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# Welcome to Igelstaverket and Söderenergi AB

# Söderenergi

Igelstaverket  
Södertälje



Igelsta CHP  
Södertälje



Fittjaverket  
Botkyrka



Geneta panncentral, Södertälje

Huddinge Maskincentral, Huddinge

All facilities are certified according to ISO 14001

# Our mission

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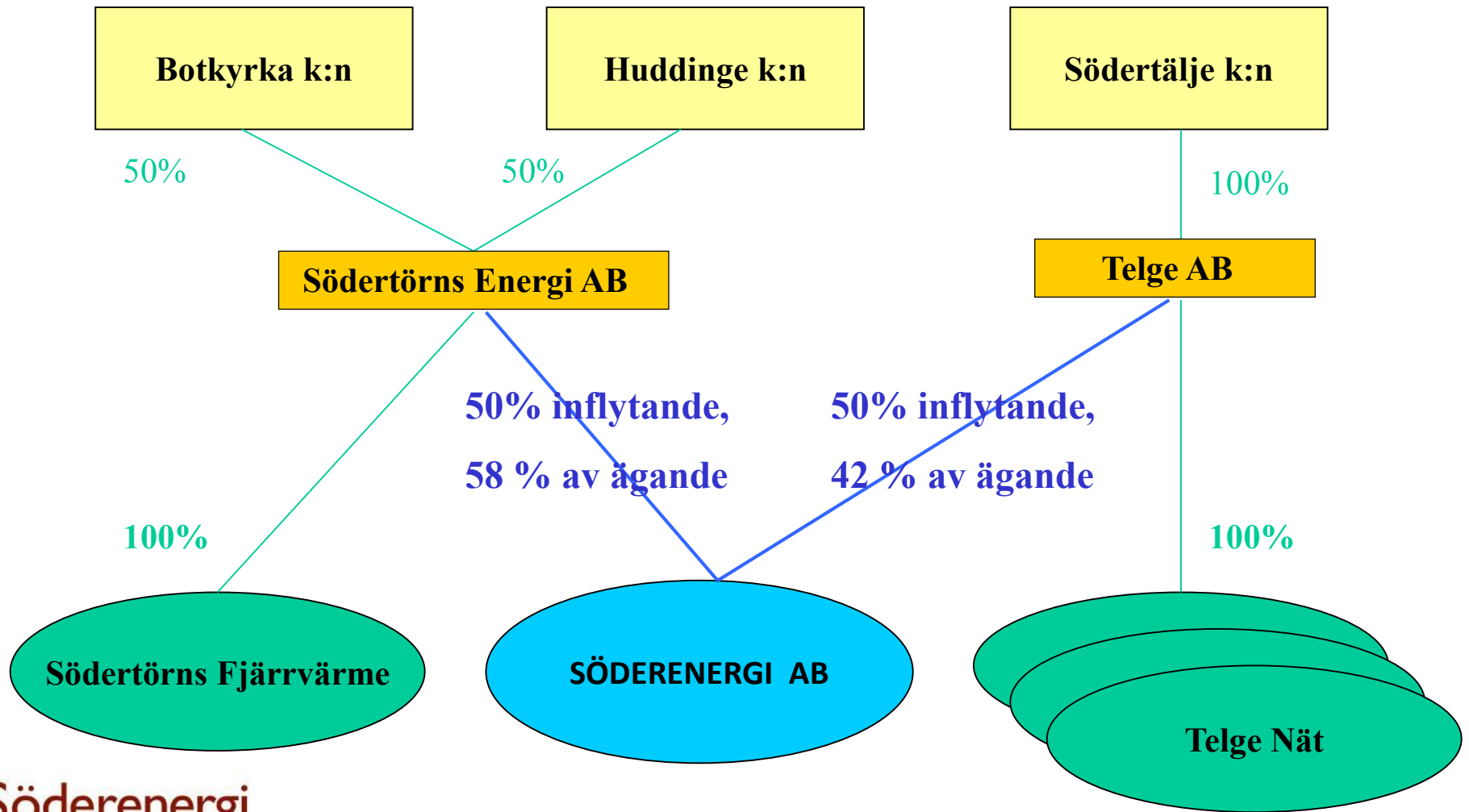
- To produce heat for the municipalities of Södertälje, Botkyrka, Salem and Huddinge.
- The heat shall be produced at low costs, high security of supply and with low environmental impact.

