



Introduction to Elsam

Start up meeting:

Regional markets for RES fuel cell systems for households.

6 – 7 March, Herning

Elsam in a big merger

- With “DONG” – the state-owned gas company
- With the Power company “E2”
- With the distribution companies ”Københavns Energi” og ”Frederiksberg Energi”
- Elsam/E2 is splitting assets between Vattenfall and the New Company. Vattenfall receives 23.7% of production assets.



”Old” Elsam

Electricity generation

Significant generation capacity

- Elsam owns about 4GW of capacity and accounts for about 54% of electricity capacity and generation in the Jutland-Funen area of western Denmark
- Table (1) shows electricity generation and heat production by type of plant for 2004 and (2) Elsam's production units

	Electricity generation GWh	Heat generation TJ
Central plants	13,128	30,308
Waste to energy plants	501	5,149
Local plants	304	3,082
Partially owned local plants ¹	223	991
Wind turbines	746	
Hydroelectric power	1,382	
Total	16,283	39,530

Installed electrical capacity

	MW	Fuel
Studstrup Power plant	700	Coal/oil/biomass
Nordjylland Power plant	667	Coal/oil
Fyn Power plant	640	Coal/oil/gas
Ensted Power plant	625	Coal/oil/biomass
Skærbæk Power plant	392	Gas
Esbjerg Power plant	378	Coal/oil
Herning Power plant	89	Gas/wood chips
Windpower	271	Offshore wind
Windpower ²	251	Onshore wind
Local plants	154	Gas/biomass/waste



1 - Share of production equivalent to Elsam's percentage ownership share. A calculated share of 50% has been used for the Aarhus Nord plant.

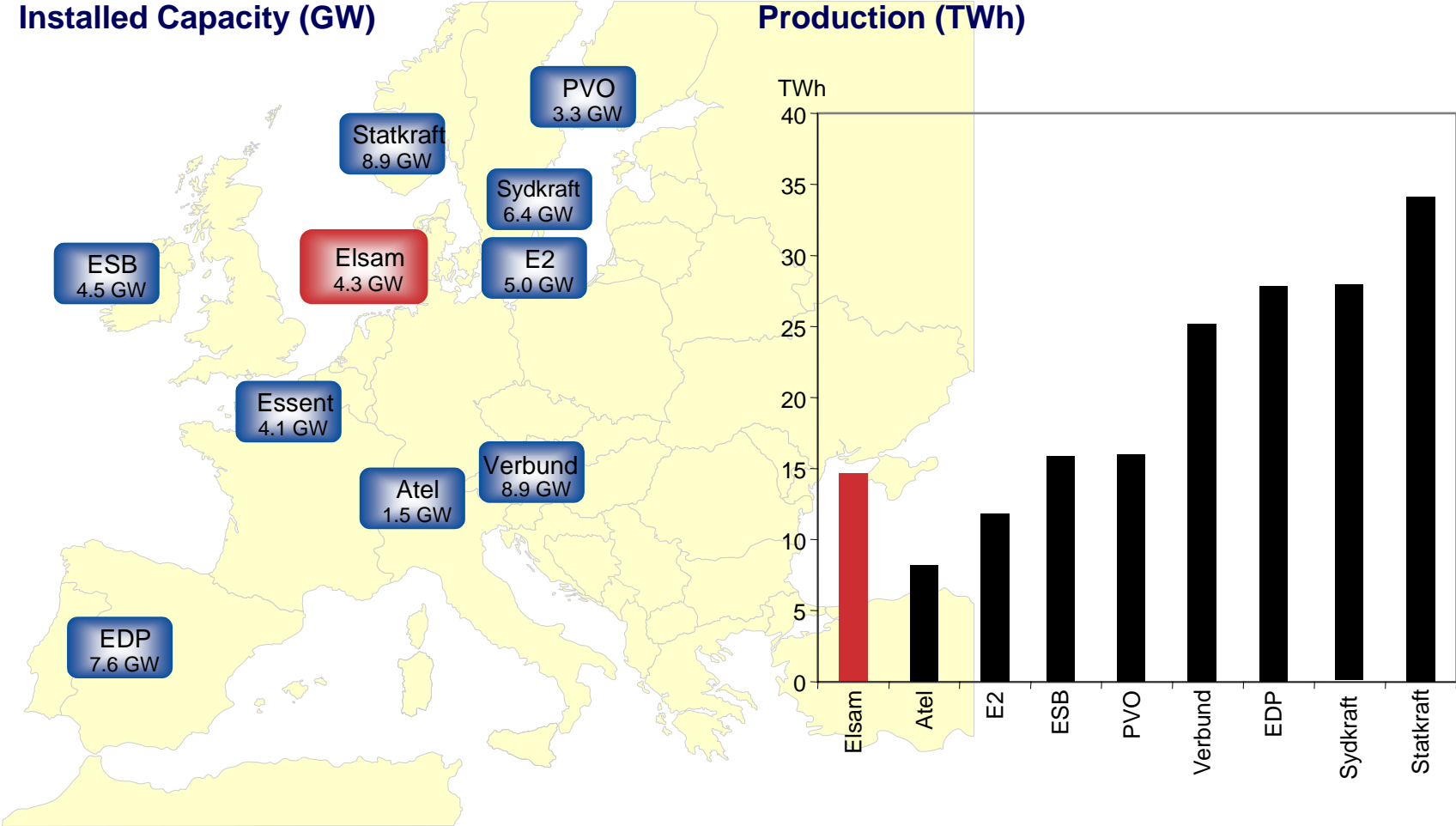
2 - Including 30 MW in Zagorze, Poland and 9 MW at Ploudalmézeau i Bretagne, France.

