



Preliminary price list of GASCADE Gastransport GmbH for the use of the national Gas Pipeline Network

for shippers and network operators
for the use as of November 1st, 2018

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The tariffs for the use of the national Gas Pipeline Network of GASCADE Gas Transport GmbH (hereinafter referred to as "GASCADE") in this price list already include the costs of construction and operation of a capacity platform.

The definitions of the General Terms & Conditions for Entry/Exit Contracts of GASCADE in the relevant version (hereinafter referred to as "GTC") shall apply.

I. Tariffs

I.1. Tariffs for standard annual capacities

The

- specific tariff for firm and free assignable Capacities in accordance with section 9 (1) lit. a, b, c, d GTC at entry and exit points with a booking period of 365 coherent days resp. 366 coherent days in a leap year and
- the tariff for the actual internal order of downstream network operators in accordance with section 18 of the „Kooperationsvereinbarung zwischen den Betreibern von in Deutschland gelegenen Gasversorgungsnetzen“ in the relevant version (hereinafter referred to as “KoV”)

arise from the following table:

| Tariffs for standard annual Capacities in GASPOOL market area | | | | |
|---|----------------------|-----------------------|--|----------------------|
| (Firm and free assignable capacities with a booking period of a coherent year) | | | | |
| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
| Zone OGE | 11C+ | Entry | Entry zone – interconnection point | 2.64 |
| Bunde | 1632 | Entry | Interconnection point - international | 2.64 |
| Jemgum I | 1BMA | Entry | Storage | 1.32 |
| Jemgum III | 1BRA | Entry | Storage | 1.32 |
| Nüttermoor | 1BQA | Entry | Storage | 1.32 |
| Gernsheim | 1ULA | Entry | Interconnection point - transmission system operator | 2.64 |
| Frankenthal Nord | 1VCA | Entry | Interconnection point - distribution system operator | 2.64 |
| Brandov- STEGAL | 2731 | Entry | Interconnection point - international | 2.64 |
| VIP Brandov- GASPOOL | 273+ | Entry | VIP, Interconnection point - international | 4.31 |
| Sp. Rehden | 3070 | Entry | Storage | 1.32 |
| Mallnow | 6800 | Entry | Interconnection point - international | 2.64 |
| Nonnendorf | 6BUA | Entry | Biogas | 0.00 |
| Bobbau | 6CZA | Entry | Storage | 1.32 |
| Fuchswinkel | 7DHA | Entry | Biogas | 0.00 |
| Eynatten | 8950 | Entry | Interconnection point - international | 2.64 |
| BGEA Wörth | OCFD | Entry | Biogas | 0.00 |
| Drohne NOWAL | 94AZA | Entry | Interconnection point - transmission system operator | 2.64 |
| Ronneburg OGE | 2ERB | Entry | Interconnection point - transmission system operator | 2.64 |

