)
- LNG Terminal/ entry point intro transmission system
- LNG Export Terminal
- Virtual Point
- Small scale LNG liquefaction facilities
- Third country cross-border interconnection point
- Cross-Border Europe *Under construction or Planned*
- Cross-Border third country import/export *Under construction or Planned*
- LNG Import Terminal *Under construction or Planned*
- LNG Export Terminal *Under construction or Planned*
- Small scale LNG liquefaction facilities *Under construction or Planned*

Data keys
- NATIONAL PRODUCTION
- RUSSIA
- NORWAY
- ALGERIA
- LIBYA
- UGS
- LNG

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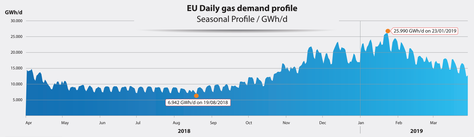
DEMAND

EUROPEAN DEMAND

EU Total 2018 4.986.841 GWh

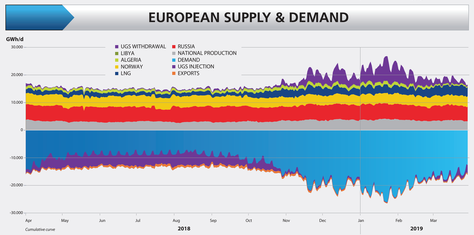
EU Apr 2018 - Sep 2018	(Summer)	1.672.864 GWh	**EU Oct 2018 - Mar 2019**	(Winter)	3.220.596 GWh
EU Min. Day	(19/08/2018)	6.942 GWh/d	**EU Max. Day**	(23/01/2019)	25.990 GWh/d

EU Daily gas demand profile
Seasonal Profile / GWh/d

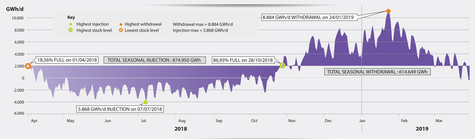


SUPPLY

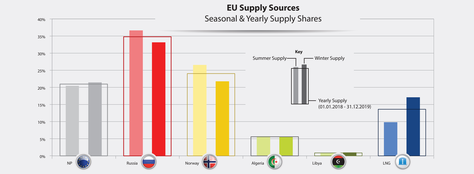
EUROPEAN SUPPLY & DEMAND



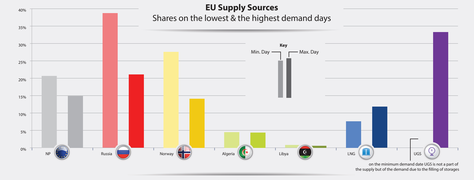
EU Storage / Injection / Withdrawal
Seasonal Profile / GWh/d



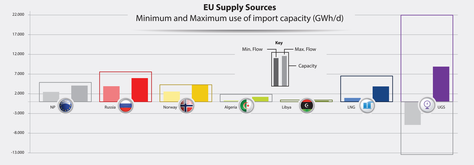
EU Supply Sources
Seasonal & Yearly Supply Shares