Elsam in Europe

comparative energy companies

Installed Capacity (GW)

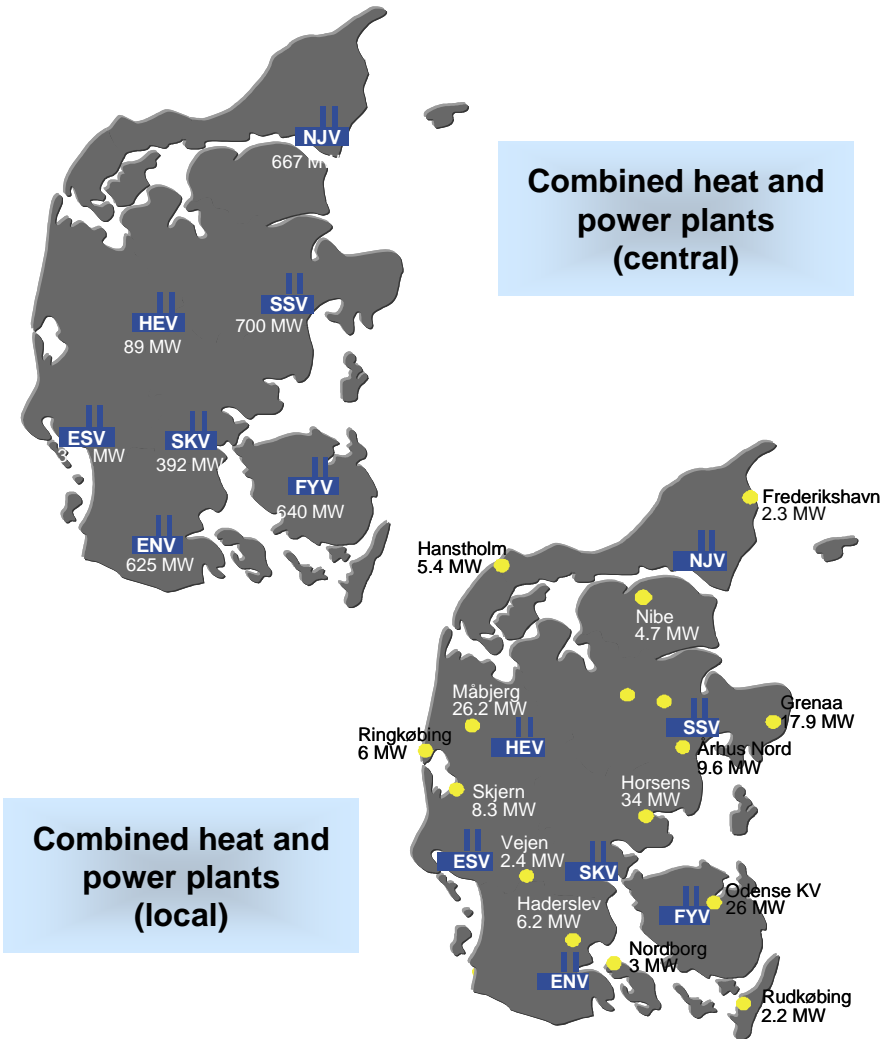
Production (TWh)



