



## 2G. Product range.

CHP plants for distributed generation of heat and power.

Highly efficient and reliable. 20 to 4,500 kW.

**2G. Cogeneration.**



# Global success with cogeneration.

A power plant by 2G is the ideal solution for anyone wanting to reduce energy costs in the long-term and wishing to protect themselves against further increases in the price of electricity. As a pioneer, innovator and one of the world's leading manufacturers of distributed power generation systems using cogeneration (also known as combined heat and power or CHP), we have commissioned thousands of technologically advanced, highly efficient CHP plants since 1995.

Satisfied customers in more than 50 countries confirm the quality, performance and reliability of our products and solutions. 2G is listed as a publicly traded company on the Entry Standard of the German Stock Exchange and has a workforce of more than 650 employees.

**The 2G product range includes CHP plants ranging in electrical output from 20 kW to 4,500 kW.**



# Contents

- Cogeneration (combined heat and power) ..... 6
- 2G. Areas of use ..... 8
- 2G. Advantages ..... 10
- g-box. 20 to 50 kW ..... 12
- patruus. 50 to 260 kW ..... 14
- aura. 100 to 420 kW ..... 16
- agenitor. 75 to 450 kW ..... 18
- avus. 550 to 4,500 kW ..... 20
- 2G. Installation and sound attenuation ..... 22
- 2G. Energy concepts ..... 24
- 2G. Service ..... 26
- 2G. Product overview - natural gas ..... 28
- 2G. Product overview - biogas ..... 30



# The technology of the future.

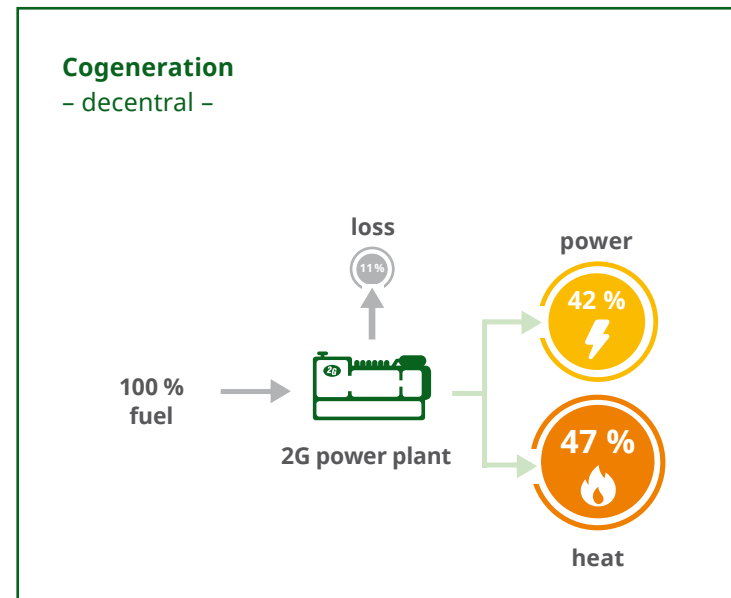
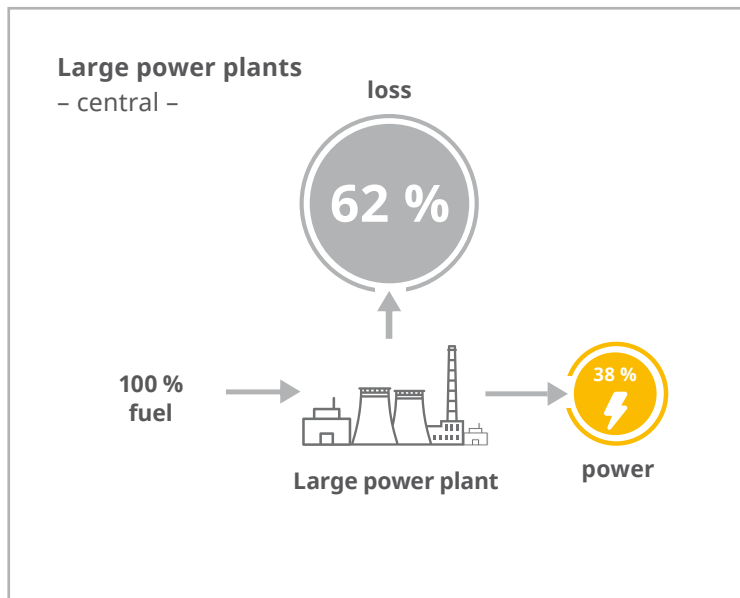
The power grid of the future will not be made up of a few large power plants but rather of many small ones. As part of the transformation of the energy sector, cogeneration plants (also known as Combined Heat & Power plants (CHP)) are increasingly gaining importance in intelligently networked energy systems – so-called virtual power plants – due to their distributed nature, controllability and predictable availability. With a plant by 2G you can also make a contribution to a stable, clean energy supply of the future.

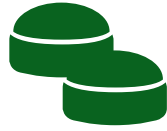
# High efficiency and climate compatibility.

The simultaneous generation of mechanical energy and useful heat is described as cogeneration (CHP). While the mechanical energy is converted straight into electricity, the heat can be used for heating, cooling or generating steam (see page 25).

Thus the heat arising during the production of electricity does not simply escape unused into the atmosphere but is put to practical use. This is what makes the technology of cogeneration so efficient and climate-friendly. It saves up to 40 % in primary energy. CO<sub>2</sub> emissions drop by up to 60 % compared to conventional power generation in large power plants.

