

# **Pellets EFO Group**

# EFO point of view on pellets

- We annually buy approximately 100 000 tons.
- We value quality and delivery accuracy very high.
- Storage capacity: Approx. 15 000 tons Oxelösund, 7 000 tons Stora vika Stockholm and approximately 25 000 tons in Varberg.
- Consumption basically December - March.
- EFO buy DAP terms according to Incoterms 2010.

## Quality specification

	<u>Method for analysis</u>	<u>Typical value as received</u>	<u>Specifications/limits</u>
Total moisture %	CEN/TS 14774-1,2	8	< 11
Ash %	CEN/TS 14775	< 0,5	< 0,5
Calorific value, MWh/ton (Net effective const pressure)	CEN/TS 14918	4,8	4,7 – 5,1
Volatile matter %	SS-ISO 562	80	70-90

Ultimate analysis

Sulphur, S %	CEN/TS 15289	< 0,08
Carbon, C %	CEN/TS 15104	40-55
Hydrogen, H %	CEN/TS 15104	5-8
Nitrogen, N %	CEN/TS 15104	< 0,1
Oxygen, O %	SS 18 71 69	40-50
Chlorine, Cl %	CEN/TS 15289	< 0,03

Content in ash

Cs-137 <5000\*Bq/kg

Ash fusion course

CEN/TS15370

Initial deformation, IT, °C	> 1200
Softening temperature, ST, °C	> 1500
Hemispherical temperature, HT, °C	> 1500
Fluid temperature, FT, °C	> 1500

## Grading analysis of raw material.

Naturkraft Sverige AB

Screen (mm)	0,5	0,71	0,85	1,0	1,6	2,0	2,5	3,15
Share in per cent which will pass the screen	— 30	— 45	— 55	— 70	— 90	— 95	— 98	100

Method of analysis: ISO 1953

Method of sampling: CEN/TS 14778

Density: ~ 650 kg/m<sup>3</sup>



## Ports where EFO have storage capacity pellets



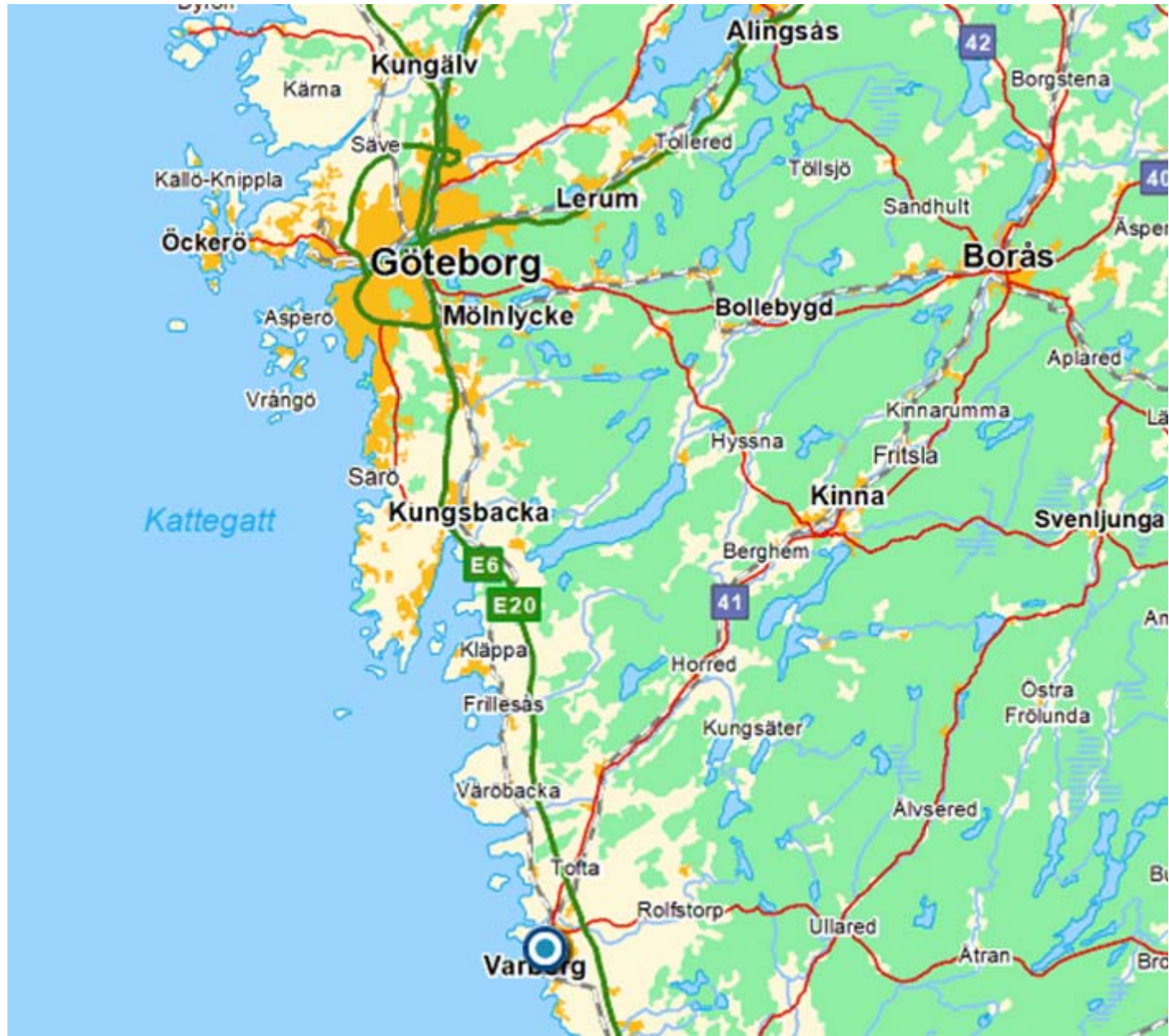


## Fittjaverket Stockholm



Consumption: 20 000 tons pellets /month December –  
March Total up to 80 000 tons/year.





## **Nomination vessel**

Vessel to be max 25 years old.

However the Seller has the right to nominate tonnage older than 25 years but maximum 29 years. Such nomination is subject to the Buyer's approval after checking status of vessel in question. The Buyer has the right to refuse such nominated tonnage, should there be a reasonable cause to do so. It is understood that this option is to be used occasionally for special cases and not to be used on regular basis.

Vessel to be single deck bulk- or general cargo vessel with box shaped holds.

Vessel shall have the delivery of wood pellets within maximum 2 cargo holds. If more than 2 cargo holds, the Seller to be responsible for any extra costs of discharge such as laytime/demurrage and cleaning of vessel. Vessel to be classed highest Lloyds or equivalent. The Vessel is to have sufficient ice class for the trade.

# Summary:

Our main concerns:

- Quality
- Delivery accuracy