CHP and district heating

Outstanding CHP expertise

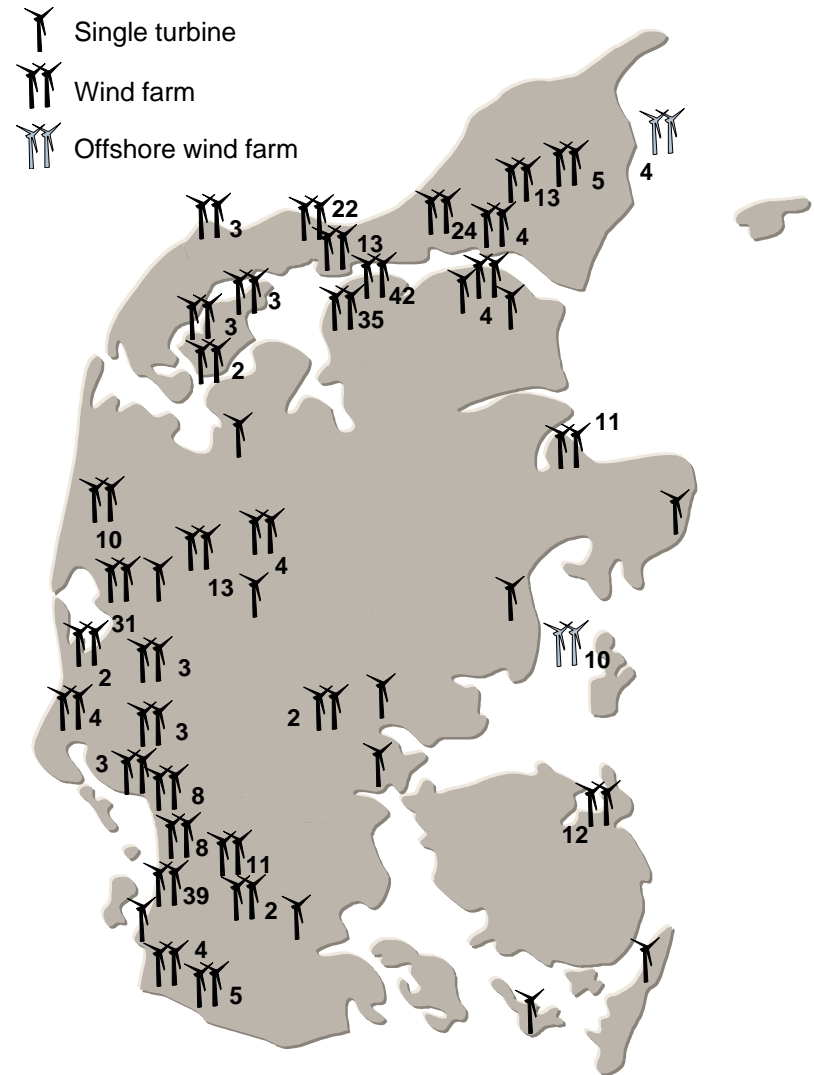
- Elsam A/S is the largest producer of district heating in Denmark
- The district heating is produced partly at 7 central CHP-plants and partly at 14 local CHP-plants
- The central CHP plants are placed in the cities of Aalborg, Århus, Odense, Esbjerg, Skærbæk, Aabenraa and Herning
- The local plants are placed in smaller towns in Jutland and Funen and use natural gas, biomass and waste as fuels
- The heat is supplied to private and municipal district heating companies and companies with a large heating requirement such as the process industry and greenhouses
- Heat contributes for approx. 33% of Elsam's 2002 revenues and is expected to remain stable due to the regulated nature of the business