## Some key-figures 2010

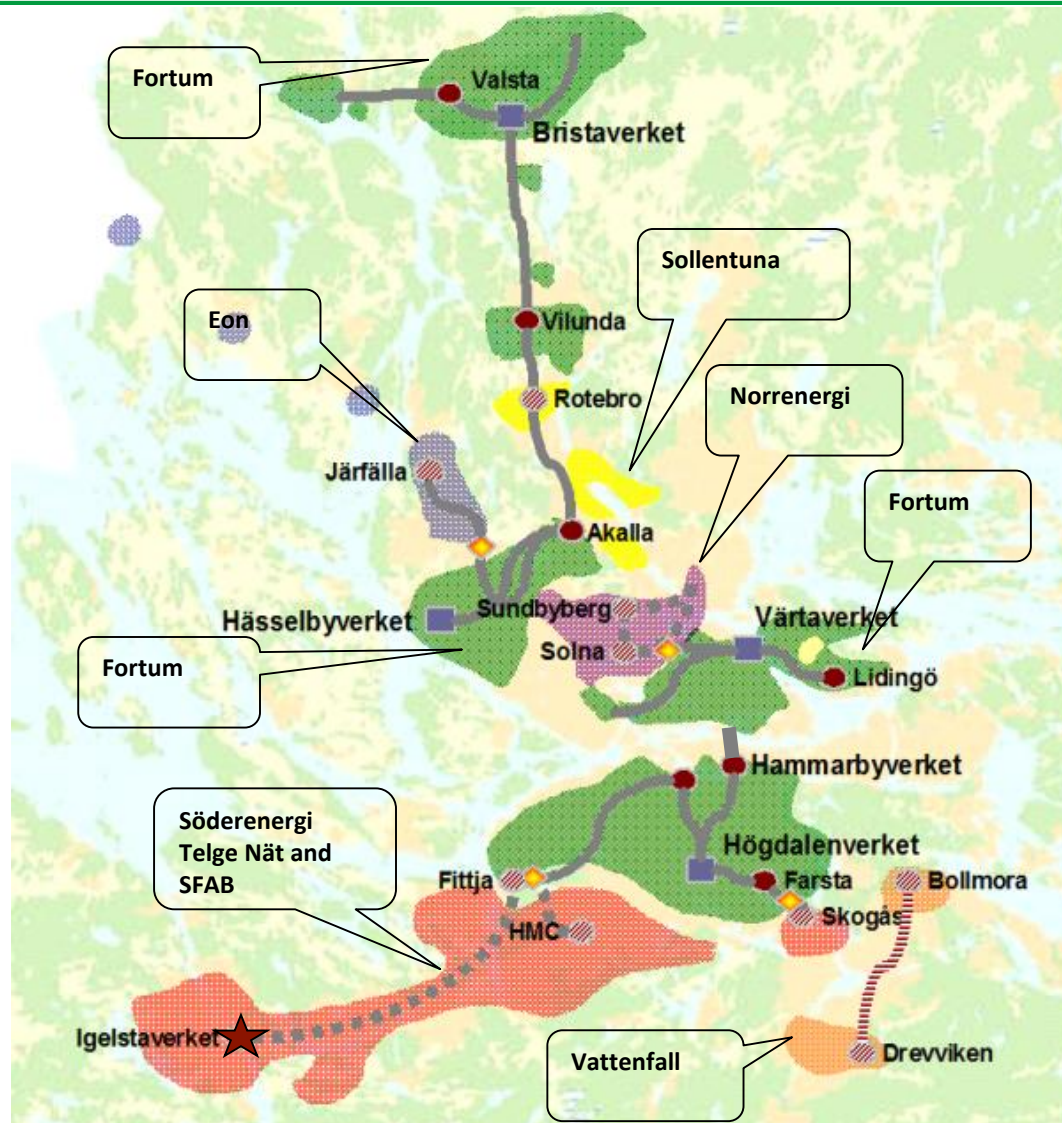
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- Production      2800 GWh/year heat  
540 GWh/year electricity
- End-users      heating more than 120.000 households  
electricity about 100 000 households
- Employees      140