## Comparison of distributed and centralised power generation.





Biogas Plants



Office and Administration Buildings



Chemical and Petrochemical Industry



Landfill Sites



Shopping Centres



Horticultural Businesses



Hotels



Industry and Commerce



Sewage Treatment Plants

# Many different areas of use.

2G power plants have already demonstrated their strengths in many places, e. g. in residential buildings, office and administration buildings, nurseries, schools, hotels, senior citizen centres, hospitals and a wide variety of industrial and commercial businesses. Nowadays, virtually every business is suitable for the use of cogeneration.



Hospitals



Agricultural Businesses



Food Industry



Public Facilities



Data Centres



Schools and Universities



Swimming Pools



Senior Citizen Centres



Sports and Event Centres



Heating Networks



Hydrogen



Residential Buildings



# We set standards.

Power plants by 2G for the cogeneration of power and heat have proven their value for many years. We set standards in the industry with reliable, leading-edge technology that's Made in Germany with outstanding local service.

## Leading-edge technology Made in Germany.

Together with prestigious universities and research institutes, our group's own research and development centre, 2G Drives, works continuously on improving the 2G engine technology and promoting innovations. As a result, we have successfully achieved significant increases in efficiency.

## Certified series production.

A high degree of vertical integration and series production certified in accordance with DIN ISO 9001 guarantee the consistently high quality of 2G power plants.

## Highly developed control technology.

The 2G control technology enables a variety of flexible running modes in on/off or part load operation. Every 2G power plant is infinitely adjustable between 50 and 100 percent load. Effective analysis tools which have revolutionised remote maintenance and service are an integral part of the sophisticated control concept.

## Verified grid compliant.

The 2G power plants can be integrated in virtual power plants. They meet the requirements of local voltage guidelines and are suitable for selling the electricity generated on the energy market.





# g-box

Profitable small power plant.

## Profitable small power plant.

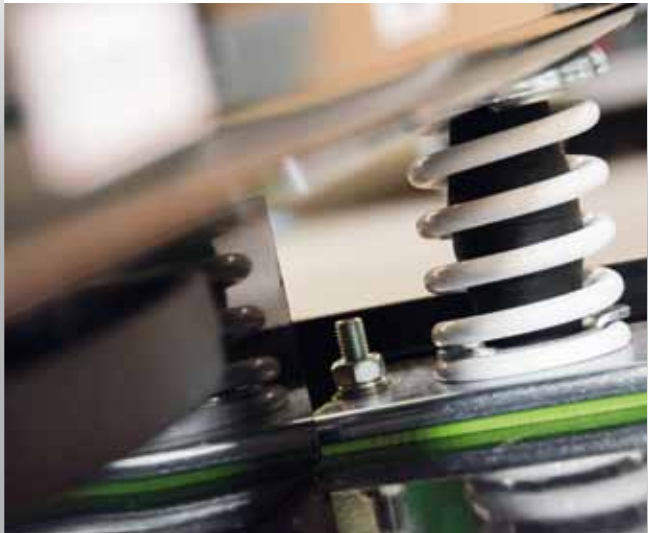
The g-box is the profitable small power plant by 2G ranging in electrical output from 20 to 50 kW. It is supplied as a connection-ready compact module. The control cabinet with PLC controller and operating unit is designed as a separate unit on the module. The g-box not only works extremely efficiently but also very quietly, thanks to the fully enclosed sound capsule.

- Connection-ready, super-silent compact module  
g-box 50 with max. 55 dB (A) at a distance of 1 m  
g-box 20 with max. 52 dB (A) at a distance of 1 m
- Very economical due to high thermal efficiency thanks to condensing technology (as standard)
- Long operating times, reliable and low-maintenance
- Possible incorporation into tight building spaces thanks to the modular design
- Completely water-cooled, no need for dedicated ventilation system thus reducing installation costs

## g-box. 20 to 50 kW.

| Type                  | Configuration | Electrical output | Thermal output |
|-----------------------|---------------|-------------------|----------------|
|                       |               | Natural gas       | Natural gas    |
| <b>g-box 20</b>       | as22-4        | 20 kW             | 44 kW          |
| <b>g-box 50 plus*</b> | as70-4        | 50 kW             | 104 kW         |

\* Also available as a HT version with a flow temperature up to 95 °C.  
Efficiency levels, see p. 28-31.  
Installation options, see p. 22-23.





# patruus

Traditional solution.

## Traditional solution.

The patruus, with engine technology that has been established for decades, is the most experienced member of the 2G power plant family. It is a sturdy and efficient supplier of power and heat and is electrically available in the output range up to 260 kW.

- Designed as a connection-ready compact module
- High plant availability due to established engine technology
- Available with both naturally-aspirated or turbocharged engines
- Modular design facilitates installation in hard to reach places
- Sturdy and low-maintenance

## patruus. 50 to 263 kW.

| Type               | Configuration | Electrical output | Thermal output |
|--------------------|---------------|-------------------|----------------|
|                    |               | Natural gas       | Natural gas    |
| <b>patruus 140</b> | as80-1        | 140 kW            | 270 kW         |
| <b>patruus 263</b> | as80-1        | 263 kW            | 380 kW         |
|                    |               | Biogas            | Biogas         |
| <b>patruus 50</b>  | ct80-0        | 50 kW             | 70 kW          |
| <b>patruus 64</b>  | ct80-0        | 64 kW             | 85 kW          |

Efficiency levels, see p. 28-31.  
Installation options, see p. 22-23.