Green Power – Leader in wind energy

Overview

- Elsam is strongly focused on wind power both nationally as well as internationally
- Today Elsam operates nearly 500 wind turbines (with an installed capacity of 389 MW) in Denmark alone
- The jewel of the crown in Elsam’s wind park portfolio is the offshore Horns Rev project
- Additionally Elsam is actively involved in a number of international wind energy projects around Europe both onshore and offshore
 - Zagorze (30 MW), Polen
 - Other projects in Poland
 - Burbo (90 MW), UK
 - Shell Flat (ca. 90 MW), UK
 - West Dudden
 - Ploudalmézeau i Bretagne (9 MW) France



Offshore wind power at Horns Rev - world leader

Offshore wind farm

- In December 2002 Elsam's 160MW Horns Rev offshore wind farm was completed and put into operation
- The wind farm will produce approx. 600GWh (approx. 2% of the Danish power consumption)
- The wind farm consists of 80 wind turbines (2MW each)
- The total project costs was Euro 270mn

The project

- In 2002, Elsam constructed the world's largest offshore wind farm at the Danish west coast
- The wind farm is located 14-20 km into the North Sea, West of Blåvands Huk
- It represents the first phase of a large-scale Danish effort to produce non-polluting electricity from offshore wind turbines
- With the Horns Rev project it will be possible to determine whether or not the Danish Government's ambitious energy plan is feasible
- Under the plan, wind turbines with a total capacity of 4,000 MW must be established in Danish waters before 2030

Ownership and operations

- Elsam is the owner and is responsible for the operation of the wind farm
- Eltra, the independent transmission system operator in Western Denmark, is responsible for the connection of the wind farm to the national onshore grid





”The new Elsam”

