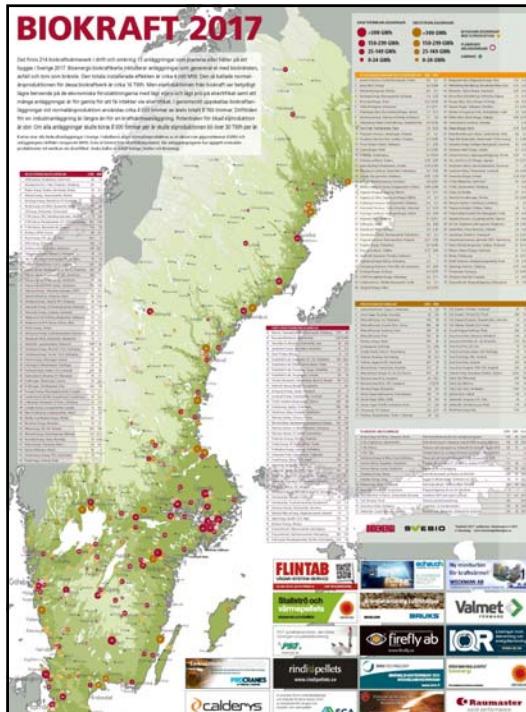


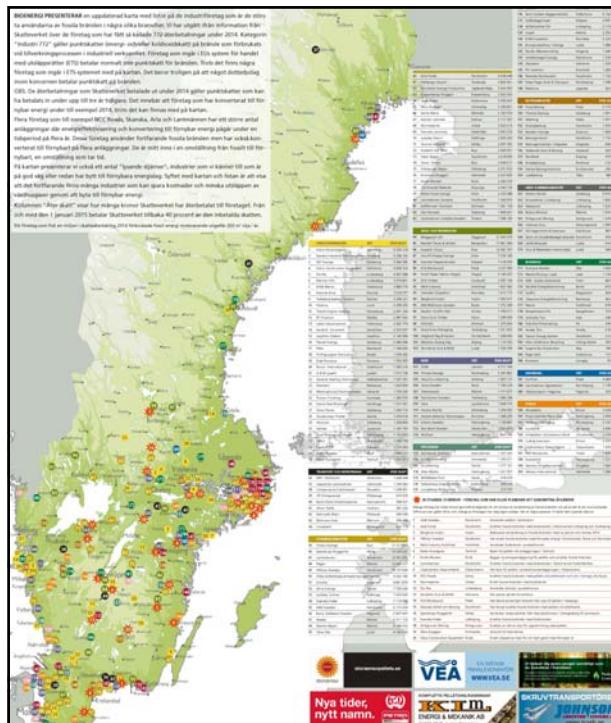
Power Plant Chemistry in Sweden – an overview

Mats Hellman 2018-03-14



- 214 Bio fuelled power plants
 - 94 CPH
 - 79 Bio gas plants with electricity generation
 - 41 Industrial plants
 - 15 new plants beeing built or planned
 - 4 000 MW installed capacity
 - 15 TWh "normalårs-produktion"
 - "Normalårs-produktion" 4 000 h (out of 8 760 h)

38 paper mills (2016)



A list of the 200 industrial plants that would benefit most from converting into bio fuels.

<https://bioenergitidningen.se>

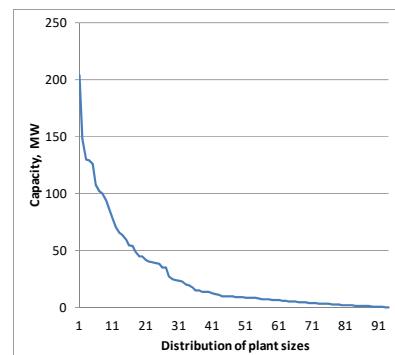
Combined heat and power (CHP)

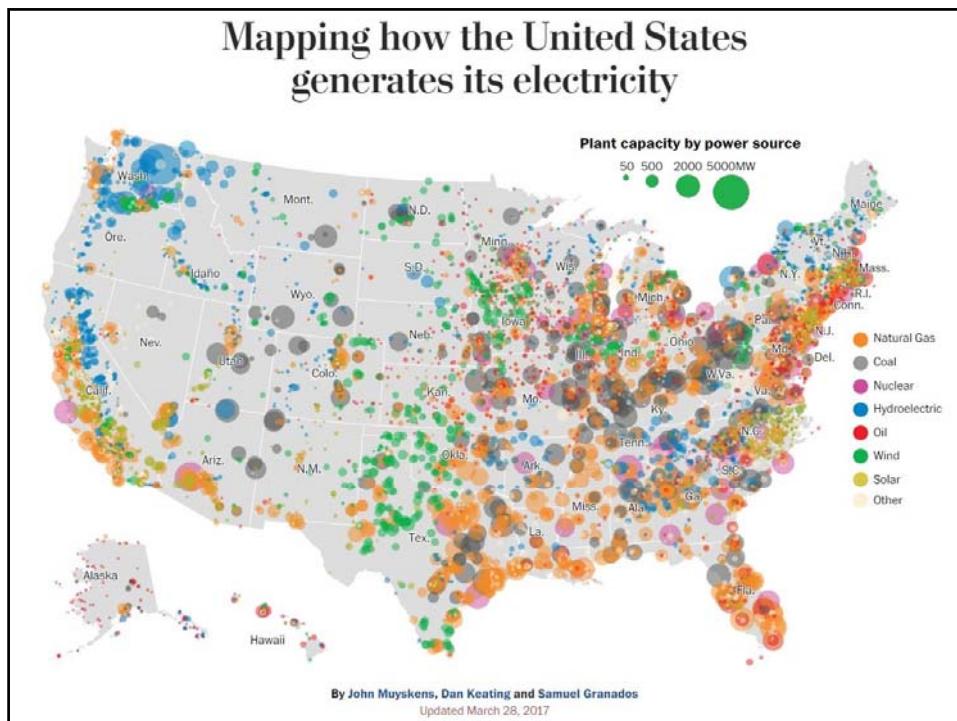
94 bio fuelled CHP

- 50% < 10 MW
 - 20% > 50 MW
 - 7 plants 100-150 MW
 - 1 plant > 200 MW (204 MW)

Uppsala KVV	204 MW
Värtaverket KVV6	148 MW
Värtaverket KVV8	130 MW
Händelöverket G11, G13	129 MW
Västhamnsverket	126 MW
Igelstaverket	108 MW

Ronneby Miljöteknik, Bräkne-Hoby 0,049 MW





Water treatment	
CHP plants	Industrial plants
<ul style="list-style-type: none"> • RO + EDI or MB • 40-50 membrane based FGC cleaning plants • High level of on-line instrumentation • Decreasing number of water chemists • Decreasing level of knowledge 	<ul style="list-style-type: none"> • SAC-WBA-SBA-BB • No FGC cleaning plants • Low level of on-line instrumentation • Operation/lab • Fair level of knowledge

Chemical treatment

CHP plants

- PT (ammonia + TSP) 90 %
- AVT (ammonia) 5 %
- Amines + dispersents 5 %
- Oxygen scavangers - rarely

Industrial plants

- PT (ammonia + TSP) 25 %
- AVT (ammonia) 1 %
- Amines + dispersents 75 %
- Oxygen scavangers - frequently
 - Carbohydrazide
 - DEHA

Target group:

Everybody who works with water chemistry issues like;
- operating personnel
- chemical engineers
- managers
- suppliers
-consultants

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<http://www.energiforsk.se/rapportsok/>