# aura

Clean and efficient.

## Clean and efficient.

Equipped with 2G's proprietary Lambda 1 technology and low-charged turbocharger, it is also characterised by extremely low exhaust emissions and meets, in particular, the increasingly stringent requirements for low nitrogen oxide limits.

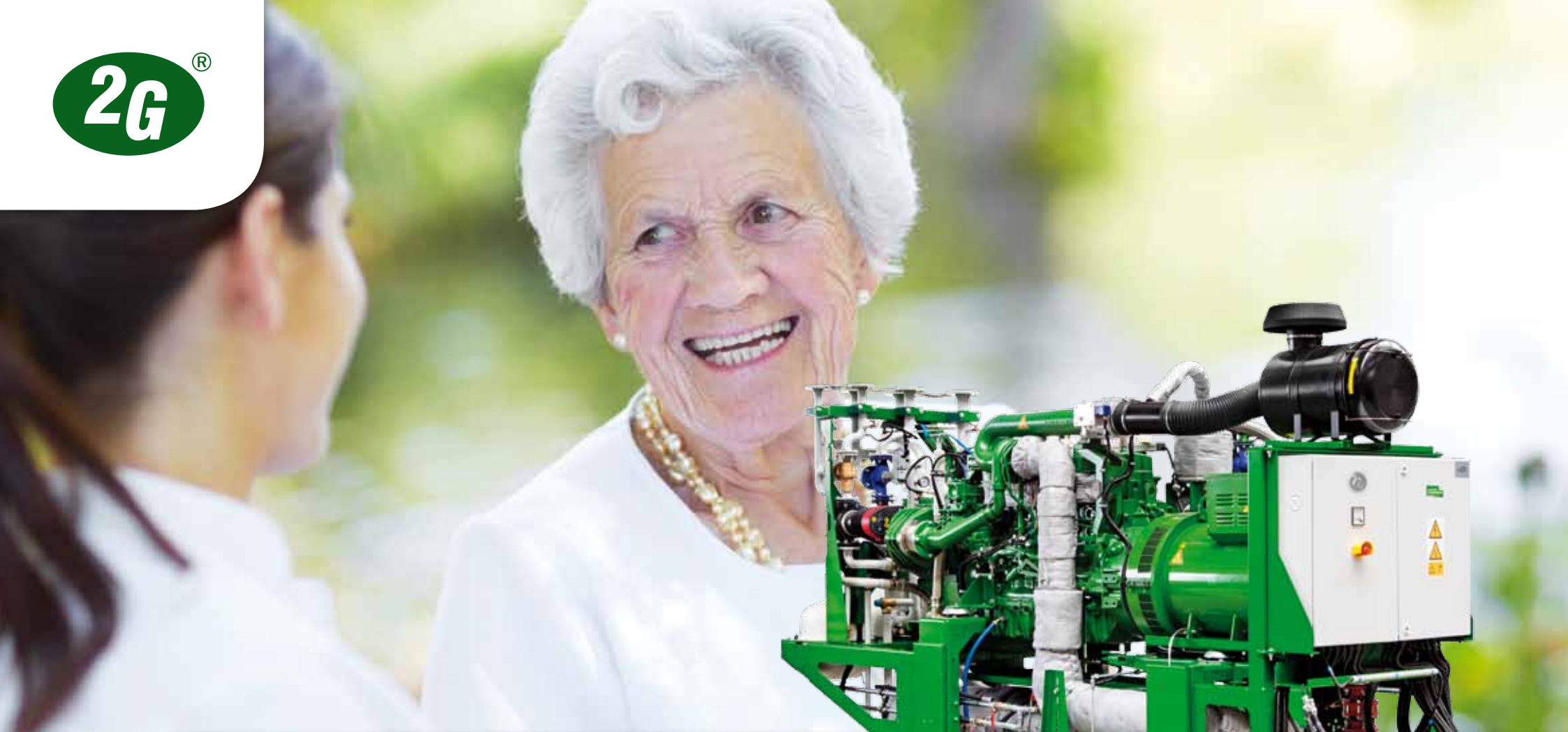
- Low emissions
- High heat efficiency
- Reliable, service-friendly engine
- Higher performance of 15 % compared to conventional systems with the same displacement
- Designed as ready-to-connect compact module

## aura. 100 to 420 kW.

| Type            | Configuration | Electrical output | Thermal output |
|-----------------|---------------|-------------------|----------------|
|                 |               | Natural gas       | Natural gas    |
| <b>aura 404</b> | bt80-4        | 100 kW            | 167 kW         |
| <b>aura 406</b> | bt80-1        | 170 kW            | 263 kW*        |
| <b>aura 408</b> | bt70-1        | 280 kW            | 408 kW         |
| <b>aura 412</b> | bt70-1        | 420 kW            | 611 kW         |

\* Calorific flue heat exchanger on board.  
Efficiency levels, see p. 28-31.  
Installation options, see p. 22-23.





# agenitor

Evolution in efficiency.



## Evolution in efficiency.

The agenitor by 2G is the result of intensive work by the development team at 2G Energietechnik GmbH. Improving combustion chamber geometry has made it possible to increase the efficiency of the agenitor range significantly.