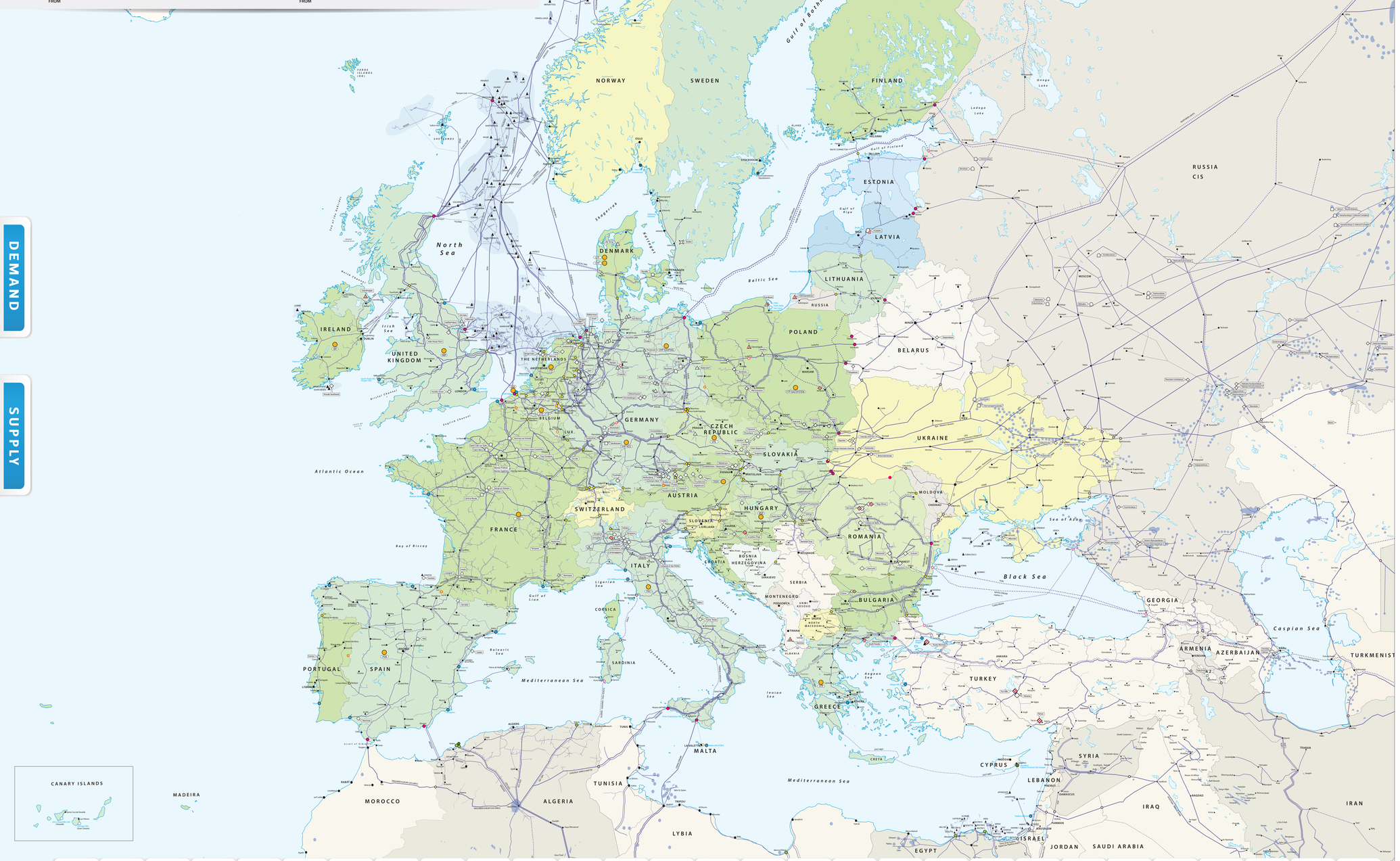


EU Supply Sources
Shares on the lowest & the highest demand days



EU Supply Sources
Minimum and Maximum use of import capacity (GWh/d)





COUNTRY PROFILES

Total 2018
1 Jan 2018 to 31 Dec 2018
Summer
1 Apr 2018 to 30 Sep 2018
Winter
1 Oct 2018 to 31 Mar 2019