# Ownership



# District heating networks in the greater Stockholm area

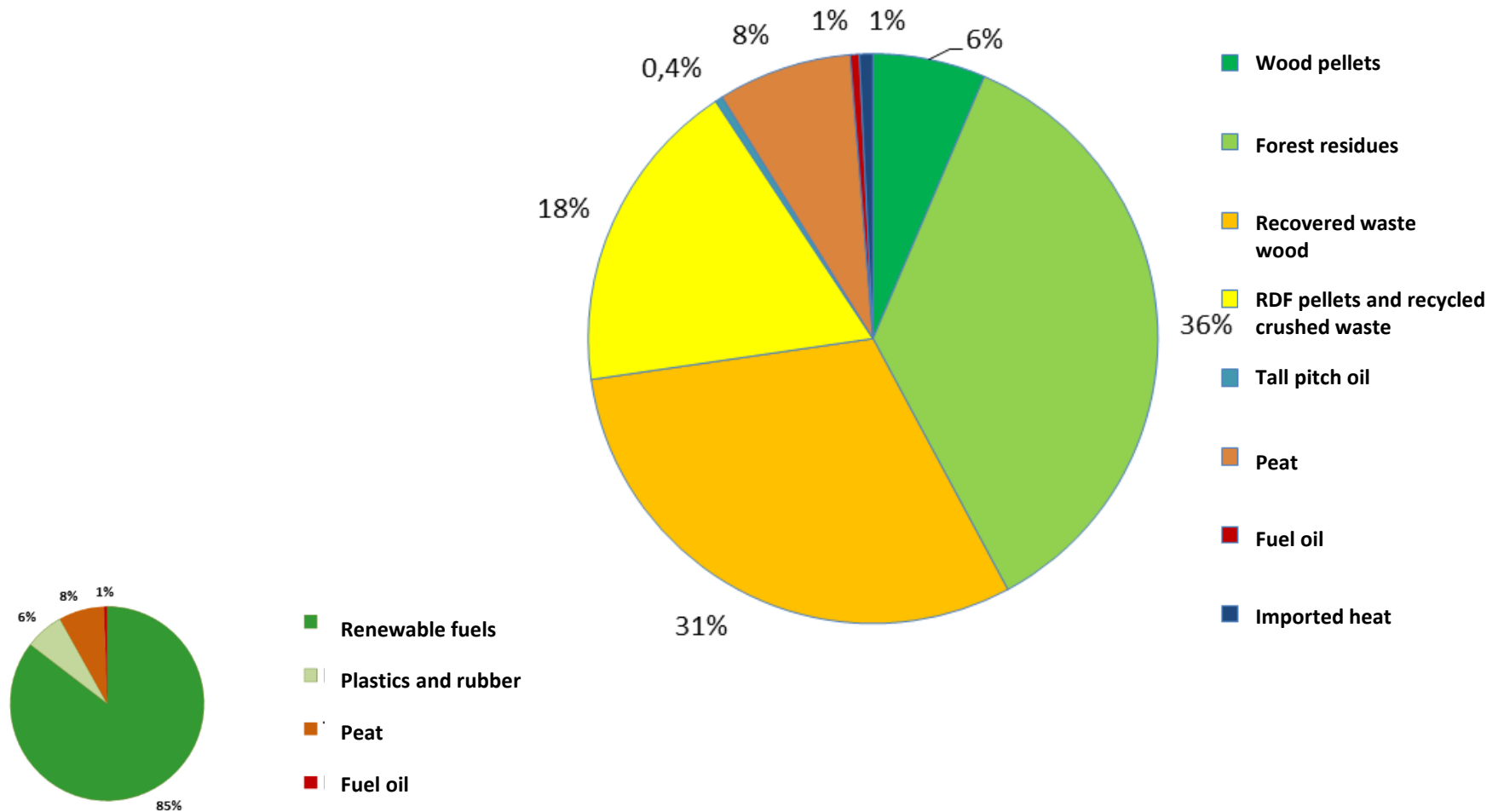


# Success factors

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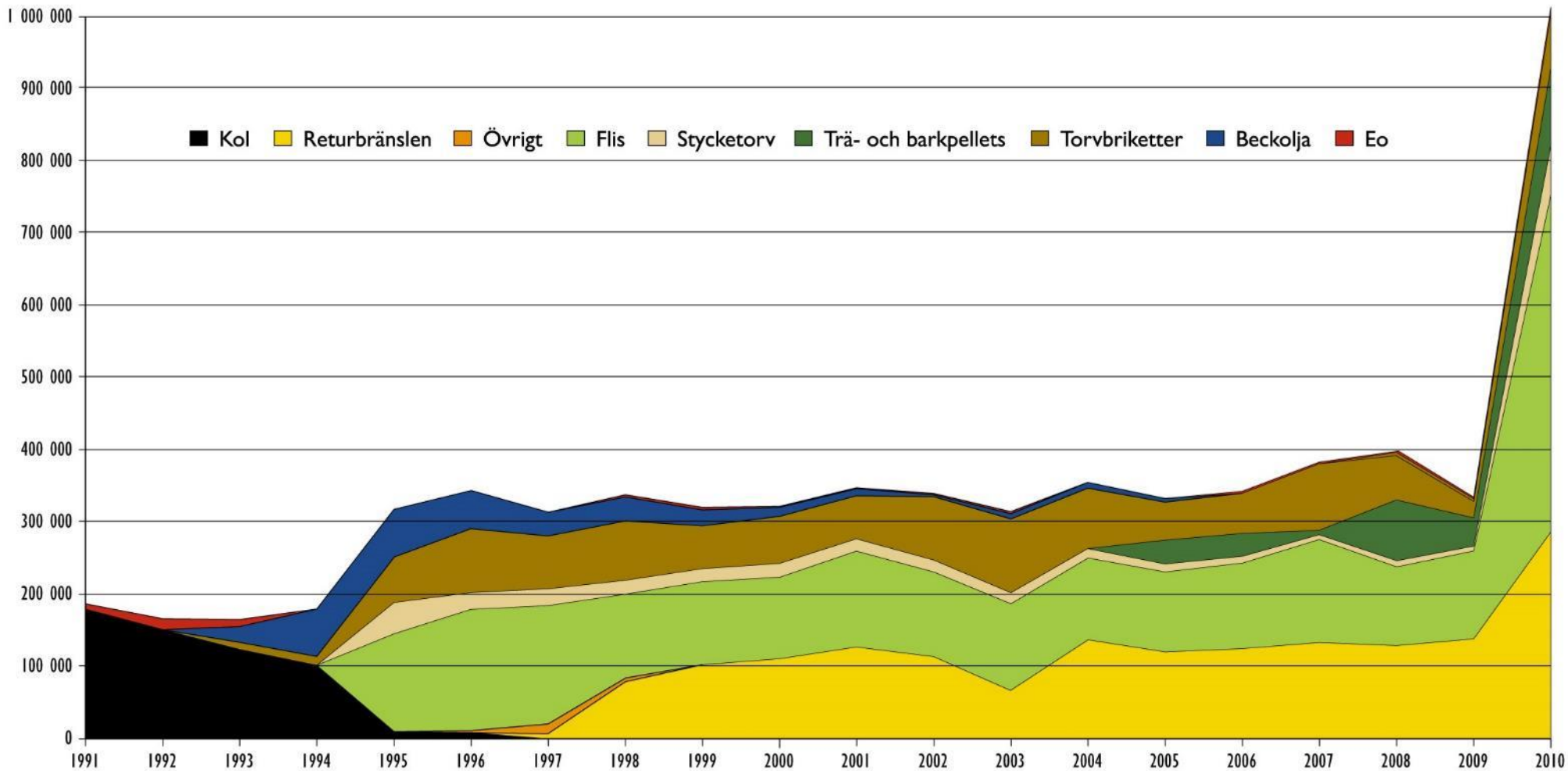
- Robust production system with high fuel flexibility
- Site position in district heating network
- 90 % renewable fuels in own system
- Long experience in developing new fuel supply chains and quality control systems
- Port with sufficient depth at site and access to the Baltic sea