- Highly efficient power plant with optimised gas engine – and therefore lower fuel costs
- Modular design facilitates installation in hard to reach places
- Very reliable even in regular start-stop operation thanks to highly wear-resistant engine components
- Robust with low-maintenance

## agenitor. 75 to 450 kW.

| Type                | Configuration   | Electrical output | Thermal output |
|---------------------|-----------------|-------------------|----------------|
|                     |                 | Natural gas       | Natural gas    |
| <b>agenitor 404</b> | bt80-01 (MZ 70) | 95 kW             | 108 kW         |
|                     | bt80-1          | 100 kW            | 112 kW         |
|                     | ct80-1          | 160 kW            | 168 kW         |
| <b>agenitor 406</b> | ct70-1          | 160 kW            | 172 kW         |
|                     | ct80-1          | 250 kW            | 260 kW         |
|                     | ct70-1          | 250 kW            | 268 kW         |
| <b>agenitor 408</b> | bt80-1          | 250 kW            | 304 kW         |
|                     | ct80-1          | 360 kW            | 381 kW         |
|                     | ct70-1          | 360 kW            | 383 kW         |
| <b>agenitor 412</b> | bt70-1          | 360 kW            | 440 kW         |
|                     | ct70-1          | 450 kW            | 493 kW         |
|                     | bt70-1          | 450 kW            | 609 kW         |
|                     |                 | Biogas            | Biogas         |
| <b>agenitor 404</b> | at135-0         | 75 kW             | 104 kW         |
|                     | bt135-0         | 100 kW            | 110 kW         |
|                     | ct135-0         | 160 kW            | 155 kW         |
| <b>agenitor 406</b> | ct135-0         | 250 kW            | 245 kW         |
| <b>agenitor 408</b> | ct135-0         | 360 kW            | 345 kW         |
| <b>agenitor 412</b> | ct135-0         | 450 kW            | 468 kW         |

Efficiency levels, see p. 28-31.  
Installation options, see p. 22-23.



avus

Built for big tasks.



## Built for big tasks.

The avus is a highly efficient 2G power plant for high electric power consumption which is used in larger industrial projects or for supplying heating networks. If necessary, experienced 2G technicians familiar with large engine technology will completely take over the planning and management of the overall project and will provide professional assistance in designing the peripheral components.

- Complete solutions for industry: project planning, design of all components, communication with all interfaces on site, piping installation, integration in container or existing building
- Efficient running mode and operating times due to excellent engine quality

## avus. 550 bis 4,500 kW.

| Type                 | Configuration | Electrical output | Thermal output |
|----------------------|---------------|-------------------|----------------|
|                      |               | Natural gas       | Natural gas    |
|                      | ct80-1        | 550 kW            | 578 kW         |
| <b>avus 500 plus</b> | ct70-1        | 550 kW            | 590 kW         |
|                      | bt70-1        | 550 kW            | 723 kW         |
| <b>avus 500c</b>     | -             | 600 kW            | 652 kW         |
| <b>avus 500a</b>     | D209-F        | 600 kW            | 685 kW         |
| <b>avus 500b</b>     | D05-F         | 637 kW            | 739 kW         |

|                      |          |               |               |
|----------------------|----------|---------------|---------------|
| <b>avus 800c</b>     | -        | 800 kW        | 861 kW        |
| <b>avus 800a</b>     | D05-F    | 851 kW        | 991 kW        |
| <b>avus 800b</b>     | C05-F    | 934 kW        | 979 kW        |
| <b>avus 1000a</b>    | D05-F    | 1,067 kW      | 1,241 kW      |
| <b>avus 1000c</b>    | -        | 1,200 kW      | 1,244 kW      |
| <b>avus 1000b</b>    | C05-F    | 1,248 kW      | 1,306 kW      |
| <b>avus 1500b</b>    | C05-F    | 1,558 kW      | 1,645 kW      |
| <b>avus 1500c</b>    | -        | 1,560 kW      | 1,650 kW      |
| <b>avus 1600e</b>    | L64 FNER | 2,028 kW      | 2,055 kW      |
| <b>avus 2000a</b>    | J01-G    | 1,999 kW      | 1,930 kW      |
| <b>avus 2000d</b>    | L33 FN   | 1,999 kW      | 2,109 kW      |
| <b>avus 2000c</b>    | -        | 2,000 kW      | 2,065 kW      |
| <b>avus 2000e</b>    | L64 FNER | 2,145 kW      | 2,082 kW      |
| <b>avus 2000b</b>    | J01-G    | 2,676 kW      | 2,527 kW      |
| <b>avus 3000a</b>    | J11-G    | 3,360 kW      | 3,172 kW      |
|                      |          | <b>Biogas</b> | <b>Biogas</b> |
| <b>avus 500a</b>     | D225     | 550 kW        | 557 kW        |
| <b>avus 500 plus</b> | ct135-0  | 550 kW        | 526 kW        |
| <b>avus 500c</b>     | -        | 600 kW        | 598 kW        |
| <b>avus 500b</b>     | D25-F    | 657 kW        | 709 kW        |
| <b>avus 800d</b>     | L32 FB   | 776 kW        | 779 kW        |
| <b>avus 800c</b>     | -        | 800 kW        | 788 kW        |
| <b>avus 800a</b>     | D25-F    | 851 kW        | 935 kW        |
| <b>avus 800b</b>     | B25-F    | 901 kW        | 913 kW        |
| <b>avus 1000a</b>    | D25-F    | 1,067 kW      | 1,179 kW      |
| <b>avus 1200d</b>    | L32 FB   | 1,169 kW      | 1,267 kW      |
| <b>avus 1000c</b>    | -        | 1,200 kW      | 1,177 kW      |
| <b>avus 1000b</b>    | B25-F    | 1,202 kW      | 1,214 kW      |
| <b>avus 1500b</b>    | B25-F    | 1,497 kW      | 1,515 kW      |
| <b>avus 1500c</b>    | -        | 1,560 kW      | 1,557 kW      |
| <b>avus 1600d</b>    | L32 FB   | 1,560 kW      | 1,667 kW      |
| <b>avus 2000c</b>    | -        | 2,000 kW      | 1,982 kW      |
| <b>avus 2000d</b>    | L32 FB   | 1,950 kW      | 2,000 kW      |

\* Higher output ranges on request. | Efficiency levels, see p. 28-31. Installation options, see p. 22-23.



