



Statistical bulletin

Technical Management of the System

May 2018

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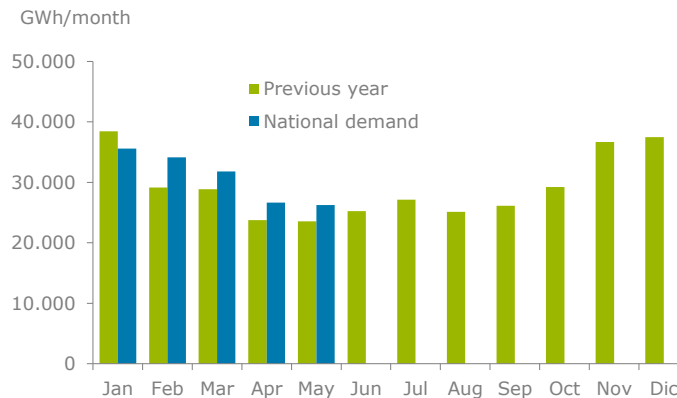
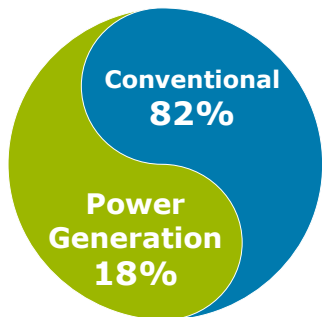
6. Operating notes

NATURAL GAS DEMAND FOLLOW-UP

Unit : GWh

| | Month | % Δ Month | Year | % Δ Year | MAT | % Δ 2017 |
|-------------------------------------|---|-------------|----------------|-------------|--|-------------|
| | 1 st to 31 st May | | Year 2018 | | 1 st June 2017 to 31 st May 2018 | |
| <i>National Demand</i> | 26.160 | 11,2% | 154.300 | 7,3% | 361.344 | 3,0% |
| - Conventional demand | 21.468 | 8,7% | 133.320 | 7,9% | 284.927 | 3,6% |
| - NG for Power Generation | 4.691 | 24,3% | 20.981 | 3,4% | 76.417 | 0,9% |
| <i>International Demand</i> | | | | | | |
| - International connections exports | 3.298 | -14,6% | 12.361 | -4,9% | 30.113 | -2,1% |
| - LNG Vessel loading | 24 | | 2.208 | >100% | 3.258 | >100% |
| TOTAL | 29.481 | 7,7% | 168.870 | 7,7% | 394.715 | 3,1% |

National demand
May - 2018

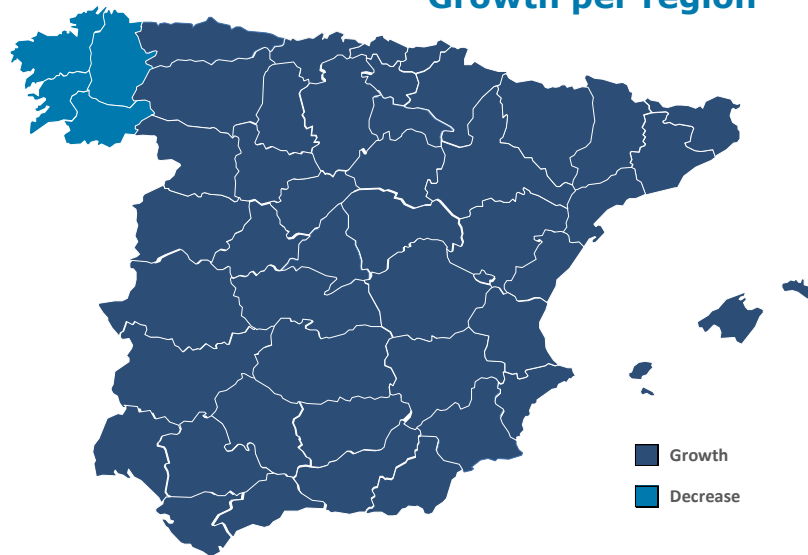
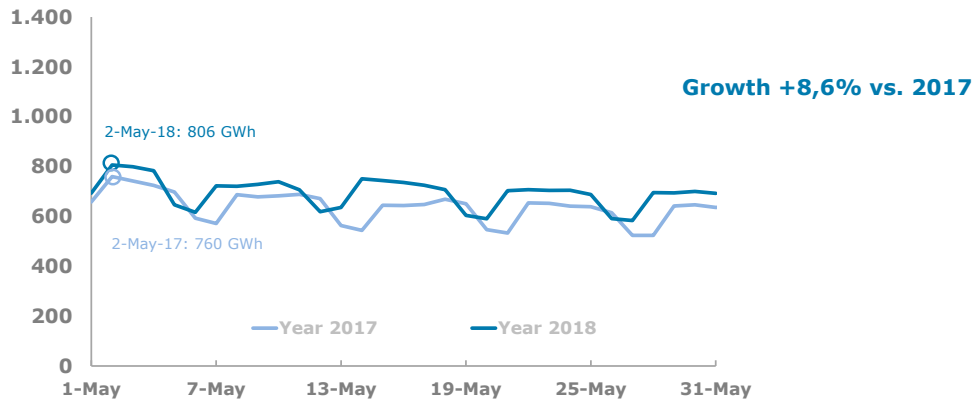