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| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
|------------------|---------------|----------------|--|---------------|
| Ostpfalz | 01A+ | Exit | Exit zone | 2.66 |
| TW Ludwigshafen | 0AAA | Exit | Interconnection point - distribution system operator | 2.66 |
| Wörth | 0CF+ | Exit | Exit zone | 2.66 |
| Karlsruhe-Maxau | 0CFC | Exit | End consumer | 2.66 |
| RMN | 11A+ | Exit | Exit zone | 2.66 |
| Hameln | 11B+ | Exit | Exit zone | 2.66 |
| Zone OGE | 11C+ | Exit | Exit zone | 2.66 |
| Bunde | 1632 | Exit | Interconnection point - international | 2.66 |
| Jemgum I | 1BMA | Exit | Storage | 1.33 |
| Jemgum III | 1BRA | Exit | Storage | 1.33 |
| Jemgum IV | 1BMB | Exit | End consumer | 2.66 |
| Nüttermoor | 1BQA | Exit | Storage | 1.33 |
| SW Bünde | 1FZA | Exit | Interconnection point - distribution system operator | 2.66 |
| SW Lemgo | 1GZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Warburg I | 1IMA | Exit | Interconnection point - distribution system operator | 2.66 |
| Großenritte | 1LLA | Exit | Interconnection point - distribution system operator | 2.66 |
| Baunatal | 1LMA | Exit | End consumer | 2.66 |
| Malsfeld-Ostheim | 1LZA | Exit | Interconnection point - distribution system operator | 2.66 |
| SW Hünfeld | 1NFA | Exit | Interconnection point - distribution system operator | 2.66 |
| Reckrod II | 1NLA | Exit | Interconnection point - distribution system operator | 2.66 |
| Wirtheim | 1RZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Jügesheim II | 1SEA | Exit | Interconnection point - distribution system operator | 2.66 |
| Gernsheim | 1ULA | Exit | Interconnection point - transmission system operator | 2.66 |
| GGEW Bensheim | 1UXB | Exit | Interconnection point - distribution system operator | 2.66 |
| SW Weinheim | 1UZB | Exit | Interconnection point - distribution system operator | 2.66 |
| Worms Süd | 1VCD | Exit | Interconnection point - distribution system operator | 2.66 |
| Mörsch-West | 1VCF | Exit | Interconnection point - distribution system operator | 2.66 |
| Lampertheim IV | 1VLA | Exit | Interconnection point - transmission system operator | 2.66 |
| SW Lampertheim | 1VNA | Exit | Interconnection point - distribution system operator | 2.66 |
| Mannheim I | 1VTA | Exit | End consumer | 2.66 |
| Mannheim II | 1VTB | Exit | End consumer | 2.66 |
| Ludwigshafen | 1VZA | Exit | End consumer | 2.66 |
| Suedsachsen | 22A+ | Exit | Exit zone | 2.66 |
| Olbernhau II | 2730 | Exit | Interconnection point - international | 2.66 |

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| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
|----------------------|---------------|----------------|--|---------------|
| VIP Brandov-GASPOOL | 273+ | Exit | VIP, Interconnection point - international | 2.69 |
| SW Marienberg | 2BZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Chemnitz-Stelzendorf | 2CXA | Exit | End consumer | 2.66 |
| SW Crimmitschau | 2EEA | Exit | Interconnection point - distribution system operator | 2.66 |
| SW Werdau | 2EFA | Exit | Interconnection point - distribution system operator | 2.66 |
| Ronneburg | 2ERA | Exit | Interconnection point - distribution system operator | 2.66 |
| Gera-Gorlitzschberg | 2EZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Stadtroda II | 2FZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Wölfershausen | 2LXL | Exit | Interconnection point - distribution system operator | 2.66 |
| Sp. Rehden | 3070 | Exit | Storage | 1.33 |
| Glauchau | 52A+ | Exit | Exit zone | 2.66 |
| Altenburg | 55A+ | Exit | Exit zone | 2.66 |
| SW Meerane | 5AKA | Exit | Interconnection point - distribution system operator | 2.66 |
| Mallnow | 6800 | Exit | Interconnection point - international | 2.66 |
| Kienbaum | 6AQA | Exit | Interconnection point - transmission system operator | 2.66 |
| Bobbau | 6CZA | Exit | Storage | 1.33 |
| Rotenburg-Boetersen | 7CZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Heidenau SH | 7FRA | Exit | Interconnection point - distribution system operator | 2.66 |
| Heidenau HH | 7GZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Lippstadt | 88A+ | Exit | Exit zone | 2.66 |
| Monheim | 88B+ | Exit | Exit zone | 2.66 |
| Eynatten | 8950 | Exit | Interconnection point - international | 2.66 |
| Hillegossen | 8AFA | Exit | End consumer | 2.66 |
| Bielefeld (KOWI) | 8AFC | Exit | End consumer | 2.66 |
| Gütersloh-Verl | 8AZA | Exit | Interconnection point - distribution system operator | 2.66 |
| SW Soest | 8CLA | Exit | Interconnection point - distribution system operator | 2.66 |
| Hagen-Boele | 8ERB | Exit | End consumer | 2.66 |
| Herdecke | 8EU+ | Exit | Exit zone | 2.66 |
| Wuppertal-Hohenhagen | 8FZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Rath | 8GWA | Exit | End consumer | 2.66 |
| Ratingen | 8GWB | Exit | Interconnection point - distribution system operator | 2.66 |
| Uerdingen | 8GZA | Exit | Interconnection point - distribution system operator | 2.66 |
| Leverkusen | 8IRB | Exit | Interconnection point - distribution system operator | 2.66 |