### Compact Container

#### Sizes available (LWH)

6.00 m x 2.44 m x 2.90 m

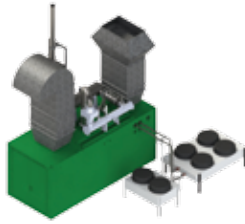
#### Acoustic emissions\*2

Standard: 65 dB (A)

Super silent: down to 55 dB (A)

#### Information

Easy installation due to complete pre-assembly in the factory and compact design, integrated electrical installation



### Container Basic

#### Sizes available (LWH)

7.00 m x 3.00 m x 3.00 m

9.60 m x 3.00 m x 3.00 m

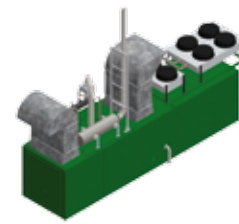
#### Acoustic emissions\*2

Standard: 65 dB (A)

Super silent: down to 52 dB (A)

#### Information

Made of sheet steel, lined internally with fleece and galvanized perforated sheet metal, integrated electrical installation



### Container Heavy

#### Sizes available (LWH)

12.00 m x 3.00 m x 3.00 m

15.00 m x 3.00 m x 3.00 m

17.00 m x 3.00 m x 3.40 m

18.00 m x 6.00 m x 3.70 m

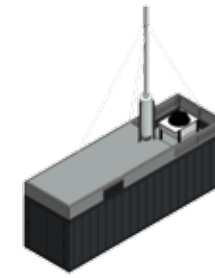
#### Acoustic emissions\*2

Standard: 65 dB (A)

Super silent: down to 55 dB (A)

#### Information

Made of sheet steel, lined internally with fleece and galvanized perforated sheet metal, integrated electrical installation



### Container Basic High Line

#### Sizes available (LWH)

9.00 m x 3.00 m x 3.70 m

#### Acoustic emissions\*2

Standard: 52 dB (A)

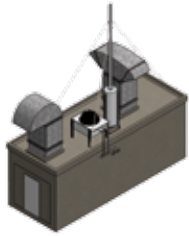
Super silent: down to 45 dB (A)

#### Information

Like container basic, optimized design, cooler in addition to supply and return air ducts integrated in the container roof

# Extremely versatile and quiet.

2G power plants can be installed in various ways – depending on local conditions and the requirements for sound insulation. They can therefore be incorporated in existing buildings or heating systems or can be set up separately in a container or engine room. With the appropriate sound insulation package, noise emission can be as low as 35 dB (A) at a distance of 10 m.



### Basic Concrete Acoustic Enclosure

#### Sizes available (LWH)

11.00 m x 4.30 m x 3.70 m\*  
12.00 m x 4.30 m x 3.70 m  
13.00 m x 4.30 m x 3.70 m

#### Acoustic emissions\*<sup>2</sup>

Standard: 65 dB (A)  
Super silent: down to 45 dB (A)

#### Information

Complete concrete enclosure of the 2G power plant, wall thickness 160 mm, integrated electrical installation, high mass to reduce the body noise



### High Line Concrete Acoustic Enclosure

#### Sizes available (LWH)

9.60 m x 3.60 m x 3.75 m

#### Acoustic emissions\*<sup>2</sup>

Standard: 65 dB (A)  
Super silent: down to 35 dB (A)

#### Information

Like basic concrete acoustic enclosure, optimized design, cooler (size-depend-ent) in addition to supply and return air ducts integrated in the container roof, high mass to reduce the body noise



### Sound Capsule

#### Sizes available (LWH)

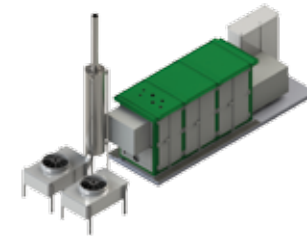
depending on product

#### Acoustic emissions\*<sup>3</sup>

Standard: 65 dB (A)

#### Information

Encapsulation of the entire 2G power plant using sheet steel cases, easily accessible through doors and maintenance flaps



### Outdoor Sound Capsule

#### Sizes available (LWH)

depending on product

#### Acoustic emissions\*<sup>3</sup>

Standard: 65 dB (A)

#### Information

Encapsulation of the entire 2G power plant, easily accessible through doors and maintenance flaps

\* Also available in 35 db (A), in 10 m, free field conditions.

\*<sup>2</sup> At a distance of 10 m free field conditions.

\*<sup>3</sup> At a distance of 1 m free field conditions.



# Innovative energy concepts.

Air-conditioning of offices, generating steam for industry and being at the forefront technology for stable decentralised energy supply of the future. All of this is what cogeneration generally does – especially a highly efficient power plant by 2G.

