



GLOMMERS
MILJÖENERGI AB

Company Presentation



2011

www.gmepellets.se



GLOMMERS MILJÖENERGI AB

Glommers Miljöenergi AB, GME, was founded in 1996 to create new jobs, based on the refinement of locally produced biofuels.

GME:s Area of Business

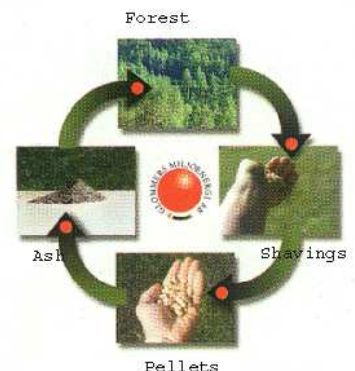
GME:s Area of Business		
BIOFUEL TEST STATION Product development in collaboration with Universitites/Colleges Biofuel Projects Demonstration site for development of Reed Canary Grass as energy raw material.	PRODUCTION OF PELLETS Production of wood pellets for distribution. Current max. prod 5-6000 tonnes/year Production of Reed Canary Grass briquettes. Retailer Biomasser briquetting equipment	DISTRICT HEATING Supply of district heating from GME:s installations. Sales of heating installations

Current **Bioenergy Projects:**

1. **Reed Canary Grass for small scale heating systems in sparsely populated areas** – a demonstration and development project for RCG cultivation on peat soil, mobile briquetting with screw technique and heating production in bottom fed furnace.. Read more about the projects on: www.bioenerginord.com
2. From 2010 Arvidsjaur's kommun is running **an international knowledge transfer project with Mwanza District in Tanzania**. GME plays an important role as Bioenergy Expert. Read more on www.bioenerginord.com

GME finished seven **Bioenergy Projects** between 1996-2008:

1. KAB – An **inventory of the biofuel potential** of the local district.
2. **Reed Canary Grass** – Energy grass **cultivation on peat soil land** in collaboration with the Swedish Agricultural University.
3. **Marketing** and information to the public about biofuel pellets.
3. **Inventory of the ash and sludge quantities** of Northern Sweden (for use as a fertilizer)
4. The construction of a **Biofuel Test Station**
5. Inventory and analysis of commercial use of **White Hardwood** (2007)
6. **Lifecycle-based bioenergy in Cold Climate** (2008)



GME's Objectives:

- To produce high quality pellets
- To keep a high service profile towards customers and suppliers
- To be an attractive Biofuel Test Station
- To work according to the established environmental control program.

GME's Wood Pellets Production Line:



Barn for raw material



Feeding table for input to mill



Hammer mill



Feeding line to factory



Pelleting machine



GME quality pellets comes in two sizes:

The GME pellet highly exceeds the limits for Class 1 Pellets according to Swedish Standard 187120

GME:s Quality Control Includes:

- Control of raw material at the point of delivery: Visual control and moisture content test.
- Visual control of pellets during production
- Control of that the fine fraction is removed from pellets and brought back to production
- The weighing of pellets by m3 (bulkweight)
- Moisture content control of pellets
- Durability control of pellets
- Ash content control of pellets
- Control of handling, loading and storing of pellets.
- All of the above is continually documented throughout the production.



GME's **Biofuel Test Station:**

- Work at the Biofuel Test Station is performed **in co-operation with researchers and scientists** from universities, colleges and biofuel organisations.
- GME has the competence and equipment to **pellet different raw materials** and mixtures
- We perform the **measuring** of:
 - Moisture content
 - Ash content
 - Durability
 - Bulk weight
- We offer **visits and information** to schools etc. about biofuels.
- We are a **demonstration site**, developing Reed Canary Grass cultivation on peat soil, mobile briquetting with a screw/heat technique and heating production in an 60kW biofuel boiler – from sowing to heating supply with the goal of profitability throughout all parts!

Our customers:

- Retailers in wood pellets
- Private customers, cash-and-carry
- Bulk distribution: private and corporate customers
- District heating: wood chips, wood pellets and reed canary grass briquettes
- Buyers of briquetting equipment

Our market today:

- **Biofuel Test Station:** Primarily universities and colleges.
- **District Heating:** Local customers
- **Wood Pellets:** Private and Corporate customers in Sweden and Norway
- **Reed Canary Grass briquettes:** private and corporate customers

What can we offer You?

- **Wood pellets of highest quality** – visit our web page for current prices
- **Reed Canary Grass briquettes for tests**
- **Briquetting tests of different straw material**
- Knowledge transfer about **Lifecycle-based Bioenergy**
- Knowledge transfer about **production of Reed Canary Grass for commercial use**
- **Tests and pelleting of different fuel mixtures**
- **Calculations** for the construction of small scale pellet production factory (2 tonnes per hour) and small scale biofuel based heating plant (up to 1 MW).



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