

Questionnaire for the Avosetta meeting in Oslo, April 1-2, 2011:

Legal issues related to the promotion and regulation of renewable energy

Norwegian Report

Hans Chr. Bugge

1. *What is the share of renewable energies in overall final energy consumption in your country? From what sources is this renewable energy? How will / should the proportion and composition of renewable energy develop in your country? Can the requirements of the Directive 2009/28/EC be met or exceeded?*

The share of renewables in overall final energy consumption is 60 %. This is divided between:

- Hydro 86 %
- Wind 1 % (sjekk)
- Biomass, wood, biogas 8 %
- Biofuel 1 %
- Heat pumps 4 %
- (Solar power is insignificant)

There is a general political objective in Norway, with the supported of all political parties, to increase the amount of all types of renewables. It is an expressed goal of the present government that Norway shall exploit its potential in this area and play “a leading role” in the development of renewable energy. However, with regard to technology and actual installation of renewable energy except hydro, we are not particularly in the forefront at the present time. Some quantified targets have been laid down over the years, but at present there are no fixed targets which are formally established by the Parliament. However, some estimates of the potential may give a picture of the possibilities:

Hydropower:

Norway has abundant hydro power resources. However, most major waterfalls and watercourses have now either been developed or been formally protected. Thus, the potential for new major developments (big dams) is very limited. More effect will however come from improving existing works and transfer lines.

Growth will come mainly in *small scale hydro power* works. These are divided into three categories: “Small power works” (1-10 MW), “mini power works” (0,1-1,0 MW) and “micro power works” (less than 0,1 MW). The present total average annual production from small scale hydro is some 7 TWh, and the potential is estimated at more than

threefold of this: 25 TWh. Some 600 installations are presently working, and 600 new applications are presently in the pipe-line.

Wind

An earlier target of reaching 3 TWh annual production of wind power by 2010 has been given up. We are at present at only roughly 1 TWh. During the last 4 years only *one* major wind farm has been established. However, financial support for five new major farms was approved by EFTA Surveillance Authority ESA in December, and there are plans – at various stages - corresponding to altogether 66,5 TWh. The slow development of wind farms in Norway has several causes, one of them being the NIMBY syndrom (see below) and also the economic conditions. There is much wind along the Norwegian coast, but the coastline is rugged and the geographical conditions for the production unit and the transmission lines are often difficult.

Off shore wind energy is a priority area for research and development in Norway's energy policy. In the longer term it may become a very important activity and energy source in Norway. So far, we have only one off shore wind farm, close to the coast. But the Parliament adopted a special Sea Energy Act last year, and the government has adopted a "Sea Energy Strategy" with emphasis on research and development.

Bioenergy

The present annual consumption of bioenergy is about 15 TWh, of which half in private households (mostly wood for heating). A government "Strategy for development of bioenergy" from 2008 estimates the potential to be a doubling (14 TWh) of this amount.

For *biofuels* the national target is 3,5 % of total motor vehicle fuel consumption.

Directive 2009/28/EC is EEA relevant and it is the declared objective of the government to have it included in the EEA agreement. Negotiations are now going on between Norway and EU on the matter. A full implementation of the directive raises special problems for Norway due to our already very high rate of hydro power. Hydro covers 99 % of our electricity production. If the general method for defining the obligation to increase the share of renewable energy of individual EU MS is applied to Norway, Norway must increase its share of renewable energy from 58 % in 2005 to 72 % i 2020. This is of course extremely demanding.

2. ***Describe the key national legislation to promote renewable energies.***
 - a. ***Subsidies and other financial support?***
 - b. ***Purchase guarantees? (example: feed-in tariffs?)***
 - c. ***Quota system? (example: "green certificates"?)***
 - d. ***A special legal framework for the installation of facilities for the production of renewable energy sources? (short description)***
 - e. ***Sustainability requirements for biomass / biofuels production? (art. 17-19 of 2009/28/EC)***

a) Norway has numerous financial support instruments to promote the production and consumption of renewable energy and energy efficiency.

The most important mechanism to this end is a state fund - "The Energy Fund". The Fund is financed mainly by a small tax on electricity consumption (1 øre = NOK 0,01 per Kwh). (This is at present under scrutiny by the EFTA Surveillance Authority ESA, in relation to EEA state aids rules.) The Fund is administered by a special state company, *Enova*, owned by the Ministry of Petroleum and Energy (MPE). (Details may be provided)

Enova was established 10 years ago with the purpose of promoting an environmentally friendly restructuring of energy consumption and energy generation in Norway. *Enova's* main mission is to contribute to environmentally sound and rational production and use of energy. It has at its disposal several financial instruments and incentives to stimulate market actors and mechanisms to achieve national energy policy goals. This includes various types of support also to ordinary households, and information programmes.

