



Processkontroll

GREEN TECHNOLOGY

The Nordic region's leading supplier of filling stations, services and infrastructure for liquefied and compressed energy gases.

Our greatest asset – customer satisfaction

Our stated goal is for our customers to feel secure that our facilities provide trouble-free operation and that we solve deviations quickly and competently.

This has led to us having a very high level of trust among our customers who will return to us for the next project.

More than 200 installations and 300 mobile gas storages delivered:

- Public biogas filling stations
- Buss depots filling stations
- Parent filling stations
- LCNG filling stations
- Decompression units
- Automation solutions

See www.processkontrollgt.se/tankstationer for our customer references.



Public CBG filling stations

- Stand alone station, ~ 2 dispensers
- Open for public filling of CBG
- Gas supply via mobile gas storages or by pipeline if available.



Mobile gas storage container



Automation, compressing, buffer



Dispenser



250 → 5 bar

Alternative. Gas from pipe

Compressed gas

Filling of vehicle
200 bar @ +15°C
(Max 250 bar with
temp compensation)

Buss depot

- All sizes from small bus depots to hundreds of buses
- Mostly slow over-night filling with buses connected to parallel filling ramps. No supervision needed.
- Also available with fast filling dispensers in addition to ramps for quick refill of one or more buses. Supervision needed.



Automation, compressors, buffer



Gas from pipe, mobile gas storage or LNG-back-up

Compressed gas

Bussramp with slow filling ramp

Gas storage filling station

- Gas from biogas production (or gas pipeline) is compressed and filled into mobile gas storage facilities
- Filled gas storages are distributed to consumer/gas filling station not connected to pipe
- Depending on customer needs it can also be equipped with a vehicle filling dispenser



LNG/LCNG

- LNG filling station
Filling of HDV with liquid biogas
- LCNG station
LNG is vaporized and pressurized to be used as CNG
- LNG backup
Vaporized LNG replaces normal gas supply during downtime/temporary capacity shortages



Decompression unit

- Used when biogas from mobile gas storage is to supply a low-pressure network, e.g. industrial process or building.
- The pressure is lowered step by step, and the gas is heated between the steps, so as not to get too cold.



Mobile Gas storages

Steel gas storage

- Steel gas cylinders – lower cost but increased weight
- Capacity of up to 2000 kg gas per flak



Composite gas storage

- Composite gas cylinders => Low weight
- High capacity up to 3800 kg gas
- Hexagon is our partner since 2008
- High quality product and delivery



Bio-Methane situation in Sweden

2022 governmental production support for bio-methane:

CNG production receive 0,3 SEK/kWh in subsidy

LNG receive another 0,15 SEK/kWh in subsidy

2022 governmental investment support for bio-methane:

Totally 66 production sites has been subsidised, whereof 22 during 2021

60% of the production capacity is been built with subsidies

Total consumption and production in Sweden

15 TWh of Methane

4 TWh is Bio-Methane

Bio-mass available to produce 9 times more Bio-Methane in Sweden



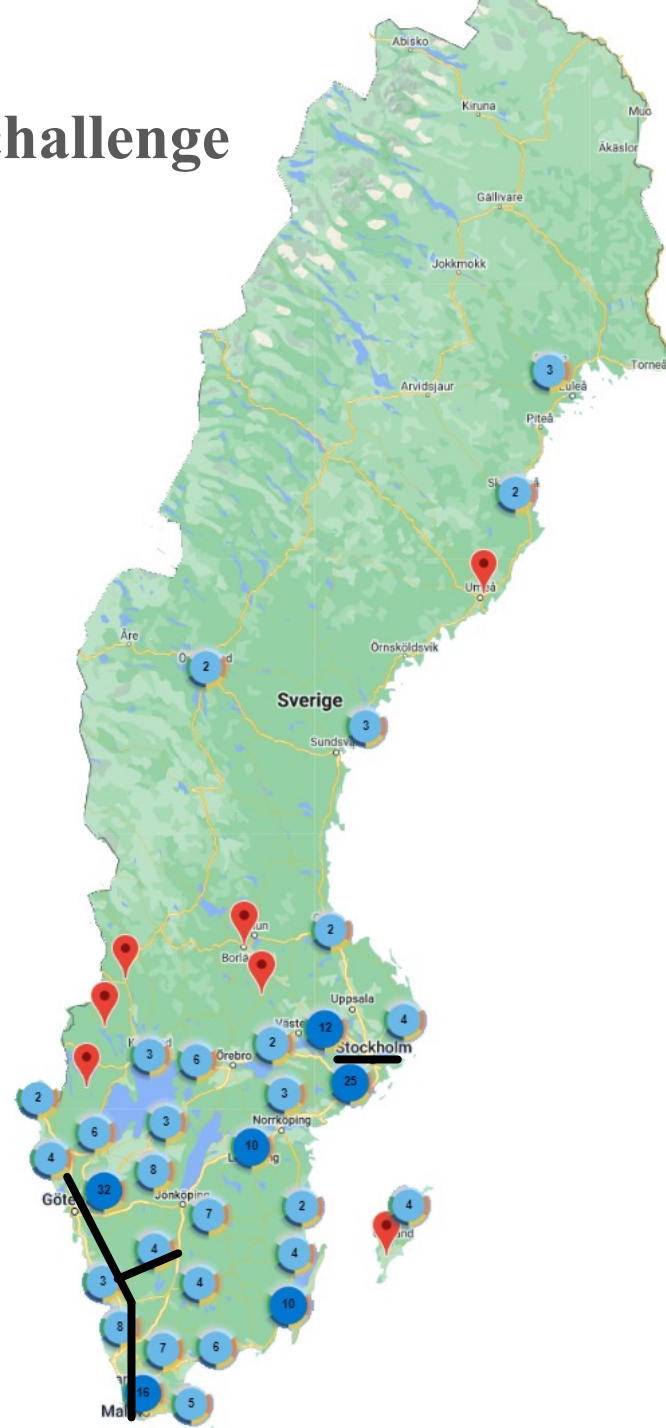
Limited Swedish gasgrid poses a challenge

