



Swedish Windmills Policy and Legislation – Recent Developments

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Introduction

The Swedish Parliament has recently adopted a new target for wind power production. By 2020, Sweden shall produce 30 TWh electricity from windmills.¹ As at 2008, the total production was 2 TWh (1,4 % of the national demand).² It is obvious that it will be a challenge to reach the target. This report will, after highlighting the various economic incentives used to promote wind power generation, provide a brief description of recent amendments to the laws regulating windmill installations. The report concludes with a discussion on whether the amended legislation will be successful in facilitating the attainment of the ambitious revised target and considers a few possible complementary measures which could facilitate its realisation.

Economic Incentives to Promote Wind Power

The economic incentives for wind energy have varied during the years. Subsidies have been granted for new installations, and an 'environmental bonus' has been paid for the production of renewable energy. Electricity certificates were introduced in 2003. Producers of renewable energy receive certificates in relation to their

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¹ Government's Bill 2008/09:163 *En sammanhållen klimat- och energipolitik*; the Parliament's decision 16 June 2009.

² IAE *Wind Annual Report 2008* (available at <http://www.miljomal.se/Systemsidor/Indikatorsida/?iid=141&pl=1>), p. 247.

production, and electricity suppliers and electricity intensive industry are obliged to buy a certain amount of them.

According to a report published in 2006,³ the economic measures were initially sufficient to promote wind power generation in Sweden. One problem which was however identified was the lack of long term policy regarding the use of different economic measures.⁴ This made long term investment planning unpredictable, a problem that was exacerbated when the legal procedure for permitting the construction of windmill installations was relatively onerous and time consuming (further discussed below).⁵

As of 2010, the only economic incentive in use is the electricity certificate system.⁶ The efficiency of this instrument is closely connected to the amount of certificates that the electricity suppliers and industry are obliged to hold.

Regulation of Windmill Installations

The establishment of windmills in Sweden is regulated by the Environmental Code (1998:808) and the Planning and Building Act (1987:10).⁷ Both laws must be complied with.

The Environmental Code

The Environmental Code compels developers to obtain an environmental permit in order to construct certain windmills. The previous permit obligation generally applied to installations with at total production of 25 MW or more. The local supervisory authority also had to be notified in respect of installations with a total production of between 125 kW - 25 MW.⁸

³ G. Michanek and P. Söderholm, *Medvind i uppförsbacke* (Rapport till Expertgruppen för miljöstudier 2006:1) at p. 57 and p. 76.

⁴ Ibid.

⁵ Ibid.

⁶ See <http://www.energimyndigheten.se/en/>.

⁷ Additional regulations, such as those regulating electrical installations, have to be complied with, but these are normally not crucial with regard to the establishment.

⁸ The ordinance (1998:899) of environmentally hazardous activity and health protection, in the wording of the (2006:1142) amendment.

The thresholds for triggering the permit obligations have now been altered.⁹ They are now based on the height and the number of windmills, and not the quantum of energy to be produced.¹⁰ A permit is currently required for a group of two or more windmills higher than 150 meters, and a group of seven or more windmills if their height is more than 120 meters. According to the *travaux préparatoires*, windmills with a height 120 meters correspond to a generation capacity of about 10 MW. Single windmills higher than 50 meters and groups of two or more windmills that do not need a permit must nonetheless be reported to the local supervisory authority.¹¹ The amendment is motivated by the fact that smaller windmill installations may cause significant impact on human health and the environment,¹² which is the general criterion for introducing the permit obligation according to the EC Directive on environmental impact assessments.¹³ An additional important reason is, probably, the simultaneous amendments in the Planning and Building Act, discussed below.

An application to construct a windmill installation is initially considered by the County Administrative Board or the Environmental Court. The requirements for securing permission are generally that: having considered the 'best possible techniques', satisfactory preventive measures have been taken;¹⁴ and that the anticipated environmental benefits associated with the windmill installation will outweigh the environmental costs associated with it.¹⁵ National authorities have issued recommendations for noise and shadows related to windmills,¹⁶ and these are taken into account in the decision-making process.¹⁷ The anticipated location of the windmill installation is a further key consideration taken into account by authorities and developers are normally required to consider the feasibility and desirability of several different sites.¹⁸ When it comes to location of windmill installations, the Environmental Court of Appeal has placed large emphasis on the role of municipal

⁹ SFS 2009:652 (Svensk författningssamling, Swedish Law Collection).

¹⁰ SOU 2008:86 *Prövning av vindkraft* (Statens offentliga utredningar, The Government's official investigation), at p. 248.

¹¹ SFS 2009:863.

¹² SOU 2008:86, at p. 248.

¹³ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment [1985] OJ L175/40.

¹⁴ This concept is largely similar to the BAT concept in the directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, [2008] OJ L24/8, Article 2.12.

¹⁵ Chapter 2 (sections 3, 6 and 7).

¹⁶ See: www.naturvardsverket.se/sv/Verksamheter-med-miljopaverkan/Buller/Buller-fran-windkraft/Riktvarder-for-ljud-fran-windkraft/; and www.boverket.se/Global/Webbokhandel/Dokument/2009/Vindkraftshandboken.pdf.

¹⁷ Environmental Court of Appeal 2005:59 and 2006:8.

¹⁸ Environmental Court of Appeal 2001:38.

planning.¹⁹ Recent legislative amendments have entrenched the key role of municipalities in the permitting process, as no permit for a windmill installation may be issued until such time as the municipality has sanctioned it.