Financial support from *Enova* is generally provided to *investments* in renewable energy production or consumption units, in accordance with the EU/EEA Guidelines for state aid for environmental protection/renewable energy. It may also include running and maintenance costs. It is based on the „extra cost principle“: Support is given to compensate for the extra costs compared to expected market price. It is often complicated to assess the correct support level.

Support to production of renewable energy.

Support is given to production of *biogas*, from biological waste, wood and other plants for delivery to external clients. Support is also given to establish installations for distant waterborn heating. There are special funding mechanisms for the establishment of on shore wind farms and off shore wind energy production.

Support to increased renewable energy consumption/energy efficiency. Support is given to industry as well as to other types of buildings and activities, including ordinary residential homes. There is a special support scheme for municipal activities and buildings.

b) Norway has not (yet) introduced feed-in- tariffs or other types of purchase guarantees.

c) Norway has not yet introduced quota systems, except with regard to rate of biofuels (national target of 3,5 % of total motor vehicle fuel consumption). However, Norway and Sweden has agreed to established a common „green certificate“ market from January 1st 2012. The preparation for this is currently under way. In Norway, this will be particularly important for the small scale hydro sector (see below).

d) Norway has had an elaborated legislation for hydro power development since the adoption of the *1917 Watercourse Regulation Act*. Small scale hydro power is regulated by the permit system in the general *Watercourse Act* of 2000. For other, and new types of renewable energy, the *1990 Energy Act* is the central piece of legislation, with a general permit system for production and transportation of electricity. However, the main purpose of this act was to liberalize the Norwegian power market. It is not particularly well adapted to the task of promoting renewable energy. In addition, the system of land use planning in the *Planning and Building Act* apply (to some extent – see below). As far as off shore wind farms is concerned, a special *Act on Off Shore Energy Production* was adopted in 2010. It establishes a general concession system for off shore wind energy, partly similar to the system for off shore petroleum industry.

e) *Sustainability criteria for biofuels* production are presently being prepared. After some hesitation and discussions, i.a. on the possibility to adopt stricter national criteria, the government has decided to implement the criteria laid down in directive 2009/28/EC arts. 17-19 more or less verbatim.

When these criteria are in place, the objective for mandatory share of biofuels in the market is meant to be increased from the present 3,5 % to 5 %.

3. *Describe mayor legal instruments, arguments, and court decisions concerning environmental protection issues of renewables.*

The major legal instruments concerning environmental protection issues of renewables are the above-mentioned “sector” legislation, in particular the Energy Act. The Acts require a public permit – “concession” – for installations for the production of hydropower and wind power. Permits are also required for transport of electricity through power lines. The objective of these Acts is a rational or efficient production of energy, and they are all administered by the Ministry of Oil and Energy

A general feature of these acts is that they leave much discretion to the energy authorities in the balancing of different objective and interests, in particular in the balancing of energy production objectives against environmental concerns and interests. This often raises controversial issues, because installations for production and transportation of renewable energy often are placed in pristine natural areas or valuable landscapes. As a consequence, there may be a sharp conflict in specific cases between the objective of more renewable energy production for climate reasons, and more traditional environmental objectives of nature and biodiversity protection. At present, this conflict is particularly clear in some wind farm cases, and in cases of new major power lines across the country. In the last case, a planned major power line through the beautiful fjord area of Hardanger on the west coast has developed into a major conflict between the local communities and the energy authorities and has also become a sensitive political challenge for the government.

This balancing is – at the end of the day - left to the energy authorities. As long as increase in renewable energy production is a major political objective, nature protection considerations are given rather little weight. The system does not give any strong legal means to protect these interests either, at least as long as the installations are placed outside legally protected nature areas.

There is also a somewhat complicated and controversial relationship between the energy legislation and energy authorities on the one hand and the general system of societal and land use planning pursuant to the Planning and Building Act on the other. In principle, energy production installations have to be in conformity with land use plans pursuant to the Planning and Building Act. However, since land use planning is the main responsibility of municipalities and counties, while the energy sector formally is a strong state sector, there are some special problems of coordination, and also some particular exceptions for energy production and transportation in relation to the planning system. In short: The energy sector aims at being as independent as possible from the general land use planning system. The serious conflict in the Hardanger case may partly be seen as a consequence of this attitude.

An important court case in this field is the very controversial Supreme Court case regarding the big hydro power development in the Alta river in the Sami area of Finnmark, in the Northern Norway. The court accepted the decision to regulate the river by a huge dam in spite of the fact that it had very negative effects in particular on Sami interests. This case, however, dates back to 1982. Since then, there have not been any major court cases in this field. This is probably due to the fact that the acts in question leave so much discretionary power to the executive authorities. As long as a decision is kept within this broad legal framework, and the procedure has been correct, the possibility of a Norwegian court to play a role by revoking the decision is very limited.