Integrated energy company with revenue of EUR 3.6 billion*

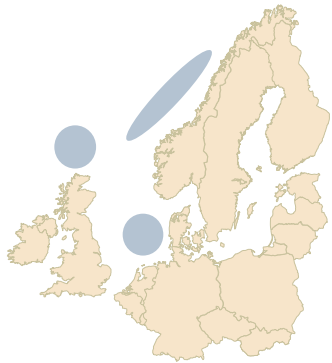
0.4
billion

1.2
billion
*

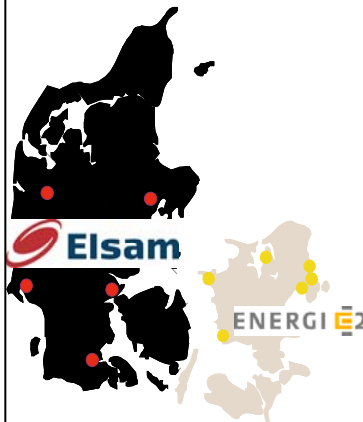
0.5
billion
*

1.5
billion*

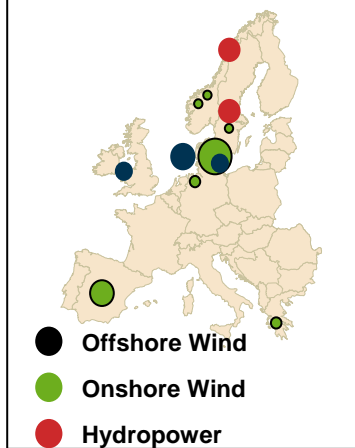
E&P



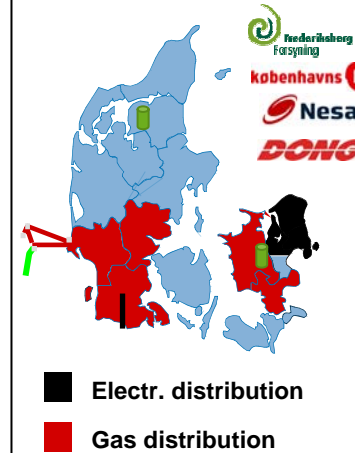
Generation



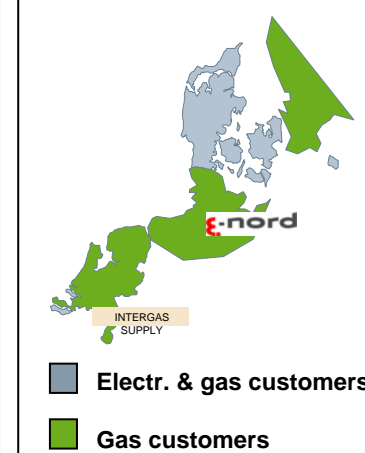
Renewables



Infrastructure



Sales



- Reserve base of more than 350 million boe
 - Hereof 40 bcm gas
- Three focus areas
 - The Danish part of the North Sea
 - Mid-Norway

- Effective and diversified conventional electricity production
 - 6,200 MW capacity (coal, gas, and bio mass)

- Large wind capacity in Denmark and abroad (600 MW)
- Significant wind power projects in Denmark and abroad
- Hydropower in Norway and Sweden (500 MW)

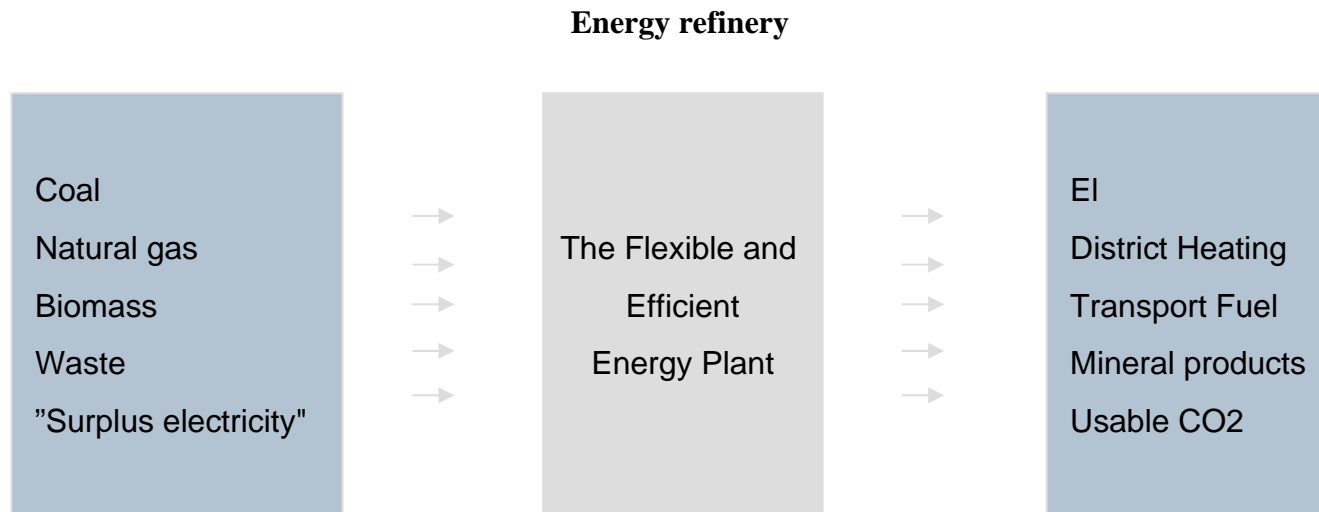
- Two natural gas storages (760 million m³)
- Gas distribution
 - 100,000 customers
- Electricity distribution
 - 900,000 customers

- Sale of approx. 8 bn m³ natural gas and significant volume of power
- 1,000,000 customers in Denmark
- Market leader in Denmark and Sweden