## Business plan figures 2013, produced energy 3264 GWh



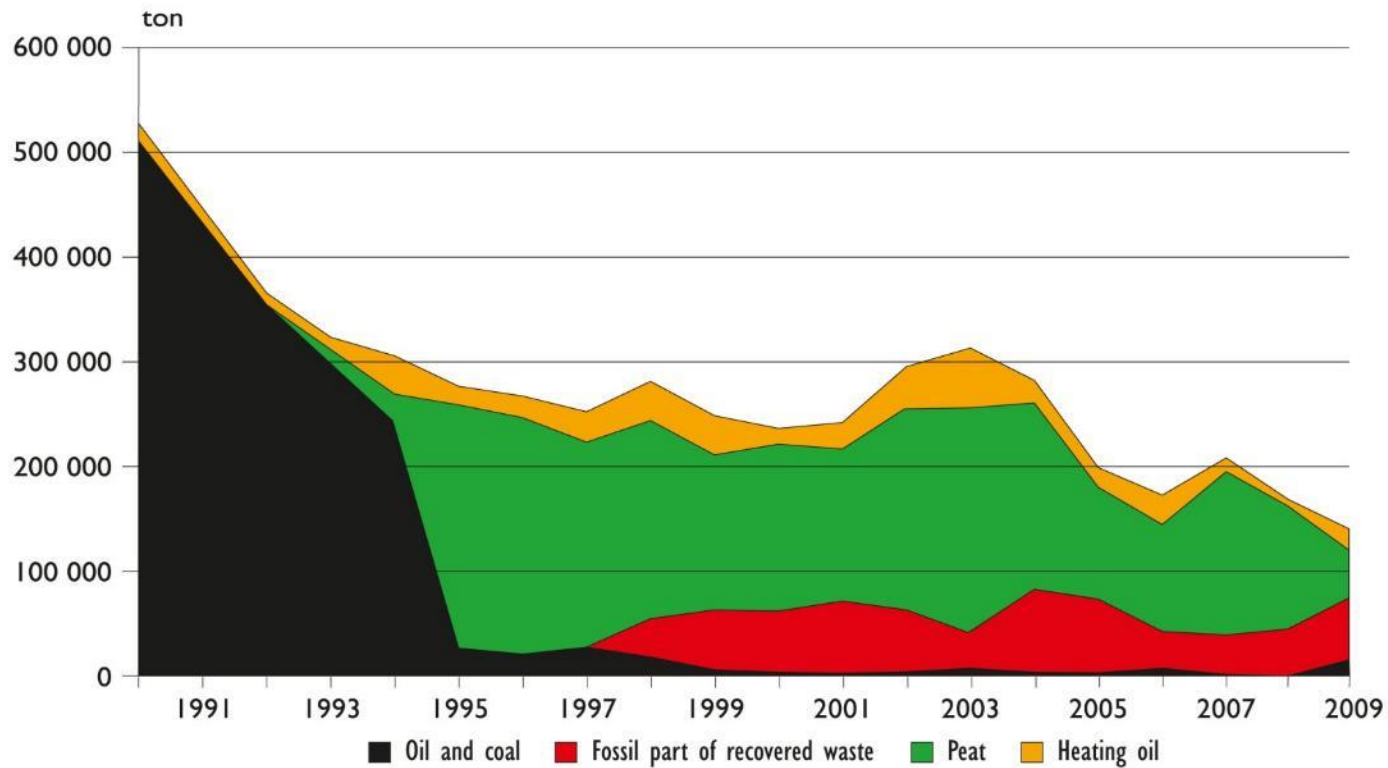


BRANSLEMIX · **Förbrukning av olika bränslen** · för Söderenergi, ton



# Emissions of CO<sub>2</sub>, Igelstaverket 1990-2009

Emission of fossil carbondioxid CO<sub>2</sub>



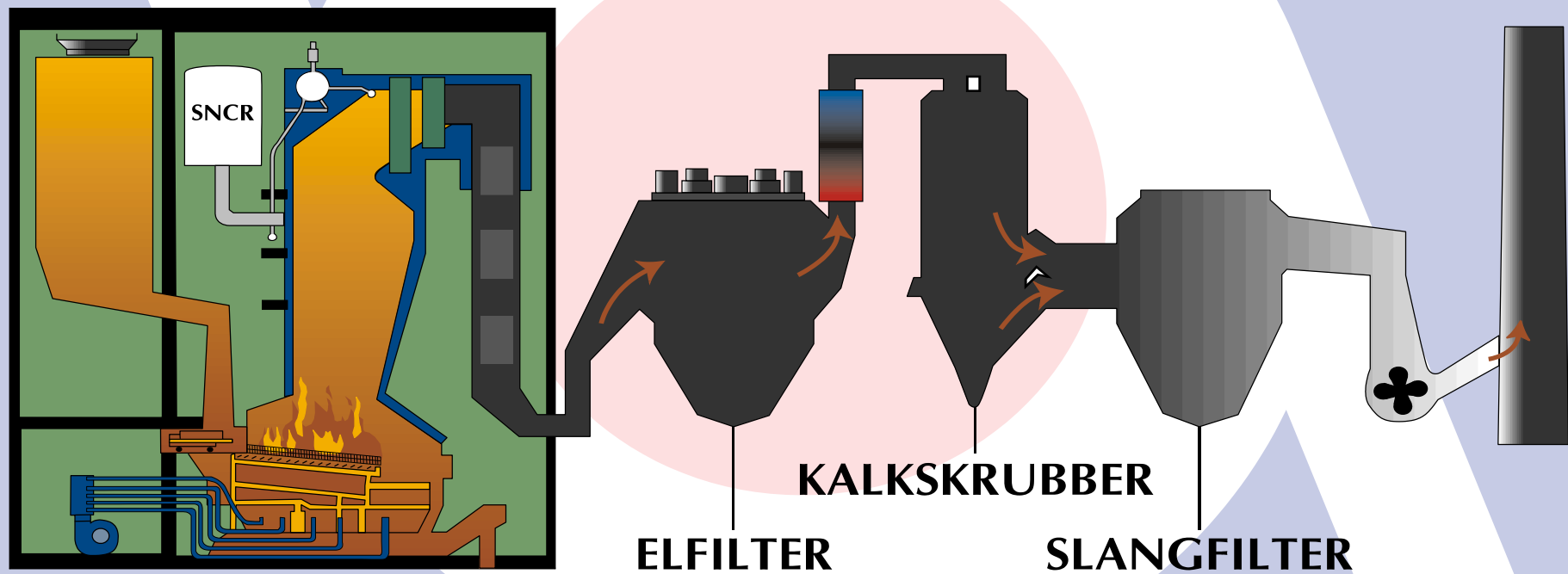
# Focus on Environment

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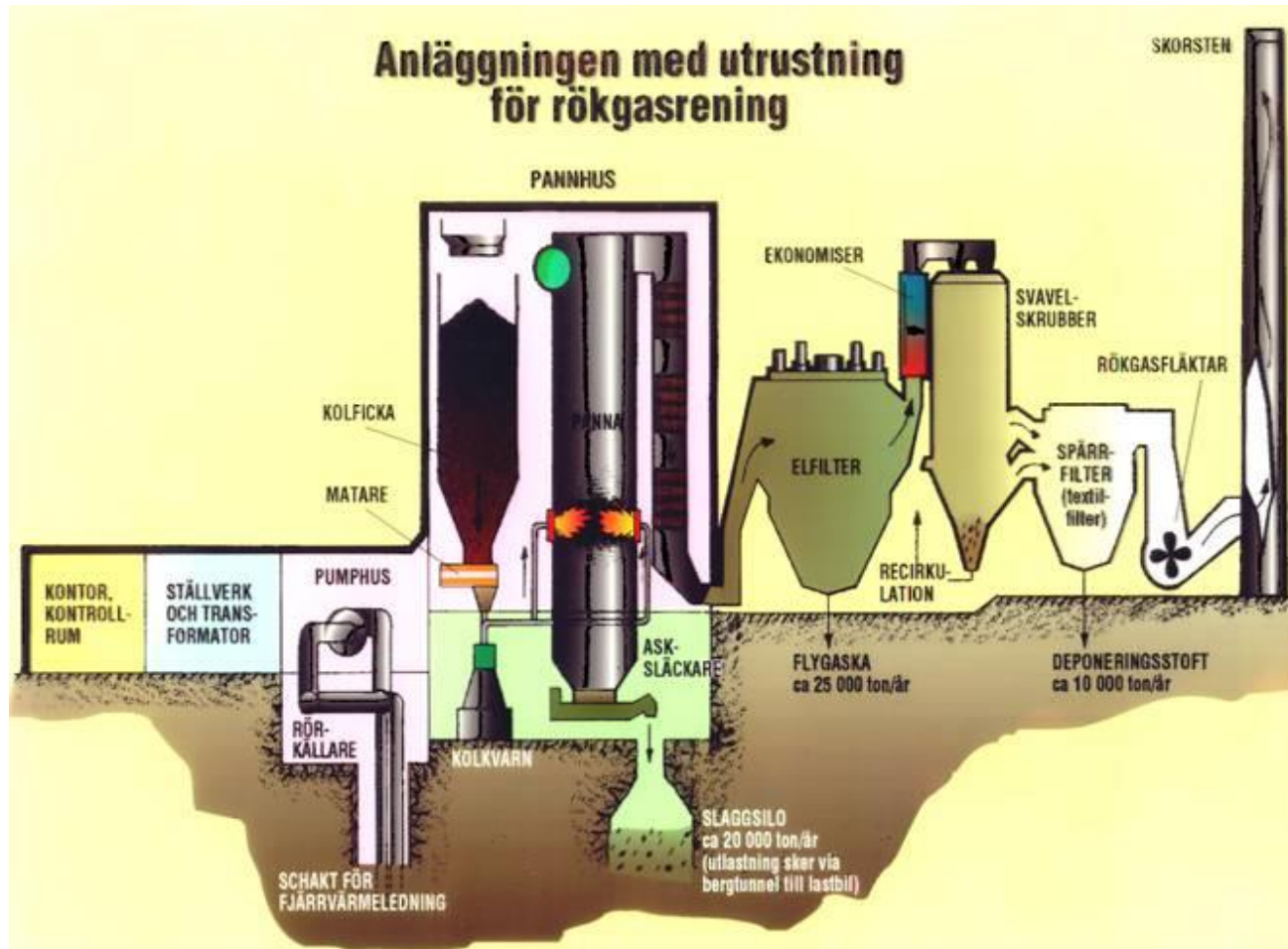
Söderenergi shall:

- ❖ Economize nature's resources and make the least possible impact on the environment.
- ❖ Prevent pollution and environmental disturbances.
- ❖ Use good technology to create a continuously better environment.
- ❖ Mainly use fuels derived from used materials or products that cannot be reused or recycled in another more efficient way.
- ❖ Have an energy production that is the best alternative from aspects of environment and resources.