COVERS | PROVIDES TSOs | CONNECTS CUSTOMERS | HAS LNG TERM | FUNDS GENERATION

AUSTRIA	BELGIUM	BOSNIA-HERZ.	BULGARIA	CROATIA	CZECH REPUBLIC	DENMARK	ESTONIA	FINLAND	FRANCE	N. MACEDONIA	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBURG	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	SWITZERLAND	UNITED KINGDOM
Total 2018	90.634 GWh	187.055 GWh	1.796 GWh	32.454 GWh	28.127 GWh	80.872 GWh	26.023 GWh	37.574 GWh	479.642 GWh	2.450 GWh	846.011 GWh	32.495 GWh	104.896 GWh	96.750 GWh	341.132 GWh	15.195 GWh	22.290 GWh	8.867 GWh	374.891 GWh	194.168 GWh	66.052 GWh	117.824 GWh	51.323 GWh	8.494 GWh	246.283 GWh	93.917 GWh	373.885 GWh	651.962 GWh
Summer	42.023 GWh	83.554 GWh	555 GWh	12.484 GWh	8.775 GWh	19.922 GWh	11.749 GWh	12.760 GWh	128.571 GWh	1.084 GWh	351.994 GWh	13.229 GWh	32.594 GWh	39.860 GWh	130.356 GWh	4.472 GWh	7.200 GWh	2.929 GWh	132.005 GWh	59.571 GWh	23.678 GWh	53.078 GWh	16.920 GWh	2.829 GWh	84.334 GWh	35.342 GWh	137.527 GWh	220.035 GWh
Winter	48.611 GWh	103.501 GWh	1.241 GWh	19.969 GWh	19.352 GWh	60.950 GWh	14.274 GWh	24.814 GWh	350.071 GWh	1.366 GWh	494.016 GWh	19.266 GWh	72.302 GWh	56.890 GWh	210.776 GWh	10.723 GWh	15.090 GWh	5.938 GWh	242.886 GWh	134.597 GWh	42.374 GWh	64.746 GWh	34.403 GWh	6.665 GWh	161.949 GWh	58.575 GWh	236.358 GWh	431.927 GWh
Max. Day	502.000 GWh	1.022 GWh/d	9.000 GWh/d	50 GWh/d	23 GWh/d	76 GWh/d	17 GWh/d	168 GWh/d	1.640 GWh/d	5 GWh/d	1.080 GWh/d	60 GWh/d	222 GWh/d	96 GWh/d	218 GWh/d	9 GWh/d	23 GWh/d	8 GWh/d	1.011 GWh/d	388 GWh/d	84 GWh/d	128 GWh/d	74 GWh/d	12 GWh/d	1.440 GWh/d	9 GWh/d	48 GWh/d	1.892 GWh/d
Min. Day	2019/01/23	296 GWh/d	1 GWh/d	2 GWh/d	1 GWh/d	5 GWh/d	4 GWh/d	26 GWh/d	470 GWh/d	0 GWh/d	1.080 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	1.807 GWh/d
EU Max. Day	2018/12/19	1.022 GWh/d	9.000 GWh/d	50 GWh/d	23 GWh/d	76 GWh/d	17 GWh/d	168 GWh/d	1.640 GWh/d	5 GWh/d	1.080 GWh/d	60 GWh/d	222 GWh/d	96 GWh/d	218 GWh/d	9 GWh/d	23 GWh/d	8 GWh/d	1.011 GWh/d	388 GWh/d	84 GWh/d	128 GWh/d	74 GWh/d	12 GWh/d	1.440 GWh/d	9 GWh/d	48 GWh/d	1.892 GWh/d
EU Min. Day	2018/08/19	296 GWh/d	1 GWh/d	2 GWh/d	1 GWh/d	5 GWh/d	4 GWh/d	26 GWh/d	470 GWh/d	0 GWh/d	1.080 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	1.807 GWh/d
Maximum Production	32 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d
Deliverability Winter	1.047 GWh/d	170 GWh/d	0 GWh/d	36 GWh/d	21 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d
Deliverability Winter	10.274 GWh/d	1.022 GWh/d	9.000 GWh/d	50 GWh/d	23 GWh/d	76 GWh/d	17 GWh/d	168 GWh/d	1.640 GWh/d	5 GWh/d	1.080 GWh/d	60 GWh/d	222 GWh/d	96 GWh/d	218 GWh/d	9 GWh/d	23 GWh/d	8 GWh/d	1.011 GWh/d	388 GWh/d	84 GWh/d	128 GWh/d	74 GWh/d	12 GWh/d	1.440 GWh/d	9 GWh/d	48 GWh/d	1.892 GWh/d
Send-out Storage	0 GWh/d	477 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d	0 GWh/d
Storage	2.329 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh	0 GWh
Installed gas-fired capacity	6.853 MWe	6.874 MWe	0 MWe	751 MWe	761 MWe	1.826 MWe	200 MWe	1.812 MWe	36.000 MWe	250 MWe	31.814 MWe	4.215 MWe	4.042 MWe	4.215 MWe	19.778 MWe	1.020 MWe	588 MWe	136 MWe	13.570 MWe	3.775 MWe	2.382 GWe	1.020 MWe	1.311 MWe	319 MWe	30.176 MWe	3.400 MWe	10.176 MWe	35.176 MWe