CONVENTIONAL DEMAND

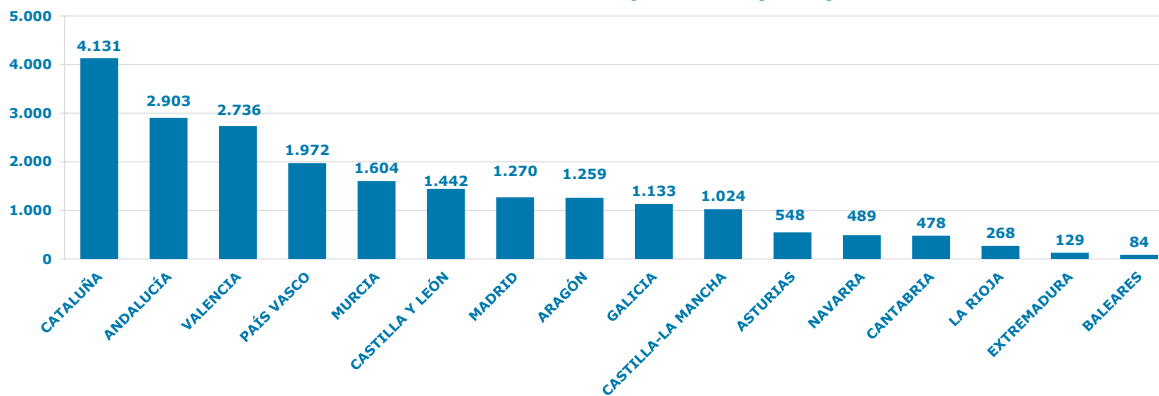
Growth per region

Comparison 2017 - 2018

Unit: GWh



Conventional demand per CCAA (GWh)

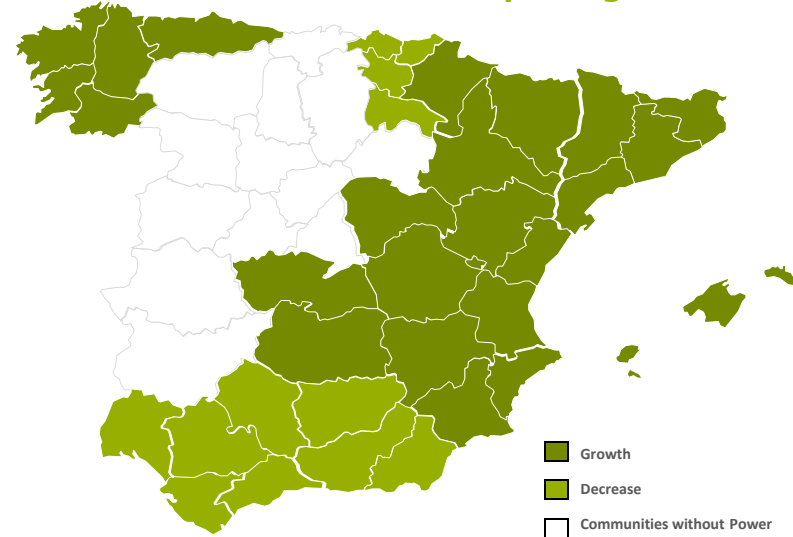
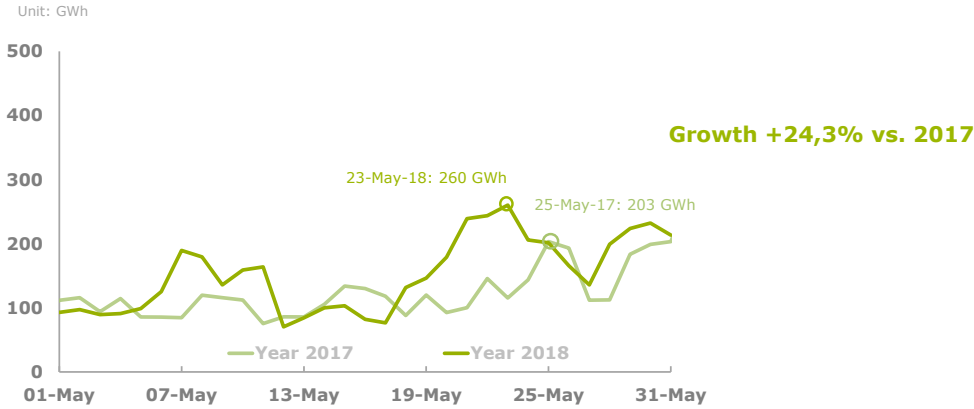


Industrial + DC

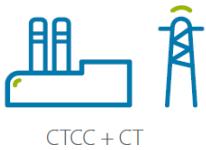
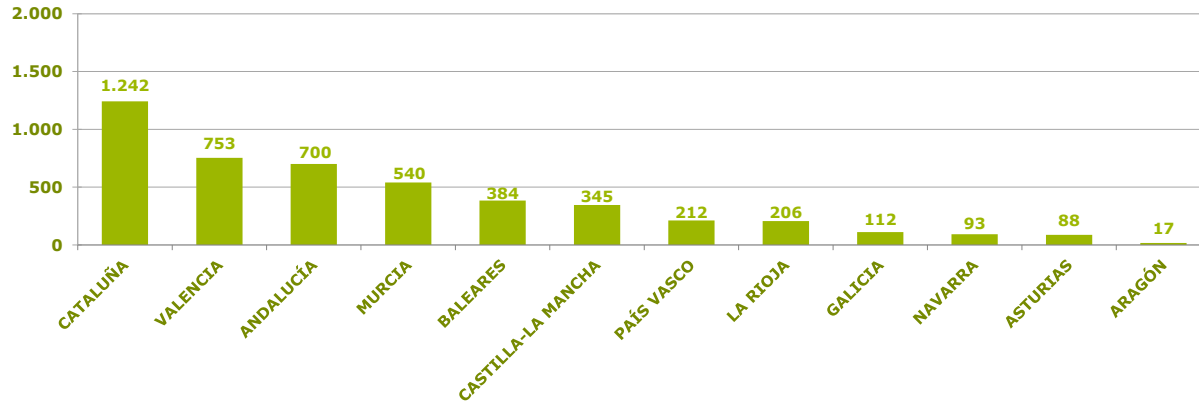
NATURAL GAS FOR POWER GENERATION

Growth per region

Comparison 2017 - 2018

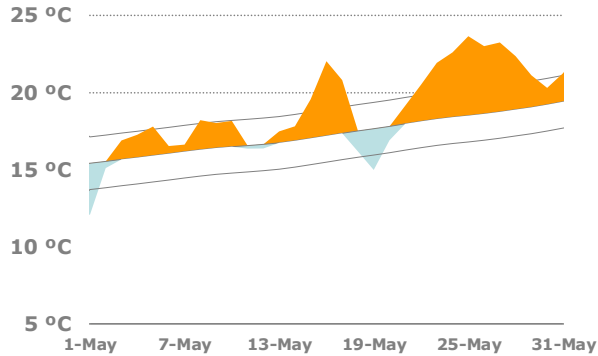


NG for Power Generation (GWh)

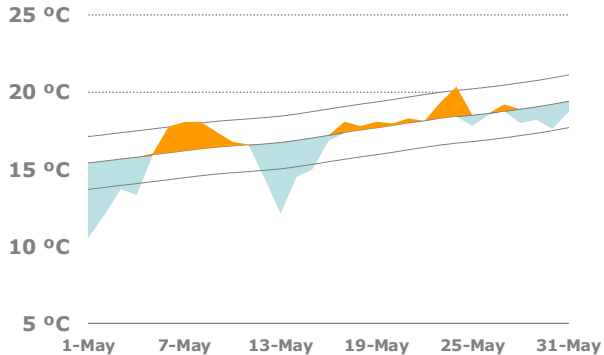


DEMAND - TEMPERATURES

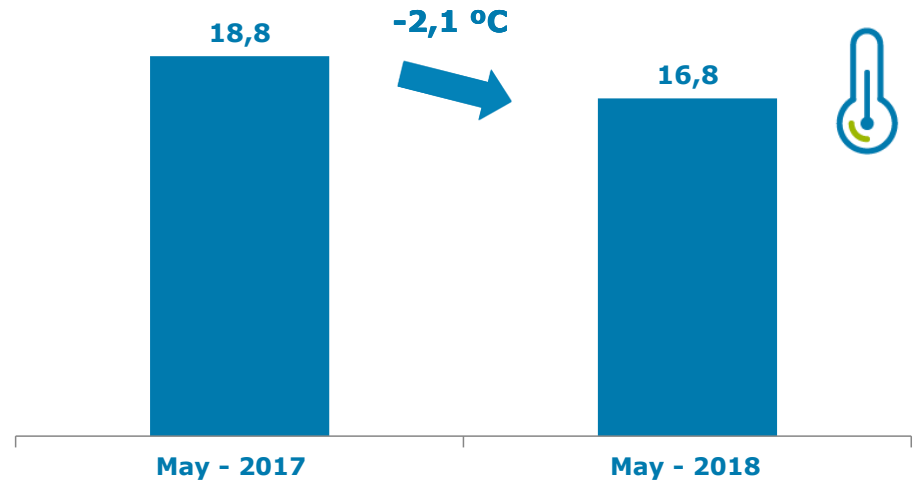
Temperatures 2017



Temperatures 2018



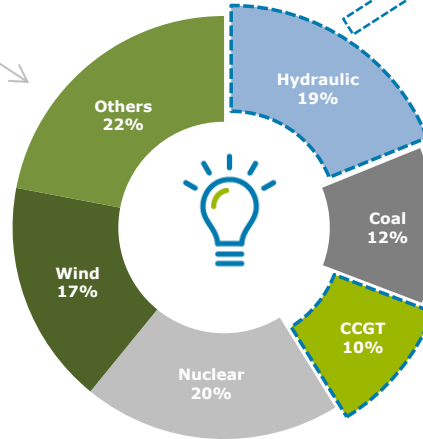
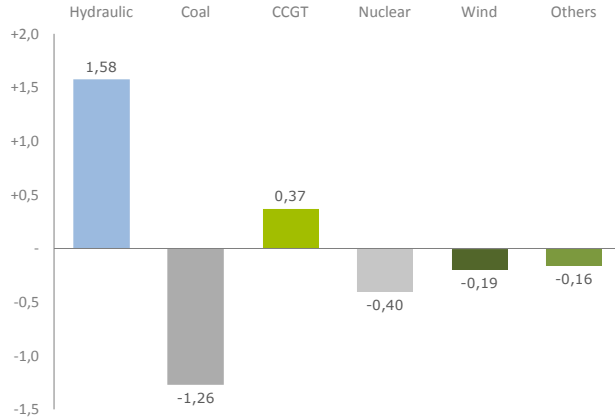
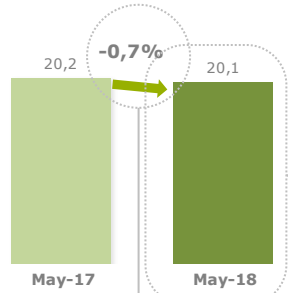
- Temperatures have been lower during May 2018 in comparison with May 2017.
- The average temperature has been **2,1°C** lower than the average of May 2017



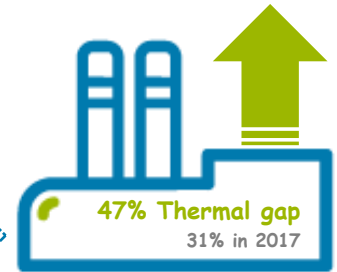
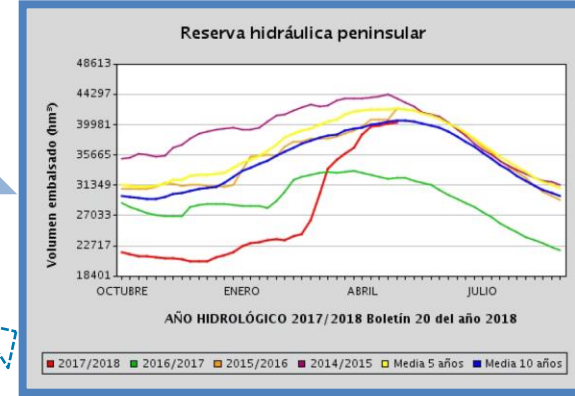
GAS FOR POWER GENERATION

TRANSMISSION DEMAND MAY-18 VS. MAY-17

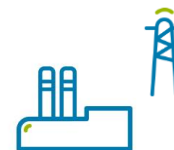
Unit: TWh (e)



RED ELÉCTRICA DE ESPAÑA



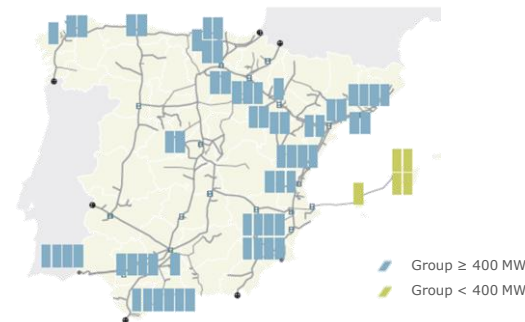
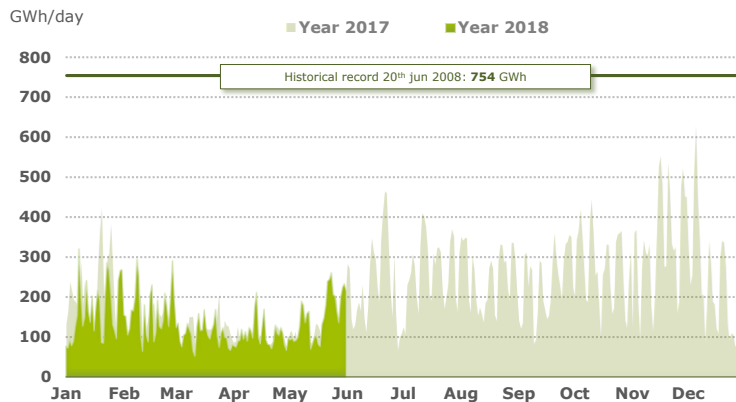
GAS FOR POWER GENERATION



TPPCC 's

| Unit: GWh | Monthly record | | | Mobile Annual Total record | | |
|----------------------------------|----------------|--------------|---------------------|----------------------------|--------------------------|---------------------|
| | May-17 | May-18 | Δ s/may-18 | Year 2017 | MAT Jun-2017/May-2018 | Δ over/Year 2017 |
| NG for Power Generation | 3.774 | 4.691 | +24,3% | 75.728 | 76.417 | +0,9% |
| - Thermal Power Plants | 25 | 12 | -52% | 228 | 237 | +3,9% |
| - CCGT 's | 3.750 | 4.680 | +25% | 75.501 | 76.181 | +0,9% |
| Maximum daily consumption | 203 | 260 | +28% | 630 | 630 | - |
| | 25-May-17 | 23-May-18 | | 05-Dec-17 | 05-Dec-17 | |
| Minimum daily consumption | 75 | 70 | -7% | 56 | 52 | -6% |
| | 11-May-17 | 12-May-18 | | 04-Mar-17 | 11-Mar-18 | |
| % Generation mix | 8% | 10% | +2,0 points | 14% | 14% | -0,2 points |
| % Thermal Gap * | 31% | 47% | +15,2 points | 44% | 47% | +2,5 points |

* Thermal gap=CCGT 's+Coal



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ORIGIN OF SUPPLIES



| Unit: GWh | | Monthly record | | Mobile Annual Total record | | % |
|---------------|-----|----------------|---------------|----------------------------|-------------------|-------------|
| | | May-17 | May-18 | Year 2017 | MAT Jun-17/May-18 | |
| Algeria | NG | 12.390 | 15.917 | 161.243 | 174.198 | 50% |
| | LNG | 3.024 | 500 | 26.767 | 24.299 | |
| Nigeria | LNG | 3.236 | 3.698 | 48.592 | 45.176 | 11% |
| Qatar | LNG | 4.112 | 5.055 | 38.977 | 43.563 | 11% |
| T&T | LNG | - | 2.735 | 6.117 | 12.467 | 3% |
| Peru | LNG | 2.723 | - | 39.441 | 29.620 | 7% |
| France | NG | 3.903 | 2.149 | 44.084 | 43.035 | 11% |
| | LNG | - | - | - | 487 | |
| Angola | LNG | - | 17 | 3.111 | 3.098 | 0,8% |
| United States | LNG | - | - | 8.543 | 5.244 | 1% |
| Norway | LNG | - | - | 10.070 | 9.586 | 2% |
| Egypt | LNG | - | - | 1.127 | 1.127 | 0,3% |
| National | NG | 35 | 99 | 419 | 383 | 0,1% |
| Portugal | NG | - | - | 15 | 27 | 0,01% |
| Netherlands | LNG | - | - | 1.198 | 820 | 0,21% |
| Russia | LNG | - | - | - | 2.132 | 0,54% |
| TOTAL | | 29.423 | 30.169 | 389.703 | 395.264 | 100% |

National NG includes the withdrawal from national fields and biogas

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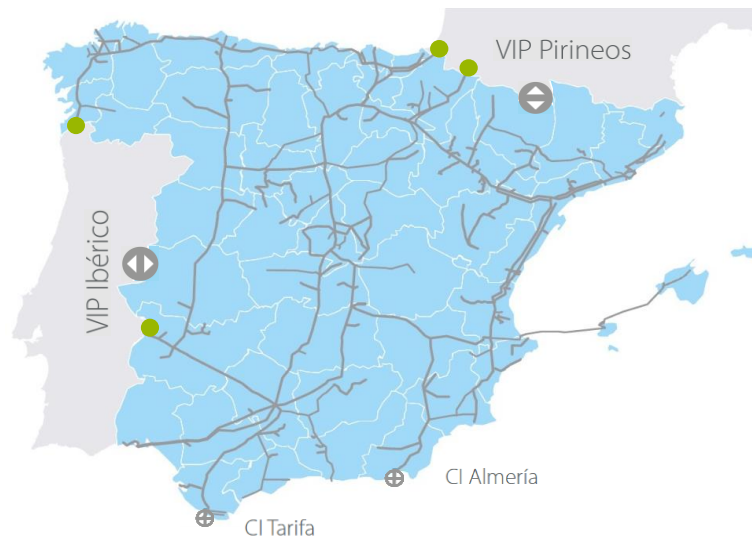
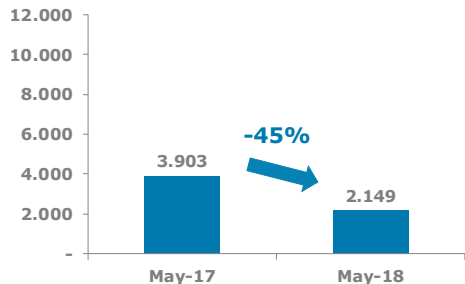
6. Operating notes

INTERCONNECTION POINTS

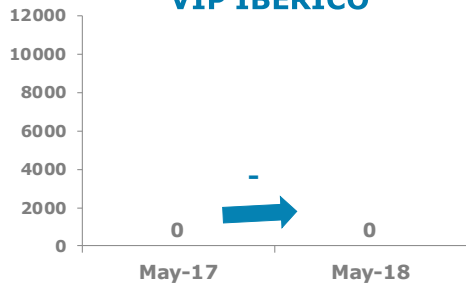


Imports

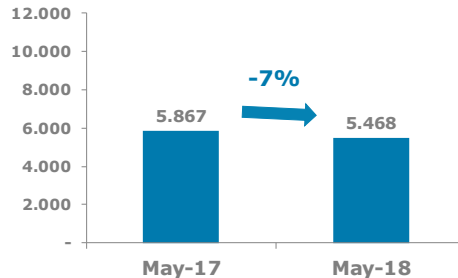
Unit: GWh **VIP PIRINEOS**



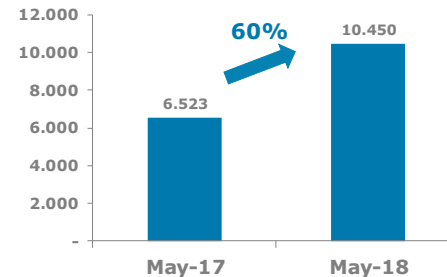
VIP IBÉRICO



ALMERÍA



TARIFA



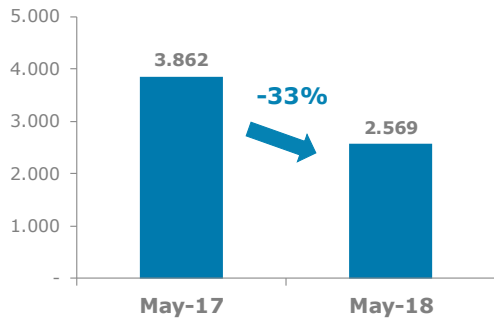
INTERCONNECTION POINTS



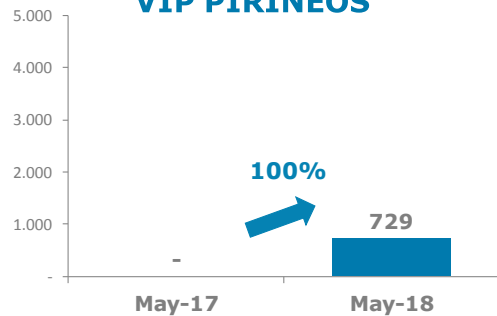
Exports

Unit: GWh

VIP IBÉRICO



VIP PIRINEOS



INTERCONNECTION POINTS

Balance



| Unit: GWh | Monthly record | | | Mobile Annual Total record | | |
|-----------------------|----------------|---------------|----------------------|----------------------------|-------------------|-------------------|
| | May-17 | May-18 | Δ s/May-17 | Year 2017 | MAT Jun-17/May-18 | Δ s/MAT |
| Tarifa GME | 6.523 | 10.450 | 60% | 86.497 | 103.266 | 19,4% |
| Almería MEDGAZ | 5.867 | 5.468 | -7% | 74.746 | 70.932 | -5,1% |
| VIP PIRINEOS | 3.903 | 1.420 | -64% | 43.192 | 40.433 | -6,4% |
| VIP IBÉRICO | -3.862 | -2.569 | -33% | -29.824 | -27.483 | -7,8% |
| National Gas | 35 | 99 | 181% | 419 | 383 | -8,5% |
| TOTAL | 12.467 | 14.867 | 19% | 175.030 | 187.531 | 7,1% |

(+) Entry flows; (-) Exit flows

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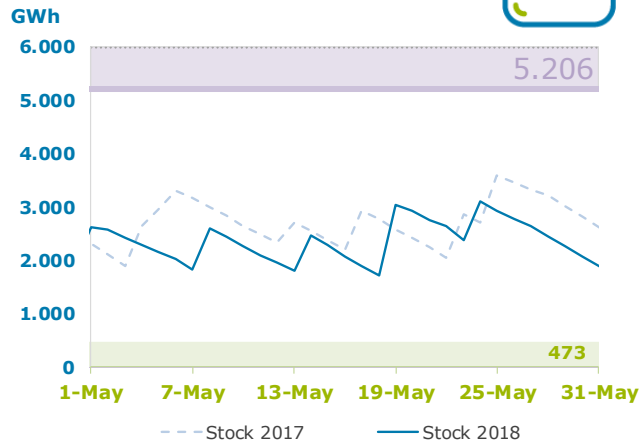
5. Underground storage

6. Operating notes

ACTIVITY AT BARCELONA PLANT



| Contract information (Average value) | | May-17 | May-18 |
|---|---------|--------|--------|
| Send-out | GWh/day | 177 | 181 |
| LNG Trucks | GWh/day | 10 | 9 |
| % average contract vs. nominal | | 34% | 34% |
| % average contract use | | 87% | 86% |



2017

6 LNG Unloaded
(5.237 GWh)
0 LNG Loaded
(0 GWh)

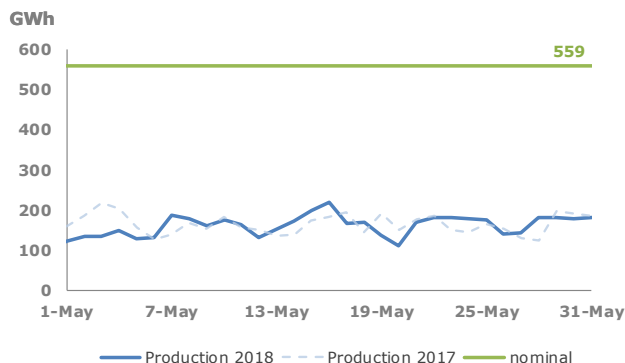


2018

5 LNG Unloaded
(5.015 GWh)
0 LNG Loaded
(0 GWh)



| Physical production | | May-17 | May-18 | |
|---------------------------|--------------|----------------|--------------|--------------|
| Nominal | Send-out | GWh/day | 544 | 544 |
| | LNG Trucks | GWh/day | 15 | 15 |
| | Total | GWh/day | 559 | 559 |
| Monthly production | | GWh | 5.104 | 5.002 |



ACTIVITY AT HUELVA PLANT



| Contract information (Average value) | | May-17 | May-18 |
|---|---------|--------|--------|
| Send-out | GWh/day | 117 | 157 |
| LNG Trucks | GWh/day | 8 | 8 |
| % average contract vs. nominal | | 32% | 42% |
| % average contract use | | 79% | 62% |

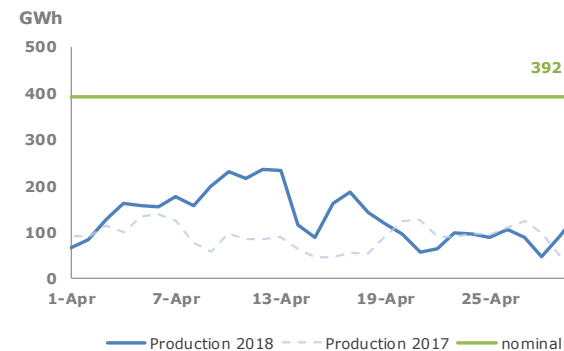
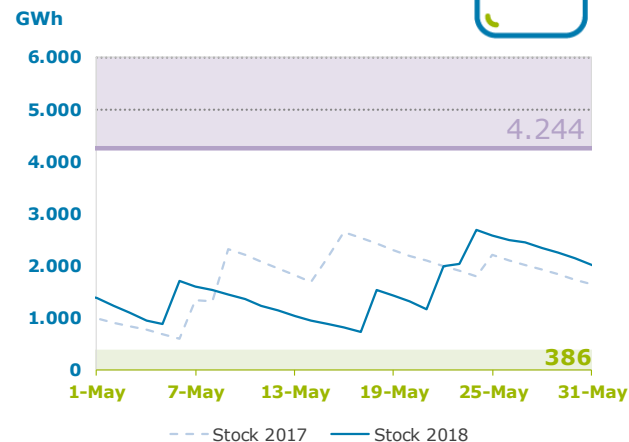
2017

4 LNG Unloaded
(3.693 GWh)
0 LNG Loaded
(0 GWh)



2018

4 LNG Unloaded
(3.675 GWh)
0 LNG Loaded
(0 GWh)



| Physical production | | May-17 | May-18 | |
|---------------------------|--------------|----------------|--------------|--------------|
| Nominal | Send-out | GWh/day | 377 | 377 |
| | LNG Trucks | GWh/day | 15 | 15 |
| | Total | GWh/day | 392 | 392 |
| Monthly production | | GWh | 3.133 | 3.111 |

ACTIVITY AT CARTAGENA PLANT



| Contract information (Average value) | | May-17 | May-18 |
|---|---------|--------|--------|
| Send-out | GWh/day | 10 | 11 |
| LNG Trucks | GWh/day | 7 | 6 |
| % average contract vs. nominal | | 4% | 4% |
| % average contract use | | 81% | 90% |

2017

1 LNG Unloaded
(859 GWh)
0 LNG Loaded
(0 GWh)

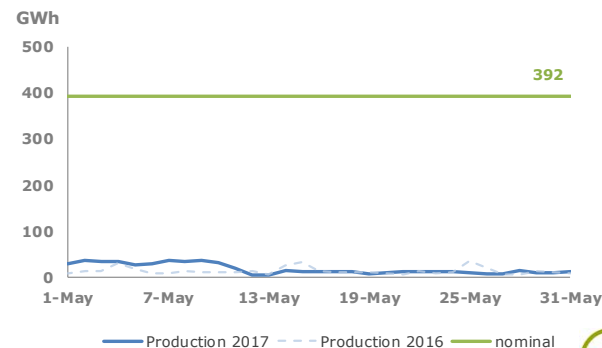
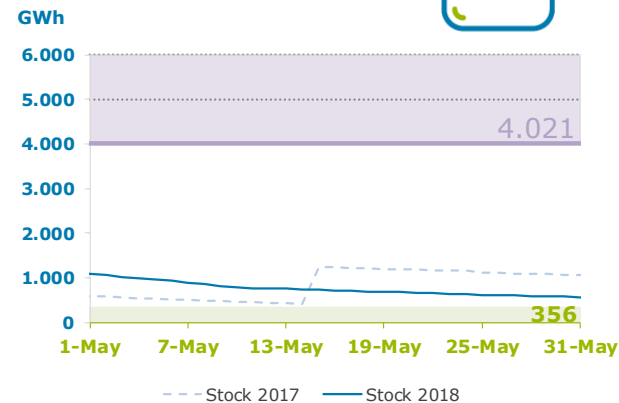


2018

0 LNG Unloaded
(0 GWh)
0 LNG Loaded
(0 GWh)



| Physical production | | May-17 | May-18 | |
|---------------------------|--------------|----------------|------------|------------|
| Nominal | Send-out | GWh/day | 377 | 377 |
| | LNG Trucks | GWh/day | 15 | 15 |
| | Total | GWh/day | 392 | 392 |
| Monthly production | | GWh | 405 | 540 |



ACTIVITY AT BILBAO PLANT



| Contract information (Average value) | | May-17 | May-18 |
|---|---------|--------|--------|
| Send-out | GWh/day | 79 | 88 |
| LNG Trucks | GWh/day | 2 | 2 |
| % average contract vs. nominal | | 35% | 40% |
| % average contract use | | 84% | 84% |

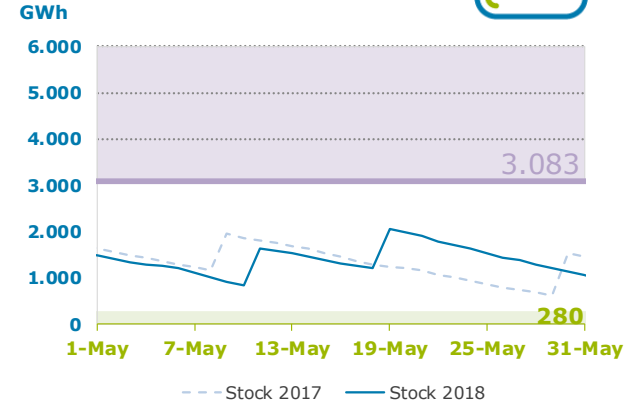
2017

2018

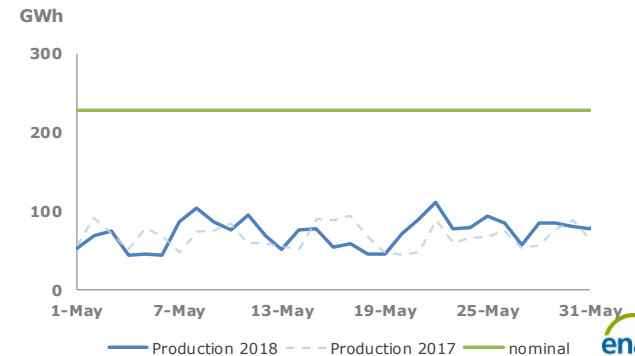
2 LNG Unloaded
(1.864 GWh)
0 LNG Loaded
(0 GWh)



2 LNG Unloaded
(1.752 GWh)
0 LNG Loaded
(0 GWh)



| Physical production | | | May-17 | May-18 |
|---------------------------|--------------|----------------|--------------|--------------|
| Nominal | Send-out | GWh/day | 223 | 223 |
| | LNG Trucks | GWh/day | 5 | 5 |
| | Total | GWh/day | 228 | 228 |
| Monthly production | | GWh | 2.102 | 2.245 |



ACTIVITY AT SAGUNTO PLANT

| Contract information (Average value) | | May-17 | May-18 |
|---|---------|--------|--------|
| Send-out | GWh/day | 37 | 1 |
| LNG Trucks | GWh/day | 6 | 4 |
| % average contract vs. nominal | | 15% | 2% |
| % average contract use | | 89% | 82% |

2017

2 LNG Unloaded
(1.443 GWh)
0 LNG Loaded
(0 GWh)

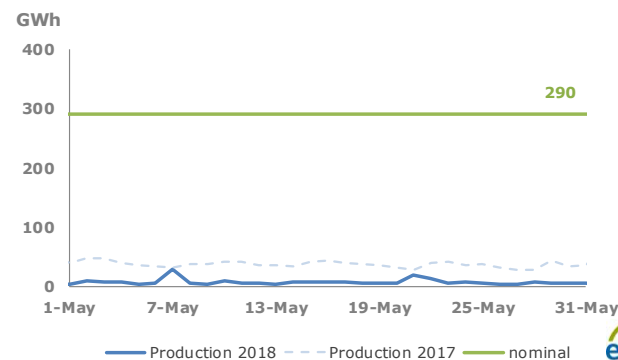
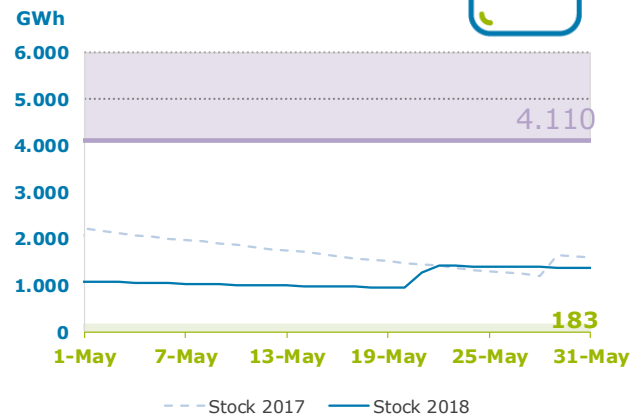


2018

1 LNG Unloaded
(500 GWh)
0 LNG Loaded
(0 GWh)



| Physical production | | May-17 | May-18 | |
|---------------------------|--------------|----------------|--------------|------------|
| Nominal | Send-out | GWh/day | 279 | 279 |
| | LNG Trucks | GWh/day | 10 | 10 |
| | Total | GWh/day | 290 | 290 |
| Monthly production | | GWh | 1.150 | 213 |



ACTIVITY AT MUGARDOS PLANT



| Contract information (Average value) | | May-17 | May-18 |
|---|---------|--------|--------|
| Send-out | GWh/day | 21 | 23 |
| LNG Trucks | GWh/day | 4 | 3 |
| % average contract vs. nominal | | 20% | 21% |
| % average contract use | | 86% | 81% |

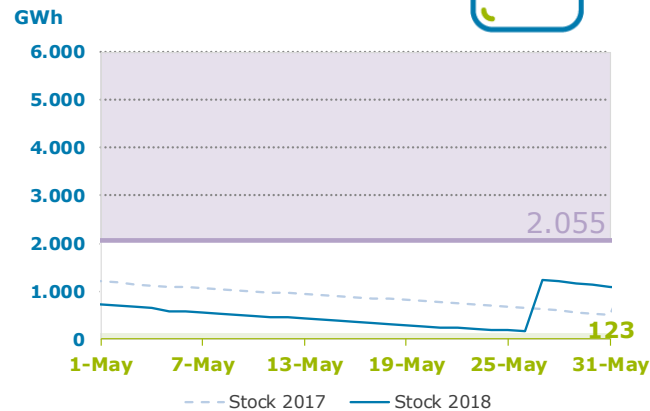
2017

2018

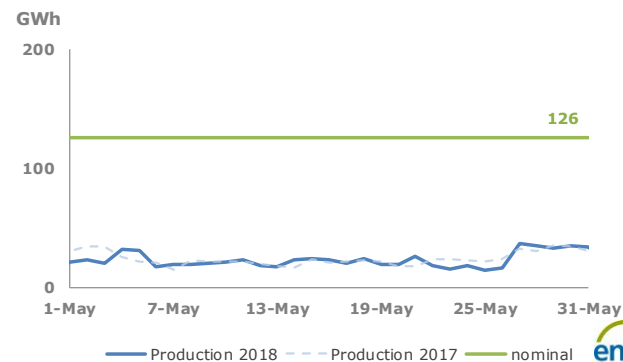
0 LNG Unloaded
(0 GWh)
0 LNG Loaded
(0 GWh)



1 LNG Unloaded
(1.062 GWh)
1 LNG Loaded
(24 GWh)



| Physical production | | May-17 | May-18 | |
|---------------------------|--------------|----------------|------------|------------|
| Nominal | Send-out | GWh/day | 115 | 115 |
| | LNG Trucks | GWh/day | 10 | 10 |
| | Total | GWh/day | 126 | 126 |
| Monthly production | | GWh | 755 | 720 |



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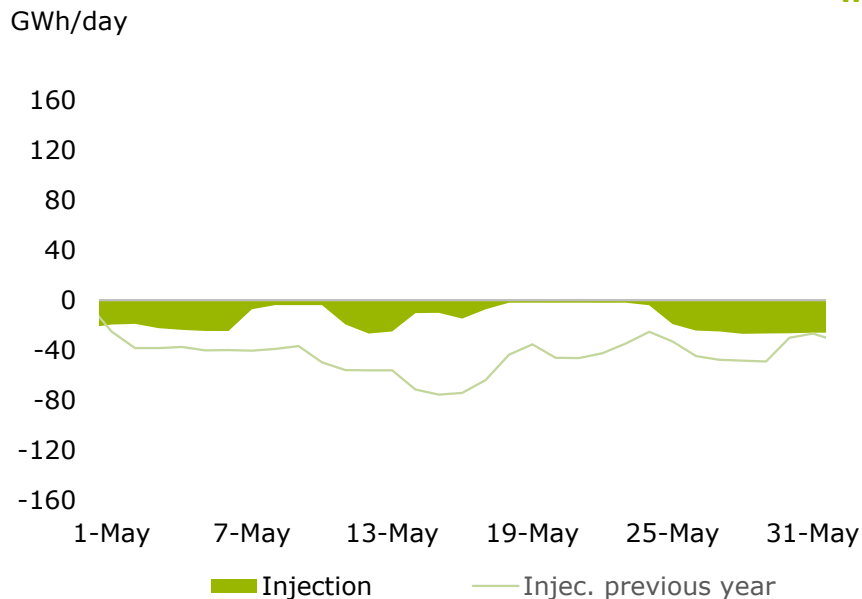
6. Operating notes

UNDERGROUND STORAGE



Injection season

Booked capacity
21.050 GWh



Injection 2018
460 GWh

Injection 2017
1.478 GWh

21.050
TWh

Stock
30th April

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OPERATING NOTES

No Operating Notes were published during **May 2018**