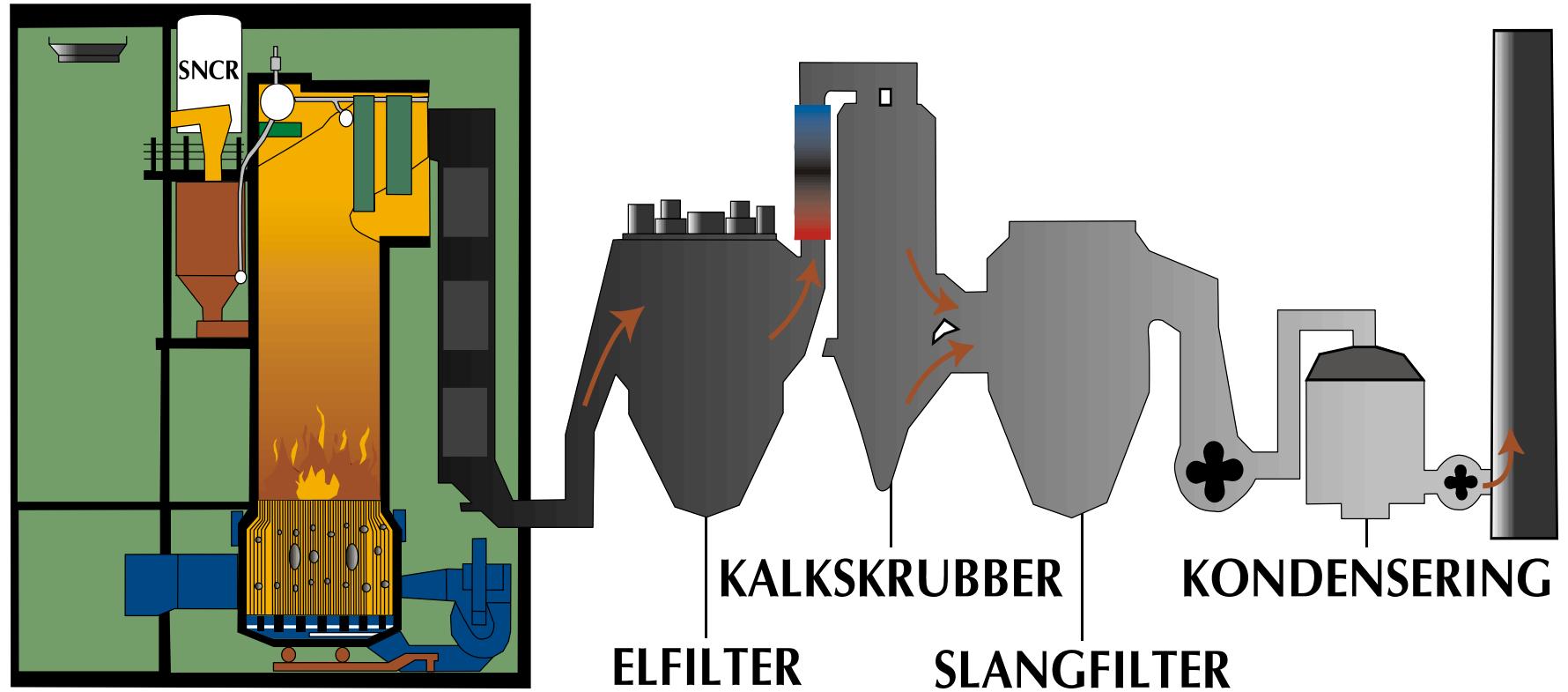
# Igelstaverket Boiler No I



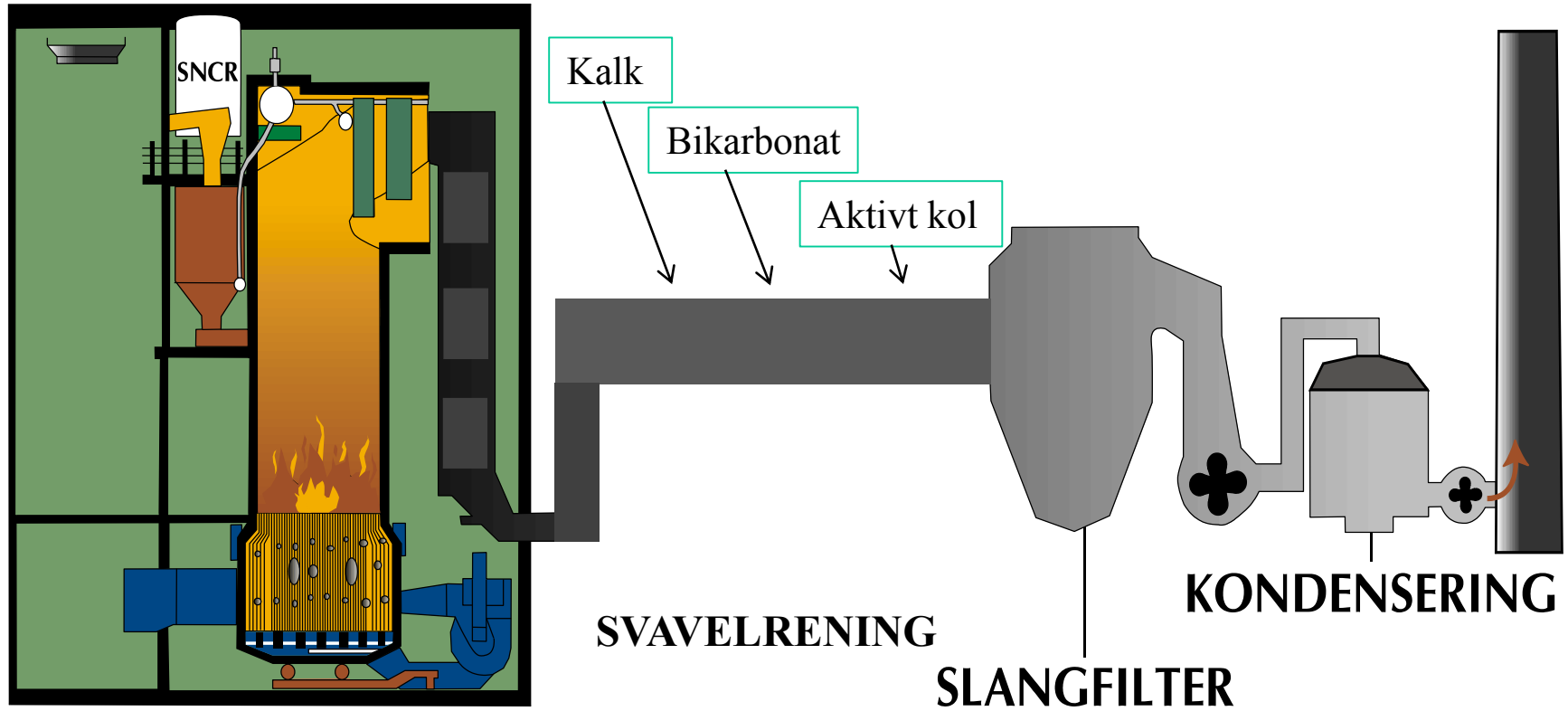
# Igelsta värmeverk - panna 2



# Igelstaverket Boiler no 3



# Panna IKV



IKV ser *nästan* ut så här

# Igelsta CHP- design figures



Boiler: Foster Wheeler CFB

Turbine/generator: Siemens

## Capacity

- Steam production 240 MW:
  - 85 MW power
  - ca 200 MW heat (including flue gas condensor)