## Storing heat.

By incorporating a heat store, it's possible to decouple heat production from electricity production and to use the 2G power plant flexibly.

## Cooling with heat.

The heat arising during cogeneration can be converted into chilled water by means of an absorption chiller and can be used, for example, for environmentally-compatible air conditioning.

## Raising the temperature.

Incorporated in steam, hot water and thermal oil applications, 2G power plants can provide customized solutions for such as the food industry.

## Treating waste gas.

By installing catalyst technology in a 2G power plant, it is possible to remove small amounts of pollutants that are still present in the exhaust gas and to achieve values below the limits of the current UK emissions requirements.

## Biogas treatment.

After the natural fermentation process, biogas often still contains residues of undesirable substances, such as sulphur. The biogas is upgraded by using activated charcoal filters and gas cooling systems.

## Operating as a backup in an emergency.

It is not always possible or practical to connect to a stable power grid. 2G power plants are capable of operating in isolated networks and may guarantee a backup supply in an emergency.

## Regulating with continuous adjustment.

Unlike large power plants, CHP plants can regulate their output within a very short time. 2G power plants are infinitely adjustable in the power range between 50 and 100 percent and adjust to the actual energy demand with the help of modern control technology.

## Virtual power plant.

2G power plants are equipped with a special interface enabling them to be integrated easily in virtual power plants and also enabling them to participate in the energy market.



# 2G service. Efficient and fast.

2G offers a leading edge service concept so that every 2G power plant runs permanently and with maximum efficiency. Service is supported by the 2G Power Plant System for automated remote diagnosis, control and maintenance.

## **2G Power Plant. Automated remote diagnosis.**

2G has expanded servicing via remote access to the plant control system by adding an innovative module: 2G Power Plant. The key to this concept is automated remote diagnosis of all the plant parameters. If a technical disruption is looming in a 2G power plant, it is automatically reported online to the 2G service centre without delay. This is carried out without the operator needing to take any action. With the relevant system parameters, the system also reports a suggested solution. An employee in the 2G service centre initiates the appropriate measures immediately to ensure that the plant continues to operate. Fast and efficient!

## **Premium service contract. Complete cost control.**

Every operator of a 2G power plant is well protected with a premium service contract. No additional costs arise as a result of maintenance and repair work (including all spare and wear parts). As a result, the operator retains full cost control.

## **2G service team. On site worldwide.**

A worldwide service network and a comprehensive spare parts warehouse form the basis for a professional on site maintenance and repair service. Hundreds of 2G service vehicles and a large number of specially trained service partners operate across the world.



## 2G. Product overview – natural gas.

| Type                           | Configuration        | Output         |         | Efficiency |         |        |         |
|--------------------------------|----------------------|----------------|---------|------------|---------|--------|---------|
|                                |                      | electrical     | thermal | electrical | thermal | total  |         |
| <b>g-box</b><br>20 - 50 kW     | <b>g-box 20</b>      | as22-4         | 20 kW   | 44 kW      | 32.0 %  | 70.4 % | 102.4 % |
|                                | <b>g-box 50 plus</b> | as70-4         | 50 kW   | 104 kW     | 34.5 %  | 71.8 % | 106.3 % |
| <b>aura</b><br>100 - 420 kW    | <b>aura 404</b>      | bt80-4         | 100 kW  | 167 kW     | 36.5 %  | 61.0 % | 97.5 %  |
|                                | <b>aura 406</b>      | bt80-1         | 170 kW  | 263 kW     | 37.3 %  | 57.7 % | 95.0 %  |
|                                | <b>aura 408</b>      | bt70-1         | 280 kW  | 408 kW     | 38.4 %  | 55.9 % | 94.3 %  |
|                                | <b>aura 412</b>      | bt70-1         | 420 kW  | 611 kW     | 38.5 %  | 56.0 % | 94.5 %  |
| <b>patruus</b><br>140 - 260 kW | <b>patruus 140</b>   | as80-1         | 140 kW  | 207 kW     | 36.5 %  | 53.9 % | 90.4 %  |
|                                | <b>patruus 263</b>   | as80-1         | 263 kW  | 380 kW     | 38.0 %  | 54.9 % | 92.9 %  |
| <b>agenitor</b><br>95 - 450 kW | <b>agenitor 404</b>  | bt80-1 (MZ 70) | 95 kW   | 108 kW     | 38.2 %  | 43.2 % | 81.4 %  |
|                                |                      | bt80-1         | 100 kW  | 112 kW     | 38.4 %  | 42.9 % | 81.3 %  |
|                                |                      | ct80-1         | 160 kW  | 168 kW     | 41.0 %  | 43.0 % | 84.0 %  |
|                                |                      | ct70-1         | 160 kW  | 172 kW     | 40.5 %  | 43.5 % | 84.0 %  |
|                                | <b>agenitor 406</b>  | ct80-1         | 250 kW  | 260 kW     | 41.8 %  | 43.5 % | 85.3 %  |
|                                |                      | ct70-1         | 250 kW  | 268 kW     | 41.3 %  | 44.2 % | 85.5 %  |
|                                | <b>agenitor 408</b>  | bt80-1         | 250 kW  | 304 kW     | 39.8 %  | 48.3 % | 88.1 %  |
|                                |                      | ct80-1         | 360 kW  | 381 kW     | 42.5 %  | 45.0 % | 87.5 %  |
|                                |                      | ct70-1         | 360 kW  | 383 kW     | 41.5 %  | 44.2 % | 85.7 %  |
|                                | <b>agenitor 412</b>  | bt70-1         | 360 kW  | 440 kW     | 39.6 %  | 48.5 % | 88.1 %  |
|                                |                      | ct70-1         | 450 kW  | 493 kW     | 41.3 %  | 45.3 % | 86.6 %  |
|                                |                      | bt70-1         | 450 kW  | 609 kW     | 39.0 %  | 52.8 % | 91.8 %  |