- Out of Swedens ~ 210 public CBG filling stations only a minority are connected to the national gas grid or the local Stockholm grid
- This has created a unique need for offgrid solutions which in Sweden has been solved with mobile gas storages



Challenges turned into benefits

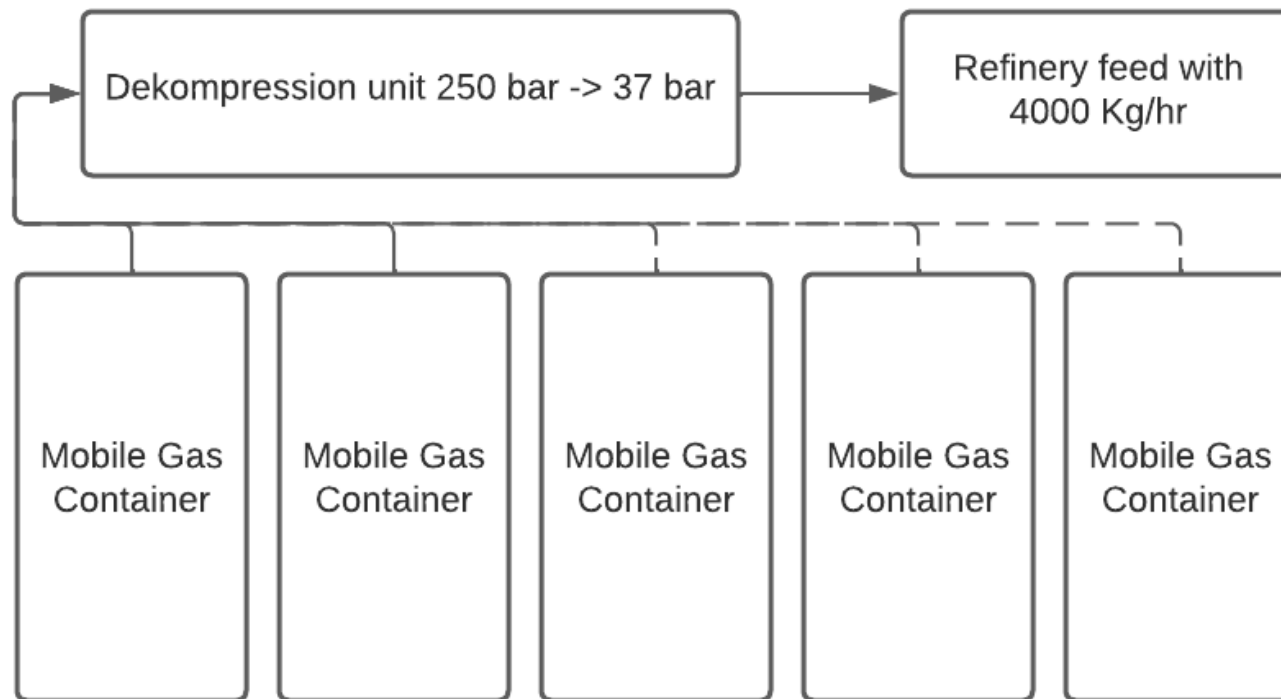
- More flexible and adaptable to volatile CBG demand
- Biomethane straight from the biogas plant



Customer case

5 Mobile storages and high capacity decompression unit

- Heat back up solution for a refinery
- 2 seconds reaction time, standby 24/7/365
- 4000 Kg/Hr from mobile containers, 250 bar → 37 bar
- No gas grid nearby, transporting is needed
- Consumption pattern not possible to plan/order i.e. local storage is the only option
- Containers solve both transport and local storage needs



Customer case decompression container

250 KW Gas boiler and 8 PKGT custom made heat exchangers

Installed in a 40 foot container

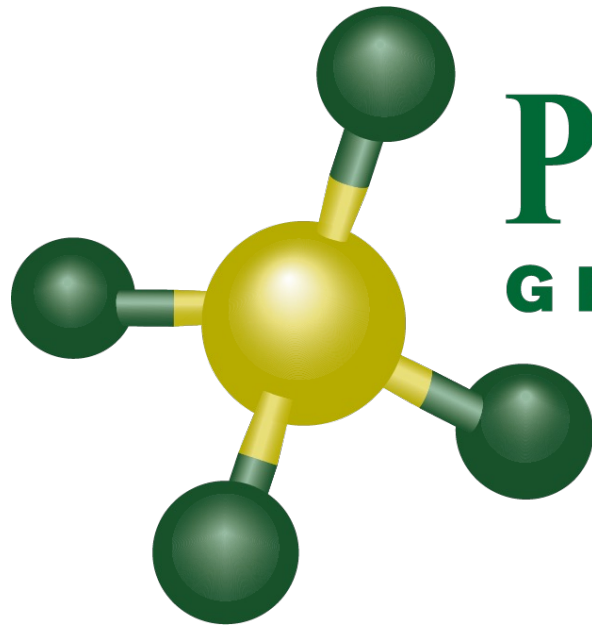
Function to prevent ice-formation in the piping during pressure reduction and temper the gas



Customer case on-site

On-site installation and performance check





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For more information please visit us at www.processkontrollgt.se
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