## Yearly production

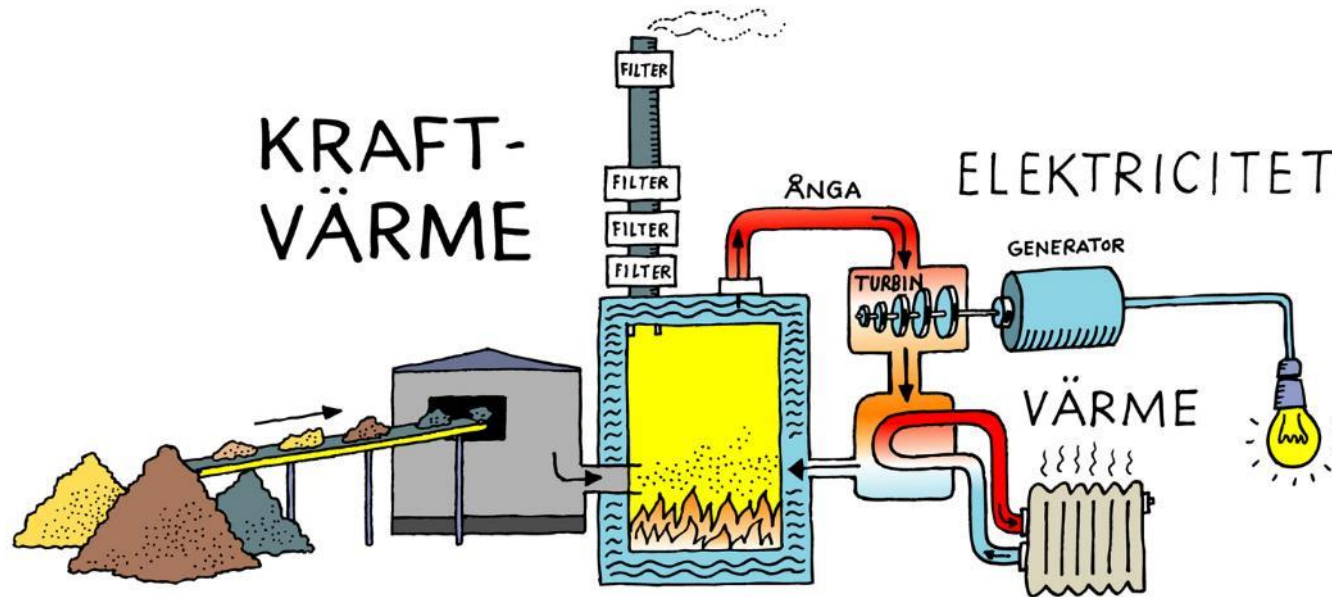
- 1300 GWh heat
- 550 GWh power

## Fuel mix development (approximate figures)

	Forest residues	Recycled wood (also including RDF pellets)
2010	80%	20%
2011	65-75 %	25-35%
2016	30 %	70 %