4. *Is there a national debate about the sense and nonsense of renewable energies, and if so, has this lead to changes or corrections of the regulatory framework?*

There is a general political consensus – expressed in parliamentary policy decisions - that we should increase the production of renewable energy, mainly as an important element in our climate policy. The public is also favourable to the idea of more renewable energy. So, at the general political level, and in the public at large, there is really not much discussion.

However, the topic is still controversial among energy experts and economists. This is mainly due to the fact that much new renewable energy production is expensive and has to be subsidized in one way or the other to be competitive in the market. The government argues that Norway should produce more renewable energy also with the objective of exporting it to other European countries which need green energy. The rationale of this is, however, disputed both among experts and NGOs. In addition, as mentioned, there is

controversy from an environmental perspective over the environmental effects of the policy in general, and of individual production and transportation installations in particular. However, so far, this debate has not lead to any significant changes in the legal framework.

5. *How well do the public accept renewable energy proposals (eg new on-shore and off- shore windfarms, biomass plants etc.)?*

As already indicated, it is fair to say that this policy area is marked by very different opinions in the public, in particular with regard to specific production and transportation projects. Wind farm projects, mainly along or close to the coast, are often placed in rather pristine and spectacular nature areas. The NIMBY syndrome is very much of a reality with regard to wind farms. They often raise local protests from some parts of the population, while at the same time being supported by others as beneficial for the local community due to tax income, financial compensation from the developer, etc. Some actionist groups and local communities have managed to stop wind farms plans. The disturbance of a beautiful scenery is probably the main argument used. The tourist industry along the coast is generally very negative. Wind farms also disturb Sami reindeer herding. Also, biodiversity considerations play a role in the protests against wind farms. In particular one large wind farm on the coast has had very negative effect on the local stock of sea-eagles.

6. *How does Strategic Environmental Assessment and Environmental Assessment apply to renewables in your country? Have any particular legal/procedural issues emerged? How does Natura 2000 influence the promotion of renewables?*

Until now, SEA has not played a major role, since this system has been legally established quite recently through the new 2009 Planning and Building Act. However, the location of wind farms will gradually be included in regional plans and municipal master plans which require SEAs to be carried out.

The special rules on project EIA apply without exception for wind farms of more than 10 MW effect and hydro power plants of more that 40 GwH. Furthermore, wind farms of more than 5 MW effect and hydro plants of more than 30 GwH are subject to the EIA rules if they may have significant negative effect on various natural and environmental values and interests listed in the regulation. However, studies show that producers often succeed in circumventing these limits, i.a. by various types of „salami slicing“. The limits mean that only very few wind projects and no small scale hydro power project must carry out an EIA.

Realistically speaking, the environmental importance and effect of an EIA is often questionable. In the Norwegian system the EIA is to be carried out by the developer, and it is the sector authority in question – here the energy authorities – that makes all

decisions with regard to what and how to assess, and also approves the EIA. This is in reality a system where „the fox guards the hens“.

Natura 2000 does not in itself play a role, as the Birds directive and the Habitat directive are not included in the EEA Agreement.

However, Norway got a new Nature Diversity Act in 2009. This Act requires that certain principles, including the precautionary principle and the principle of an ecosystem approach, are to be applied across legislation by all sector authorities in decision making. The question will be to what extent and how – or whether at all - this will actually influence the outcome of decisions by the energy authorities in the renewable energy sector.

- 7. *Do the existing or planned national legal instruments promoting renewables already comply with EU law or are important adaptations required?
What is the status of adoption of the new pieces of legislation necessary to transpose into domestic law the new provisions of Directive 2009/28/EC?
Were there already court decisions or infringement procedures taken by the Commission concerning this question?***

It is too early to answer this question as the directive does not yet apply formally to Norway. As mentioned, negotiations are going on between Norway and EU on the matter.

- 8. *Is there anything like a general framework act on climate change issues, and if so, what is its main content? If no, is such an act being considered?***

No, there is no general framework act on climate change issues. However, it has been proposed by several actors that Norway should adopt such an act. The climate act of United Kingdom is referred to as a possible model. On March 18 2011 the State Climate and Pollution Agency presented a formal proposal to the Ministry of the Environment to appoint a special Commission with the task of working out a draft Climate Act. The main elements in such an act should be a formal mechanism whereby the Parliament lays down clear reduction targets for CO₂ emissions to be applied by the government, and followed up through regular reporting, much along the same lines as the UK Climate change Act. The second main element is to strengthen the climate change issue in all relevant legislation, across sectors and levels of decision-making. There should be a general obligation to assess future GHG emissions and/or uptake resulting from new policies, plans and project, and also an obligation to take this into account when decisions are made and make the assessment explicit and transparent. Today, climate concerns are probably a relevant factor to consider when exercising discretionary authority under most acts, but not anything like a mandatory consideration.