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| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
|------------------------|---------------|----------------|---|---------------|
| Neuss | 8IZB | Exit | End consumer | 2.66 |
| Dormagen Chempark H | 88I+ | Exit | Exit zone | 2.66 |
| Köln-Merkenich II | 8IRD | Exit | End consumer | 2.66 |
| Frechen | 8KLA | Exit | End consumer | 2.66 |
| Kalscheuren | 8KLC | Exit | End consumer | 2.66 |
| Wesseling I | 8KLD | Exit | End consumer | 2.66 |
| Hürth | 8KLE | Exit | End consumer | 2.66 |
| Wesseling II | 8KLF | Exit | End consumer | 2.66 |
| Frechen-Rhein-Erft | 8KLG | Exit | End consumer | 2.66 |
| Godorf | 8KLH | Exit | End consumer | 2.66 |
| Weisweiler | 8MLA | Exit | End consumer | 2.66 |
| Dürwiß | 8MTA | Exit | Interconnection point - distribution system operator | 2.66 |
| Broichweiden Süd | 8MVA | Exit | Interconnection point - transmission system operator | 2.66 |
| Aachen (Deby-estr.) | 8MXA | Exit | Interconnection point - distribution system operator | 2.66 |
| Drohne NOWAL | 94AZA | Exit | Interconnection point - transmission system operator | 2.66 |
| Ronneburg OGE | 2ERB | Exit | Interconnection point - transmission system operator | 2.66 |

Additional to the tariffs at some grid points fees for measuring, invoicing and operation of measuring stations in accordance with section II, the specific biogas levy in accordance with section III and the market area conversion levy in accordance with section IV will be charged.

I.2. Tariffs for storage

In accordance with (2) lit. d of the guidelines of the Bundesnetzagentur regarding the pricing of entry and exit capacities (Bepreisung von Ein- und Ausspeisekapazitäten“, hereinafter referred to as „BEATE“) of 24.03.2015 (BK9-14/608), tariffs for capacities at storages should principally get a discount of 50%, based on the tariff determined by GasNEV. The tariffs for storages, shown under section I.1., includes already the 50 % tariff discount for storages.

Notwithstanding the above, storages allowing access to more than one market area or a neighboring country are treated different. In pursuance of BEATE, GASCADE Gastransport GmbH is obligated to designate a non-discounted tariff for these storages.

Only if the particular storage operator complies with the conditions stated in (IX) No. 8 of the reasoning of BEATE towards GASCADE Gastransport GmbH, GASCADE Gastransport GmbH is obligated to designate a discounted tariff.

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Pursuant to the guidelines of BEATE ((IX) Nr. 8 of the reasoning) the discounted tariff (50% discount) will be offered under the following conditions:

- there is a valid contract between GASCADE Gastransport GmbH and the particular storage operator
- the storage operator complies with the regulations of this contract
- the storage operator proves the compliance with these regulations towards GASCADE Gastransport GmbH pursuant to the guidelines of BEATE

If one or more conditions stated above are not being fulfilled during the year 2018, GASCADE Gastransport GmbH is obligated to offer only a non-discounted tariff at the affected grid point.

The discounted and non-discounted tariffs for the affected grid points are:

| Grid point | Grid point-ID | Flow direction | EUR/(kWh/h)/a discounted | EUR/(kWh/h)/a non-discounted |
|------------|---------------|----------------|--------------------------|------------------------------|
| Jemgum I | 1BMA | Entry | 1.32 | 2.64 |
| Jemgum III | 1BRA | Entry | 1.32 | 2.64 |
| Jemgum I | 1BMA | Exit | 1.33 | 2.66 |
| Jemgum III | 1BRA | Exit | 1.33 | 2.66 |

The “Ausbuchungskomponente” for the grid points Jemgum I and Jemgum III has an amount of 1.463 EUR/(kWh/h)/a in accordance with BEATE (IX No 5 c).

The “Einbuchungskomponente” for the grid points Jemgum I and Jemgum III has an amount of 1.452 EUR/(kWh/h)/a in accordance with BEATE (IX No 5 c).

I.3. Tariffs for interruptible capacities

The tariff for interruptible capacities in accordance with section 9 (1) GTC amounts to 90% of the tariff for firm capacity as per section I.1. This does also apply for interruptible internal order in accordance with section 11 (8) KoV.

Deviating from sentence 1, the tariff for interruptible capacities in accordance with 9 (1) GTC amounts, at the following grid connection points, to 89% of the tariff for firm capacity as per section I.1.:

Entry Point: Mallnow (6800)

Exit Point: Lampertheim IV (1VLA), Eynatten (8950)

At the following grid points interruptible capacity is bookable as reverse flow in accordance with section 9 (4) GTC:

| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
|----------------|---------------|----------------|---|---------------|
| Lampertheim IV | 1VLA | Entry | Interconnection point - Transmission system operator | 2.64 |
| Kienbaum | 6AQA | Entry | Interconnection point - Transmission system operator | 2.64 |

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| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
|------------------|---------------|----------------|--|---------------|
| Broichweiden Süd | 8MVA | Entry | Interconnection point - Transmission system operator | 2.64 |
| Olbernhau II | 2730 | Entry | Interconnection point - international | 2.64 |

The tariff amounts to 90% in the table mentioned tariff for firm capacity which cannot be offered at these grid points.

I.4. Tariffs for dynamically assignable capacities

The tariff for dynamically assignable capacities in accordance with section 1 of the supplementary Terms & Conditions of GASCADE (Appendix GTC 3) amounts to 90% of the tariff for firm capacity as per section I.1. Dynamically assignable capacities will be published separately.

At the following grid point dynamically assignable capacity is bookable as reserve flow in accordance with section 9 (4) GTC:

| Grid points | Grid point-ID | Flow direction | Type of grid point | EUR/(kWh/h)/a |
|-------------|---------------|----------------|--|---------------|
| Kienbaum | 6AQA | Entry | Interconnection point - transmission system operator | 2.64 |

The tariff amounts to 90% in the table mentioned tariff for firm capacity.

I.5. Tariffs for dynamically assignable capacities for power plants

The tariff for dynamically assignable capacities for power plants in accordance with section 2 Appendix GTC 3 amounts to 90% of the tariff for firm capacity as per section I.1. Dynamically assignable capacities for power plants will be published separately.

I.6. Tariffs for capacity with term of less than a year and within day

The tariff for firm and free assignable capacities in accordance with section I.1 – I.4 with terms of less than year derives from the multiplication of the tariffs for standard annual capacities as per section I.1 – I.4 with a proportional volume of $\frac{1}{365}$ for every booked day resp. $\frac{1}{366}$ for every booked day in a leap year.

The proportional value, as resulting pursuant to sentence 1, must be multiplied in accordance with the guidelines of BEATE with the following multipliers, depending on the run-time of the booked capacity:

| Run-time in days | Product classification under BEATE | Multiplier |
|------------------|------------------------------------|------------|
| 1 to 27 | daily product | 1.4 |
| 28 to 89 | monthly product | 1.25 |

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| | | |
|-----------|-------------------|-----|
| 90 to 364 | quarterly product | 1.1 |
|-----------|-------------------|-----|

For firm within day capacity in accordance with section 9 (2) GTC the respective daily tariff shall apply. For interruptible within day capacity from over-nomination the respective daily tariff for interruptible capacity shall be charged in accordance with section 13d (4).

The tariff for interruptible internal orders, especially in case of adjustments in accordance with section 15 KoV, is calculated in the same way as described above.

I.7. Capacity overrun

If a customer exceeds the ordered capacity in an hour of a day, a contractual penalty in accordance with Section 30 (4) of the GTC will be charged. This contractual penalty amounts to the fourfold of the regular tariff for the respective day at the affected grid point, as it is shown in this price list.

I.8. Exceeding of internal order

If a network operator exceeds the ordered capacity in an hour of a day, the exceeding will be charged in accordance with section 18 section (6) KoV. The provisions as per section 18 (7) KoV remain unaffected. This contractual penalty in accordance with section 18 (7) amounts to the fourfold of the regular tariff for the respective day at the affected grid point, as it is shown in this price list.

II. Tariffs for measuring and operation of measuring stations

Costs for measuring and operating of the measuring station according to § 15 Abs. 7 GasNEV will be charged at the following exit points:

| Grid points | Grid point-ID | Flow direction | Costs for measuring EUR/(kWh/h)/a | Costs for measuring and operating of the measuring station EUR/(kWh/h)/a |
|-----------------|---------------|----------------|-----------------------------------|--|
| Wörth | 0CFA | Exit | 0.02413 | 0.0259 |
| Karlsruhe-Maxau | 0CFC | Exit | 0.02413 | -* |
| RMN | 11A+ | Exit | 0.02413 | 0.0259 |
| Bunde | 1632 | Exit | 0.02413 | 0.0259 |
| Baunatal | 1LMA | Exit | 0.02413 | -* |
| Zone OGE | 11C+ | Exit | 0.02413 | 0.0259 |
| SW Weinheim | 1UZB | Exit | 0.02413 | 0.0259 |
| Worms Süd | 1VCD | Exit | 0.02413 | 0.0259 |
| Mannheim I | 1VTA | Exit | 0.02413 | 0.0259 |
| Mannheim II | 1VTB | Exit | 0.02413 | -* |
| Ludwigshafen | 1VZA | Exit | 0.02413 | -* |

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| Grid points | Grid point-ID | Flow direction | Costs for measuring EUR/(kWh/h)/a | Costs for measuring and operating of the measuring station EUR/(kWh/h)/a |
|--------------------|---------------|----------------|--------------------------------------|---|
| Olbernhau II | 2730 | Exit | 0.02413 | 0.0259 |
| Ronneburg | 2ERA | Exit | 0.02413 | 0.0259 |
| Mallnow | 6800 | Exit | 0.02413 | 0.0259 |
| Hillegossen | 8AFA | Exit | 0.02413 | 0.0259 |
| Hagen-Kabel | 8ERA | Exit | 0.02413 | -* |
| Hagen-Boele | 8ERB | Exit | 0.02413 | -* |
| Herdecke | 8EUA | Exit | 0.02413 | -* |
| Rath | 8GWA | Exit | 0.02413 | -* |
| Neuss | 8IZB | Exit | 0.02413 | -* |
| Frechen | 8KLA | Exit | 0.02413 | -* |
| Kalscheuren | 8KLC | Exit | 0.02413 | -* |
| Wesseling I | 8KLD | Exit | 0.02413 | -* |
| Hürth | 8KLE | Exit | 0.02413 | -* |
| Wesseling II | 8KLF | Exit | 0.02413 | -* |
| Frechen-Rhein-Erft | 8KLG | Exit | 0.02413 | -* |
| Godorf | 8KLH | Exit | 0.02413 | -* |
| Broichweiden Süd | 8MVA | Exit | 0.02413 | 0.0259 |
| Drohne NOWAL | 94AZA | Exit | 0.02413 | 0.0259 |

*) At these Grid points the measuring stations aren't owned by GASCADE. If the measuring service is provided at these grid points by GASCADE, the actual expenses will be charged directly to the owner of the measuring station.

III. Biogas levy

The specific biogas levy to be paid in addition to the tariffs amounts to 0.68443EUR/(kWh/h)/a in 2018. It is charged for grid connection points to end-consumers as well as to grid interconnection points to downstream network operators.

IV. Market area conversion levy

The specific market area conversion levy in Germany, to be paid in addition to the tariffs, amounts to 0.2587 EUR/(kWh/h)/a in 2017. It is charged to all exit points.

V. Fee for Nomination Replacement Procedure

GASCADE shall bill the following fees for the nomination replacement procedure according section 6 Appendix GTC 2.

V.1 Set-Up Fee

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The set-up fee for the nomination replacement procedure pursuant to section 6 (6) of Appendix GTC 2 shall, irrespective of use, be **2,000.00 euros** for each balancing group (or sub-balancing group) into which the capacity for executing the nomination replacement procedure is incorporated in accordance with section 6 (2) Appendix GTC 2. GASCADE shall onetime invoice the set-up fee for the first gas business year together with the first monthly fee in accordance with V.2.

V.2 Monthly Fee

The monthly fee for the nomination replacement procedure pursuant to section 6 (6) Appendix GTC 2 shall, irrespective of use, be **2,500.00 euros** for each network point in the balancing group (or sub-balancing group), with the exception of the network point for the flexibly controllable source pursuant to section 6 (4) of Appendix GTC 2, into which the capacity for executing the nomination replacement procedure is incorporated in accordance with section 6 (2) Appendix GTC 2. GASCADE shall bill the monthly fee with effect from the 1st of each month.

This document is a convenience translation of the German original. In case of discrepancy between the English and the German versions, the German version shall prevail.