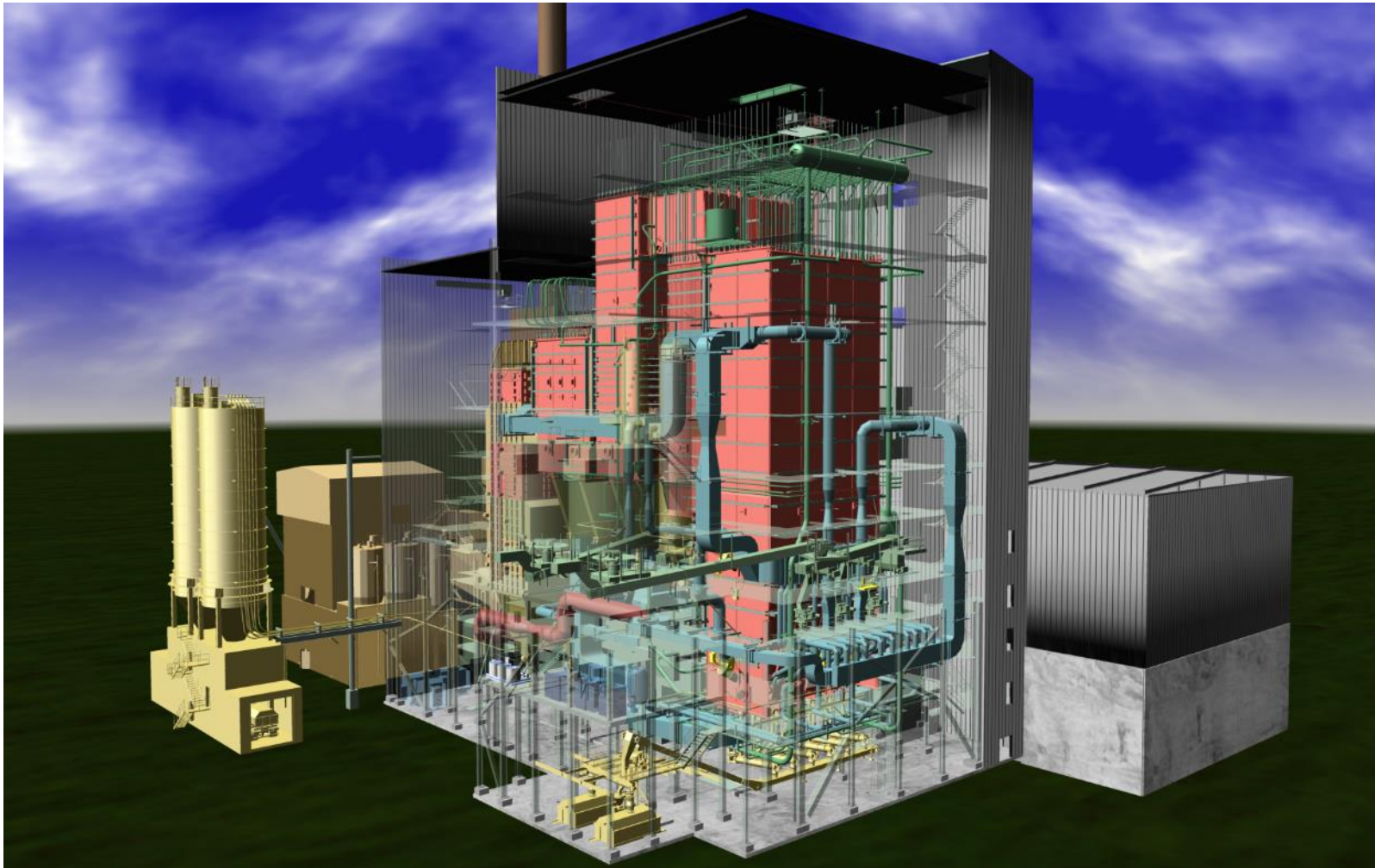


# Why Combined Heat and Power?



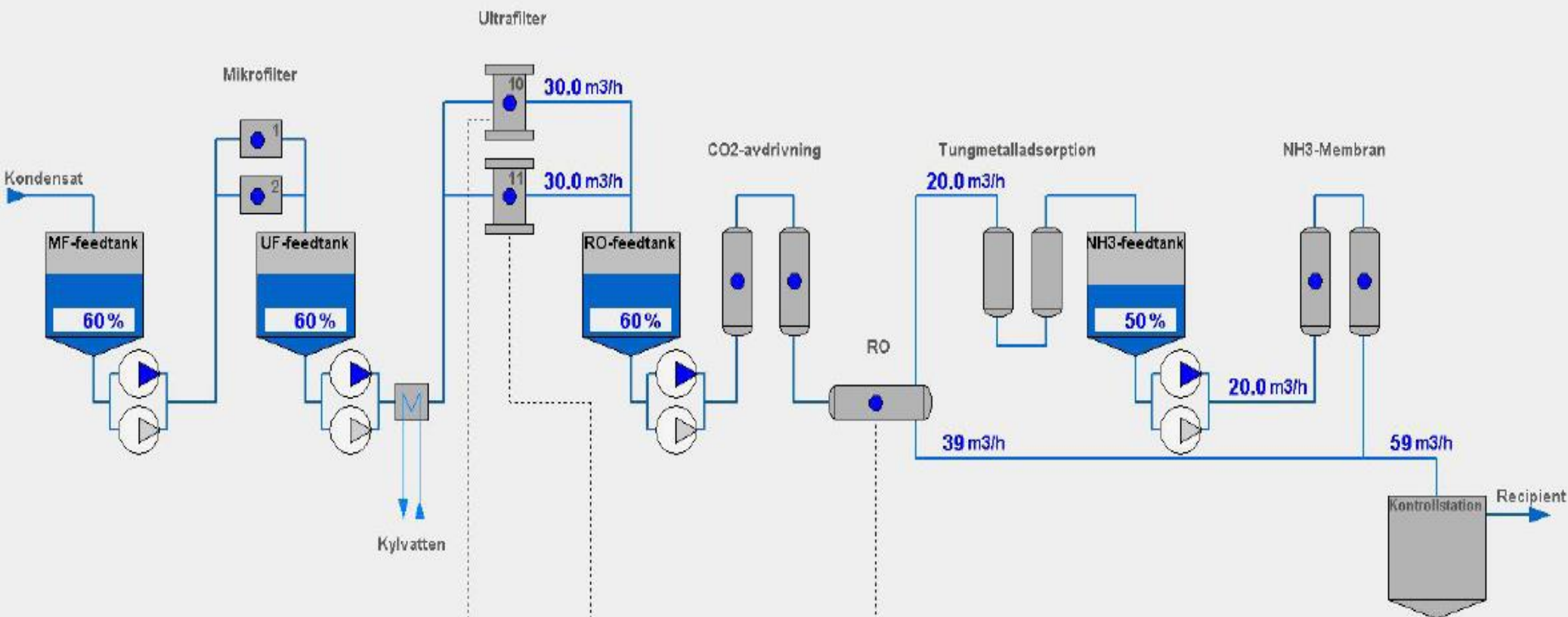
- Resource-efficient technology
- Emissions are reduced regionally and globally

# The boiler

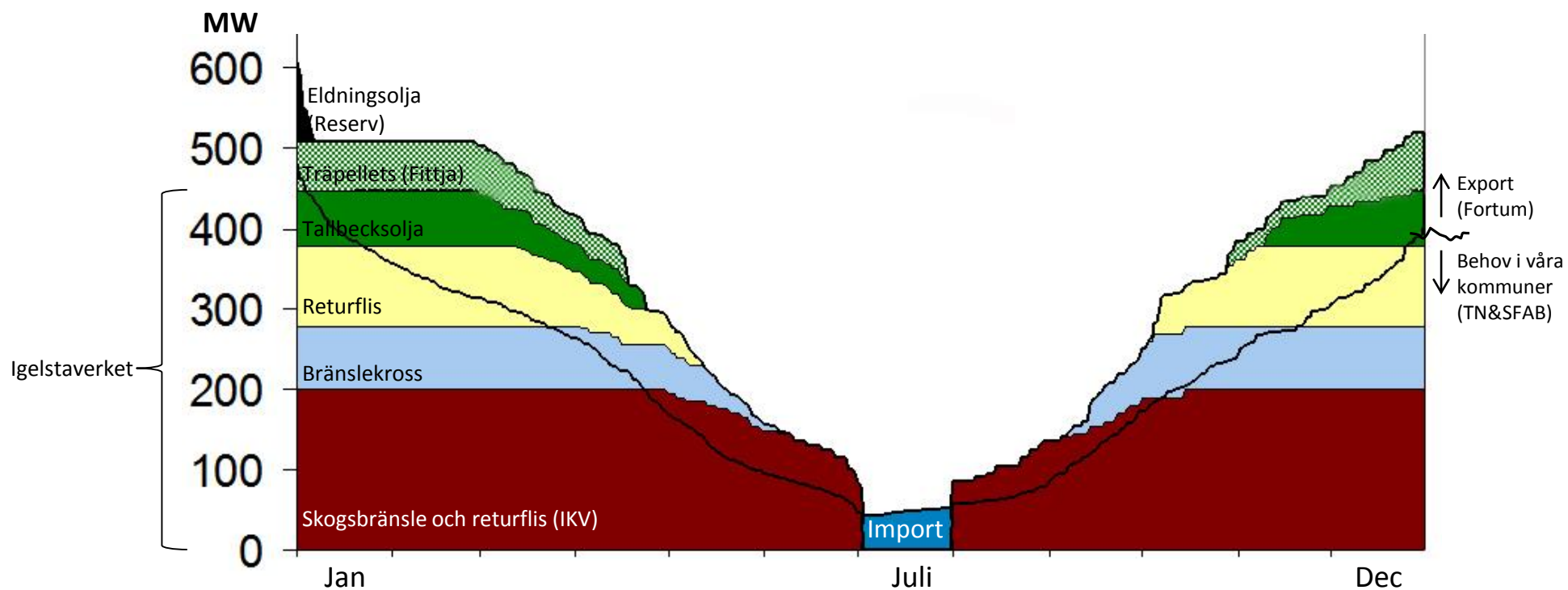


## Boiler at Igelsta CHP-plant

- ❖ CFB-boiler (Cirkulating Fluid Bed)
- ❖ The height of the boiler is 40 meter
- ❖ Width (diametre) 11 meter
- ❖ Weight ca 3000 ton
- ❖ Built by Foster Wheeler



# Värmeproduktion - principiell årsfördelning







# Logistics



## Deliveries per year:

- 200-250 ships (~2500 ton/ship)
- 150-200 trainsets (~1000 ton/train)
- 15 000 trucks (~ 30 ton/truck)

## Quality control:

- Inspections
- Samples from every load

# Thank you!

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[www.soderenergi.se](http://www.soderenergi.se)