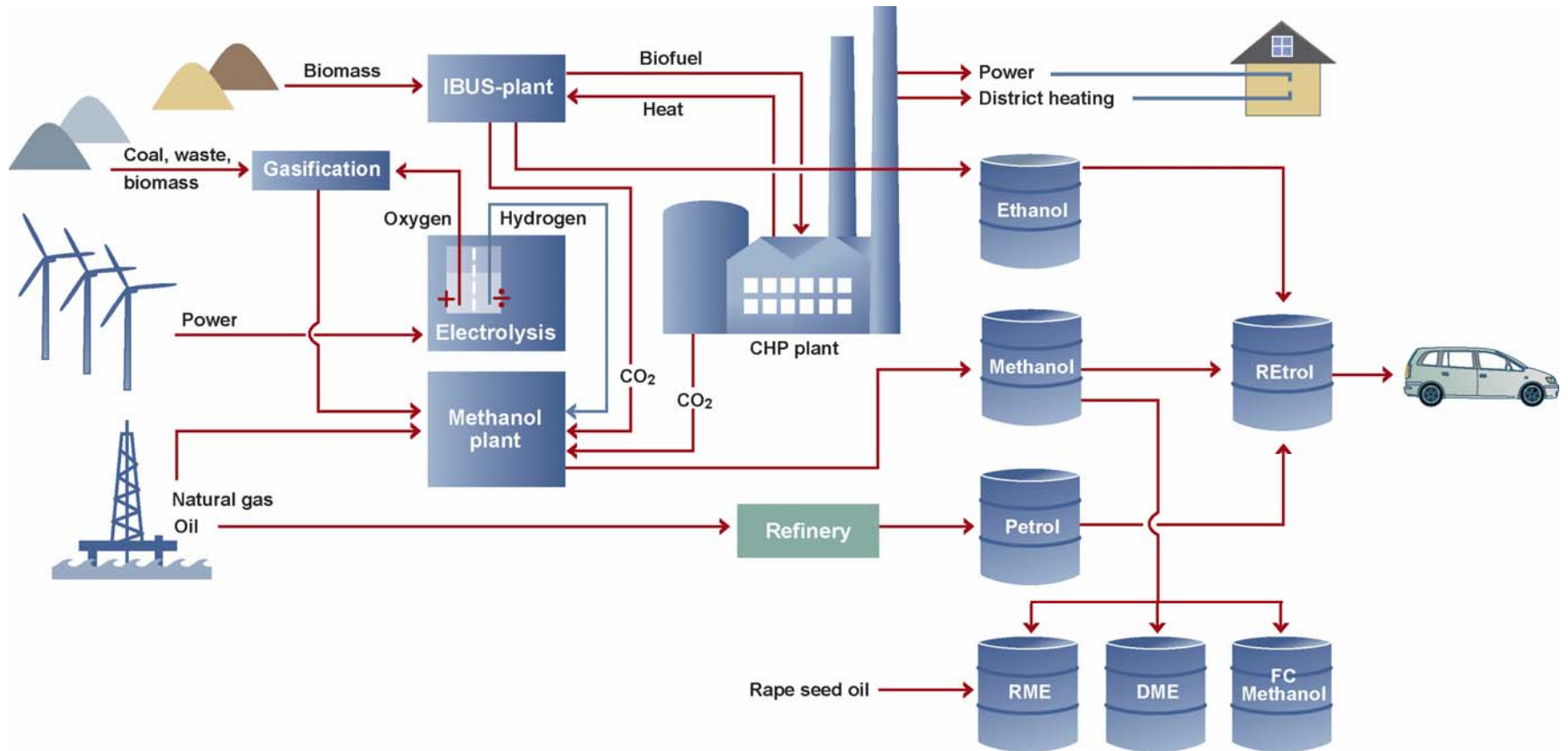
* DISCLAIMER: Based on arithmetic calculations. Figures include unaudited figures and DONG's own estimates of the West of the Shetland and the Orkney and Shetland Islands and serve for illustration purpose only. Figures assume all agreed DONG acquisitions are successfully completed

Niche player in Germany and Holland
Elsam

The flexible and efficient energy plant



From petrol to REtrol



Elsams focus in "Regional markets for RES fuel cell systems for house holds

- Develop markets for liquid renewable fuels (especially methanol) for oil-substitution
- Methanol and/or ethanol fuel cell systems
- Develop cheap production methods of renewable synthetic fuel
- Absorption of fluctuating electricity production
- Increase energy efficiency in production by integrated energy production