

15th April 2011

ABN: 16 549 616 697

Committee Secretary
Senate Community Affairs Committee

Sustainable Energy Association of Australia Inc
GPO Box 2409
PERTH WA 6000

community.affairs.sen@aph.gov.au

Phone: (08) 9228 1292
Fax: (08) 9228 0597
ceo@seaaus.com.au
www.seaaus.com.au

Inquiry into The Social and Economic Impact of Rural Wind Farms- additional information

During the Senate Committee hearing in Perth, additional information was requested on the status of overseas community wind farms, particularly in Denmark, which has one of the world's largest proportions of wind power generation and is a leader in the manufacture of wind generation systems.

Proportion of Community Windfarms

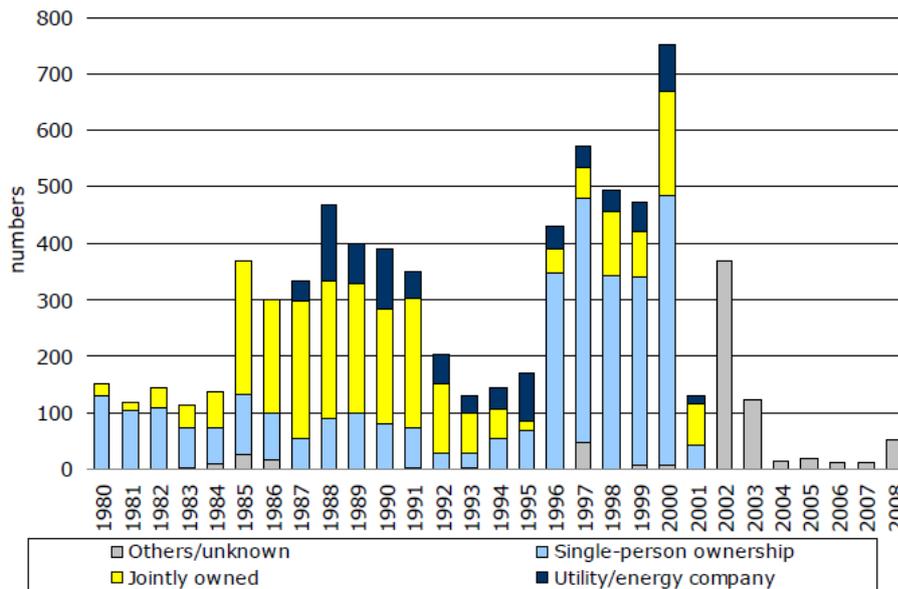
As noted in our oral submission as of 2001 the majority of wind power in Denmark was owned by community cooperatives. We have found more recent information that notes, with a change to the electricity generation rules, this proportion has fallen to approximately 15% of total wind generation.ⁱ

While significantly less than it once was, the ownership percentage by community cooperatives is still very high. Denmark has gone through a number of significant changes in the wind industry structure that has resulted in this change. The diagram following shows the changing ownership of Danish wind assetsⁱⁱ.

SEA Corporate members

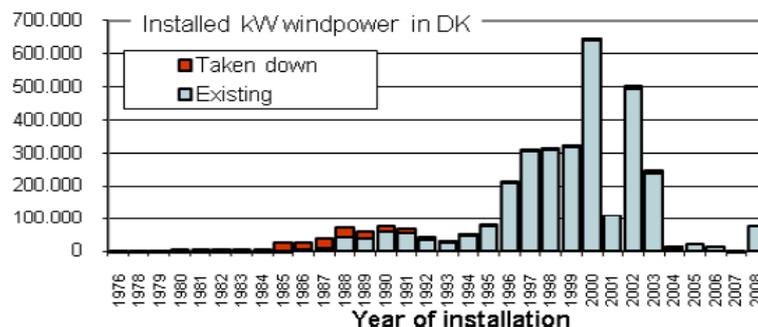
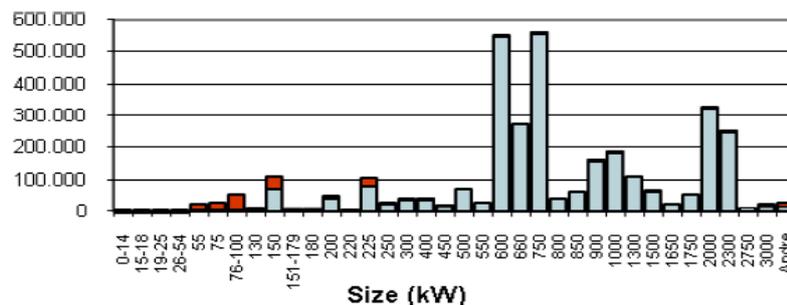
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Platinum Members | | | | | | | |
|  | |  | |  | | | |
| Corporate Members | | | | | | | |
|  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  | |

Ownership of Danish wind turbines



This fall in cooperative ownership has seen many of the smaller and less efficient wind turbine systems retired in favour of larger and more efficient systems up until 2003. This change can be seen in the diagram belowⁱⁱⁱ.

Danish wind turbines by capacity



According to the Danish Wind Turbine Owners Association :

SEA 2030 VISION

30% energy generation from sustainable sources and 30% reduction of existing use through energy efficiency by 2030

SEA – Australia’s peak body for sustainable energy

SEA promotes the development and adoption of sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources.

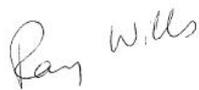
Danish wind power has stagnated in terms of new capacity since 2003, however. After the change of government in 2001, the premiums for wind-powered electricity fell and the development of a number of off-shore wind farms was stopped by the new conservative-liberal government.

From 2003 to 2008, only a few turbines were erected in Denmark, and from 2006 to 2007, the total wind-power capacity actually fell. By late 2008, the number of wind turbines in Denmark totalled 5,179 and the capacity installed was 3,180 MW. including offshore turbines^{iv}.

This also demonstrates that without strong and consistent support and rules for the wind industry, underinvestment in renewable energy can see the retirement of older systems, without any potential for the future replacement of these systems. Such policy changes can obviously have a significant impact on meeting renewable energy targets.

Should you require additional information, please contact Neil Prentice at nprentice@seaus.com.au

Yours sincerely



Prof Ray Wills
Chief Executive Officer
Sustainable Energy Association of Australia Inc. (SEA)

ⁱ Danish Wind Turbine Owners Association (2009) **Cooperatives – a local and democratic ownership to wind turbines** Online: <http://www.dkvind.dk/eng/faq/cooperatives.pdf>

ⁱⁱ Danish Wind Turbine Owners Association (2009) Ibid

ⁱⁱⁱ Danish Wind Turbine Owners Association (2009) **Facts on production, number and capacity.** Online: http://www.dkvind.dk/eng/faq/facts_figures.pdf

^{iv} Danish Wind Turbine Owners Association (2009) **Past and present - successful developments followed by stalemate** Online: http://www.dkvind.dk/eng/faq/past_present.pdf

SEA 2030 VISION

30% energy generation from sustainable sources and 30% reduction of existing use through energy efficiency by 2030

SEA – Australia's peak body for sustainable energy

SEA promotes the development and adoption of sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources.