

Electricity Disclosure - Sweden

31 May 2016

CEPS



Disclosure in Sweden

- **Ei is the regulatory authority for disclosure**
- **Swedish Energy Authority is the issuing body of GOs**
- **Electricity act (1997:857)**
 - **12 § on or in connection with invoices and in advertising that caters to electricity users report the primary energy source for electricity sales during the preceding calendar year, as well as the impact on the environment in terms of carbon emissions and nuclear waste**
- **Ei:s regulation on disclosure of electricity (EIFS 2013:6)**
 - **Which and how information shall be disclosed**

Disclosure in Sweden

- **Voluntary system for all fuels**
- **2014**
 - Untracked consumption **27,45 %**
 - **36,16 g co₂/kWh**
- **2015**
 - Untracked consumption **21,29 %**
 - **42,56 g co₂/kWh**

| Final Residual Mix | | Nordic | DK | FI | NO | SE |
|--------------------|--------------------------|---------------|---------------|---------------|---------------|---------------|
| Renewables | RES Total | 17,07% | 13,22% | 10,76% | 21,25% | 13,91% |
| | RES Unspecified | 0,09% | 0,12% | 0,66% | 0,16% | 0,00% |
| | Solar | 0,55% | 1,93% | 0,08% | 0,57% | 0,00% |
| | Wind | 2,74% | 6,62% | 0,81% | 1,49% | 4,73% |
| | Hydro & Marine | 10,49% | 4,12% | 1,96% | 18,50% | 2,98% |
| | Geothermal | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| | Biomass | 3,19% | 0,42% | 7,24% | 0,54% | 6,20% |
| Nuclear | Nuclear | 40,82% | 21,27% | 46,25% | 27,61% | 78,15% |
| Fossil | FOS Total | 42,11% | 65,52% | 42,99% | 51,14% | 7,94% |
| | FOS Unspecified | 7,69% | 8,73% | 8,06% | 8,81% | 4,79% |
| | Lignite | 10,56% | 13,87% | 6,28% | 17,92% | 0,00% |
| | Hard Coal | 13,27% | 30,10% | 14,36% | 13,17% | 1,18% |
| | Gas | 9,97% | 11,77% | 13,70% | 10,52% | 1,71% |
| | Oil | 0,63% | 1,04% | 0,60% | 0,72% | 0,26% |
| | % Consumption | 60,85% | 92,56% | 76,01% | 84,32% | 21,29% |
| | gCO2 per kWh in final RM | 336,39 | 523,66 | 299,81 | 446,41 | 42,56 |
| | mgRW per kWh in final RM | 1,16 | 0,62 | 1,38 | 0,80 | 2,11 |

| Total supplier Mix % | | Nordic | DK | FI | NO | SE |
|----------------------|---------------------|---------------|--------|--------|--------|---------------|
| Renewables | RES Total | 44,25% | 19,67% | 32,17% | 33,60% | 66,79% |
| | RES Unspecified | 0,14% | 0,11% | 0,51% | 0,14% | 0,22% |
| | Solar | 0,39% | 1,79% | 0,21% | 0,48% | 0,07% |
| | Wind | 5,98% | 11,52% | 2,57% | 1,29% | 10,60% |
| | Hydro & Marine | 32,79% | 5,82% | 18,47% | 31,18% | 49,16% |
| | Geothermal | 0,02% | 0,00% | 0,00% | 0,02% | 0,02% |
| | Biomass | 4,94% | 0,43% | 10,41% | 0,49% | 6,73% |
| Nuclear | Nuclear | 30,10% | 19,68% | 35,15% | 23,28% | 31,45% |
| Fossil | FOS Total | 25,65% | 60,64% | 32,68% | 43,12% | 1,76% |
| | FOS Unspecified | 4,68% | 8,09% | 6,12% | 7,43% | 1,02% |
| | Lignite | 6,42% | 12,84% | 4,77% | 15,11% | 0,00% |
| | Hard Coal | 8,07% | 27,86% | 10,92% | 11,10% | 0,25% |
| | Gas | 6,08% | 10,89% | 10,41% | 8,87% | 0,41% |
| | Oil | 0,39% | 0,97% | 0,45% | 0,61% | 0,08% |
| | gCO2 per kWh in TSM | 204,83 | 484,71 | 227,87 | 376,43 | 9,41 |
| | mgRW per kWh in TSM | 0,85 | 0,57 | 1,05 | 0,68 | 0,85 |

Ei:s supervision

- **Ei supervise compliance with laws and regulations**
- **That the supplier has correct information on their invoices and on their web regarding the electricity sold previous year**
- **That the supplier has cancelled GOs for the sold mix**

Suppliers Sweden

- **The supplier is responsible for the disclosure – counting, cancelling GO etc.**
- **122 suppliers in Sweden.**
- **More than 70 suppliers automatically gives renewable contracts to consumers without an active choice.**
- **More than 30 suppliers has renewable contracts as offers.**

Previous supervision

- **30 companies in total**
- **Questionnaire**
 - How much electricity sold
 - How much origin specific electricity contract sold
 - How many cancelled GO
- **Compare with Ceasar - Energy Authoritys system**

Residualmix presentation

<http://www.ei.se/sv/el/elmarknader-och-elhandel/handel-med-el/ursprungsmarkning-av-el/ursprungsmarkning-information-framst-for-elhandelsforetag/berakningsexempel-av-energimix/>

<https://www.malarenergi.se/sv/om-malarenergi/miljo/ursprungsmarkning/ursprungsmarkning-av-el/>

Thank you!

Katarina.abrahamsson@ei.se

Elin.brodin@ei.se