General guidelines concerning the management of land and water areas (such as those promulgated under the Environmental Code and the Planning and Building Act²⁰) must also be taken into account. These laws provide for the designation of areas of 'national interest' for certain purposes (such as nature conservation and industrial infrastructure) and any proposed development therein must accord with the designated purpose. It was not until 2004 that the first areas of national interest for wind power were officially identified by the Swedish Energy Agency. As of 2008, 423 areas, covering 2 % of the nation's area, were identified.²¹

The Planning and Building Act

Municipal self-government is a strong feature of Swedish political and legal tradition. In terms of the Planning and Building Act, municipalities have exclusive jurisdiction over planning matters. The Act prescribes some general provisions concerning interests and requirements for the municipality to consider.²² These provisions are vaguely worded and leave - deliberately - the municipality with a wide scope of discretion.

According to the previous wording of the Planning and Building Act, a building permit was required for all windmills, except for windmills with a turbine diameter smaller than two meters. In the amended wording, the building permit obligation only covers windmills higher than 20 meters, if they do not have a permit under the Environmental Code.²³

If a planned building or construction may have significant impact on the environment, a detailed development plan must be adopted prior to the issuing of the building permit. It is largely within the municipality's discretion to decide whether a detailed

¹⁹ Environmental Court of Appeal 2005:2, 2005:66 and 2008:41.

²⁰ Act 1987:12 on the Management of Land and Water Areas was amalgamated into the Environmental Code 1999.

²¹ See www.energimyndigheten.se/Global/Om%20oss/Vindkraft/Oversiktskarta.pdf.

²² Chapter 2 and 3.

²³ SFS 2009:651; Government's Bill 2008/09:146 *Prövning av vindkraft*, at p. 36.

development plan is required. The practice between municipalities in the exercise of this discretion has varied significantly which has caused great uncertainty among wind power entrepreneurs.²⁴ This uncertainty and frustration is exacerbated by the often prolonged nature of the decision-making process.

According to the amended Planning and Building Act, many windmill installations are exempted from the development planning requirements. A detailed development plan is currently only required for windmill installations to be built in areas subject to high demand for building or other construction purposes.²⁵

Discussion on the Possible Reach of the National Wind Power Target

From previous research it may be concluded that the development of wind power in Sweden has been hindered by the regulation of planning and the double permit system for windmill installations.²⁶ The regulation of these installations has now been eased in several respects. The former double permitting process has been replaced with a single permitting process regulated under the Environmental Code. In addition, the uncertainty with regard to the need for a detailed development plan is, largely, abolished.

However, owing to the amended thresholds prescribed in the Environmental Code, several windmill installations that previously only had to give notification to the local supervisory authority, will now need to obtain a permit. Furthermore, the permit procedure under the Environmental Code is far more onerous than that under the Planning and Building Act. While a 'full' EIA is only required when the windmill installation may cause significant impact, where it will not, the developer is nonetheless required to submit a significant amount of information to the authorities and must hold consultations with those who are concerned.

²⁴ A. Lökken, 'Vindkraft – nationell angelägenhet, lokal olägenhet? Kommunal planering av vindkraft ur ett skånskt perspektiv' (Master Thesis, Faculty of Law; Lund University 2008), at p. 44.

²⁵ SFS 2009:651; Government's Bill 2008/09:146, at p. 34.

²⁶ G. Michanek and P. Söderholm, *Medvind i uppförbacke* (Rapport till Expertgruppen för miljöstudier 2006:1) at p.149; M. Pettersson, *Renewable Energy Development and the Function of Law* (Luleå University 2008:65) at p. 87.

The most significant obstacle to the development of wind power in Sweden has previously been the rather negative attitude shown by many municipalities towards it. One way to achieve a significant expansion in the wind power industry would be to lessen the municipal discretion in the decision-making process. Another way would be to shift the decision-making competence to another institution.

The recent amendments to the Environmental Code and the Planning and Building Act can be seen as a first step in this direction. Most windmill installations are now regulated by the Environmental Code and not by the Planning and Building Act. The role of municipalities has not however reduced in practice as in terms of the amendments to the Environmental Code, a permit for a windmill installation cannot be granted without the approval of the relevant municipality. Therefore the negative attitude shown by many municipalities towards wind power generation may frustrate the attainment of the revised national target.

One way to circumvent this would be to identify more areas of 'national interest' for wind power generation. Areas of national interest must be reflected in the General Plans prepared by municipalities. These General Plans describe the municipality's current and planned overall use of land. The County Administrative Board has some competence to guard 'national interests'. A municipality may make its own assessment and is not bound to express all areas identified for different national interests in its General Plan. It would however be notable were none of the areas identified as national interest for wind power, to be reflected in a municipality's General Plan. Even though the General Plan is not a legally binding instrument, it nonetheless influences municipal decision-making.

Energy certificates may also have a role to play in influencing municipal attitude and approach to wind power development. The electricity suppliers and energy intensive industry will probably be obliged to hold an increased quota of certificates in the future. This may raise these actors' interest in the expansion of the wind power industry, with corresponding intensified ambitions to influence the municipal policy in this direction.

In summary, while the amendments to the Environmental Code and Planning and Building Act will to a certain degree facilitate the attainment of Sweden's revised wind

energy target, its implementation needs to be complemented by an array of additional legal, political and economic measures.