## 2G. Product overview – natural gas.

| Type          | Configuration | Output     |          | Efficiency |         |        |
|---------------|---------------|------------|----------|------------|---------|--------|
|               |               | electrical | thermal  | electrical | thermal | total  |
| avus 500 plus | ct80-1        | 550 kW     | 578 kW   | 42.6 %     | 44.7 %  | 87.3 % |
|               | ct70-1        | 550 kW     | 590 kW   | 41.7 %     | 44.7 %  | 86.4 % |
|               | bt70-1        | 550 kW     | 723 kW   | 39.8 %     | 52.3 %  | 92.1 % |
| avus 500c     | -             | 600 kW     | 652 kW   | 42.1 %     | 45.7 %  | 87.8 % |
| avus 500a     | D209-F        | 600 kW     | 685 kW   | 41.3 %     | 47.1 %  | 88.4 % |
| avus 500b     | D05-F         | 637 kW     | 739 kW   | 40.9 %     | 47.4 %  | 88.3 % |
| avus 800c     | -             | 800 kW     | 861 kW   | 42.4 %     | 45.6 %  | 88.0 % |
| avus 800b     | C05-F         | 934 kW     | 979 kW   | 43.1 %     | 45.2 %  | 88.3 % |
| avus 800a     | D05-F         | 851 kW     | 991 kW   | 40.7 %     | 47.4 %  | 88.1 % |
| avus 1000a    | D05-F         | 1,067 kW   | 1,241 kW | 40.9 %     | 47.6 %  | 88.5 % |
| avus 1000c    | -             | 1,200 kW   | 1,244 kW | 42.6 %     | 44.1 %  | 86.7 % |
| avus 1000b    | C05-F         | 1,248 kW   | 1,306 kW | 43.2 %     | 45.3 %  | 88.5 % |
| avus 1500b    | C05-F         | 1,558 kW   | 1,645 kW | 43.0 %     | 45.4 %  | 88.4 % |
| avus 1500c    | -             | 1,560 kW   | 1,650 kW | 42.2 %     | 44.6 %  | 86.8 % |
| avus 1600e    | L64 FNER      | 2,025 kW   | 2,055 kW | 44.3 %     | 44.8 %  | 89.1 % |
| avus 2000a    | J01-G         | 1,999 kW   | 1,930 kW | 44.9 %     | 43.3 %  | 88.2 % |
| avus 2000c    | -             | 2,000 kW   | 2,065 kW | 42.6 %     | 44.0 %  | 86.6 % |
| avus 2000e    | L64 FNER      | 2,145 kW   | 2,082 kW | 43.6 %     | 44.4 %  | 86.0 % |
| avus 2000d    | L33 FN        | 1,999 kW   | 2,109 kW | 42.8 %     | 45.2 %  | 88.0 % |
| avus 2000b    | J01-G         | 2,676 kW   | 2,527 kW | 45.5 %     | 42.9 %  | 88.4 % |
| avus 3000a    | J11-G         | 3,360 kW   | 3,172 kW | 45.6 %     | 43.0 %  | 88.6 % |

\* Higher output ranges on request.

**avus**  
550 - 4,500 kW\*

## 2G. Product overview – biogas.

| Type                | Configuration | Output     |         | Efficiency |         |        |
|---------------------|---------------|------------|---------|------------|---------|--------|
|                     |               | electrical | thermal | electrical | thermal | total  |
| <b>patruus 50</b>   | ct80-0        | 50 kW      | 70 kW   | 35.4 %     | 49.8 %  | 85.2 % |
| <b>patruus 64</b>   | ct80-0        | 64 kW      | 85 kW   | 36.3 %     | 48.1 %  | 84.4 % |
| <b>agenitor 404</b> | at135-0       | 75 kW      | 104 kW  | 37.3 %     | 48.6 %  | 85.9 % |
|                     | bt135-0       | 100 kW     | 110 kW  | 38.6 %     | 42.4 %  | 81.0 % |
|                     | ct135-0       | 160 kW     | 155 kW  | 41.5 %     | 40.2 %  | 81.7 % |
| <b>agenitor 406</b> | ct135-0       | 250 kW     | 245 kW  | 42.5 %     | 41.6 %  | 84.1 % |
| <b>agenitor 408</b> | ct135-0       | 360 kW     | 345 kW  | 42.5 %     | 40.7 %  | 83.2 % |
| <b>agenitor 412</b> | ct135-0       | 450 kW     | 468 kW  | 41.1 %     | 42.7 %  | 83.8 % |

**patruus**  
50 - 64 kW

**agenitor**  
75 - 450 kW

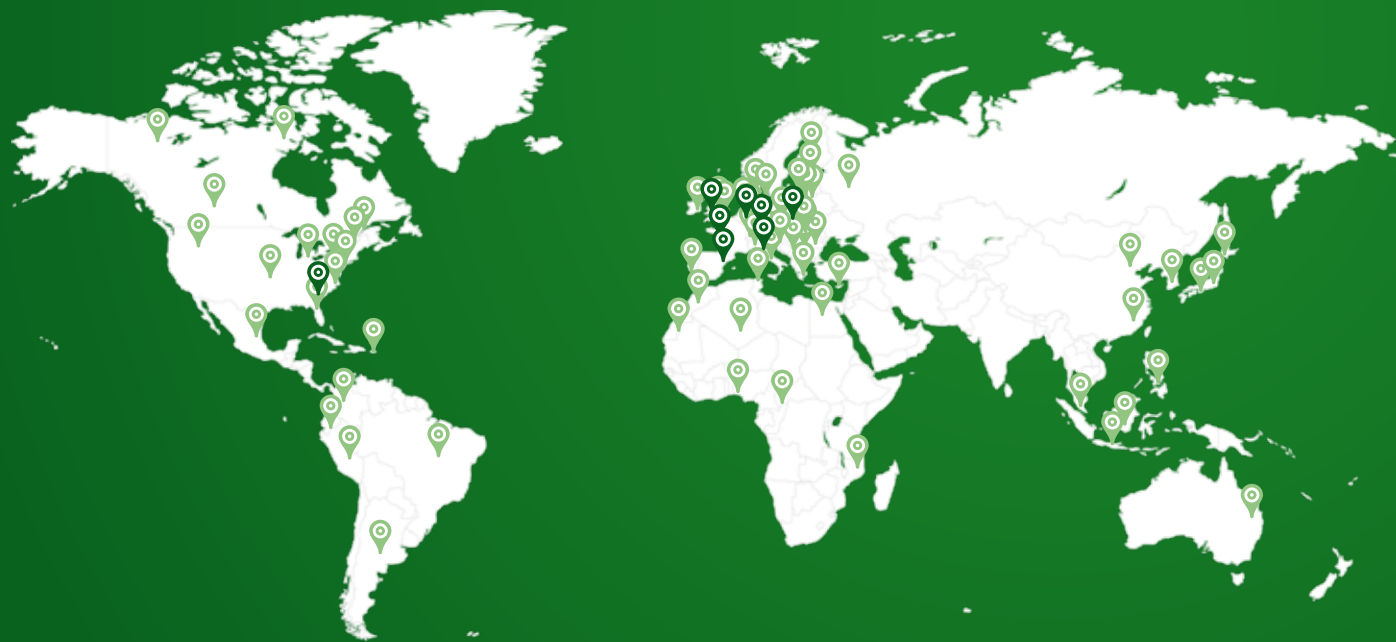
## 2G. Product overview – biogas.

| Type                 | Configuration | Output     |          | Efficiency |         |        |
|----------------------|---------------|------------|----------|------------|---------|--------|
|                      |               | electrical | thermal  | electrical | thermal | total  |
| <b>avus 500a</b>     | D225          | 550 kW     | 557 kW   | 42.1 %     | 42.6 %  | 84.7 % |
| <b>avus 500 plus</b> | ct135-0       | 550 kW     | 526 kW   | 42.5 %     | 40.6 %  | 83.1 % |
| <b>avus 500b</b>     | D25-F         | 657 kW     | 709 kW   | 40.5 %     | 45.1 %  | 85.6 % |
| <b>avus 500c</b>     | -             | 600 kW     | 598 kW   | 42.1 %     | 42.0 %  | 84.1 % |
| <b>avus 800a</b>     | D25-F         | 851 kW     | 935 kW   | 40.7 %     | 44.7 %  | 85.4 % |
| <b>avus 800b</b>     | B25-F         | 901 kW     | 913 kW   | 42.3 %     | 42.8 %  | 85.1 % |
| <b>avus 800c</b>     | -             | 800 kW     | 788 kW   | 42.4 %     | 41.8 %  | 84.2 % |
| <b>avus 800d</b>     | L32 FB        | 776 kW     | 779 kW   | 41.9 %     | 42.0 %  | 83.9 % |
| <b>avus 1000a</b>    | D25 - F       | 1,067 kW   | 1,179 kW | 40.9 %     | 45.2 %  | 86.1 % |
| <b>avus 1000b</b>    | B25-F         | 1,202 kW   | 1,214 kW | 42.4 %     | 42.8 %  | 85.2 % |
| <b>avus 1000c</b>    | -             | 1,200 kW   | 1,177 kW | 42.5 %     | 41.7 %  | 84.2 % |
| <b>avus 1200d</b>    | L32 FB        | 1,169 kW   | 1,267 kW | 42.4 %     | 46.0 %  | 88.4 % |
| <b>avus 1500b</b>    | B25-F         | 1,497 kW   | 1,515 kW | 42.3 %     | 42.8 %  | 85.1 % |
| <b>avus 1500c</b>    | -             | 1,560 kW   | 1,557 kW | 42.0 %     | 41.9 %  | 83.9 % |
| <b>avus 1600d</b>    | L32 FB        | 1,560 kW   | 1,667 kW | 42.7 %     | 45.2 %  | 87.9 % |
| <b>avus 2000c</b>    | -             | 2,000 kW   | 1,982 kW | 42.6 %     | 42.2 %  | 84.8 % |
| <b>avus 2000d</b>    | L32 FB        | 1,950 kW   | 2,000 kW | 43.4 %     | 44.5 %  | 87.9 % |

\* Higher output ranges on request.

**avus**

550 - 4,500 kW\*



2G Locations



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