

## 18. NORWAY

(Statistics are estimates from [www.eia.goe.gov](http://www.eia.goe.gov))

Population (2001): 4.5 million

Electrical Generation Capacity (2000): 27.2 GW (99% hydro)

Electricity Generation (2000): 141 billion kWh

Electricity Consumption (2000): 112 billion kWh

Mechanism:	Levy on distribution tariffs; as well as national budget funds	Creation:
Legislative		
Duration:	Began 1 January 2002; ten-year budget framework	
Administration:	ENOVA, a national government agency	
Budget:	~60million Euro/year	
Name:	No program name	
Benefit Measure:	Cost-effective	
Incentives:	No utility incentives	

### Survey Questions

#### 1. Process and timeline

Norway has funded energy efficiency measures since the 1970's. Responsibilities for voluntary initiatives were divided among the grid companies and the national regulatory agency. In March 2001 the Storting (Norwegian Parliament) relieved other parties of efficiency and renewable responsibilities, and approved the establishment of a new public agency, ENOVA SF. It became operational in January 2002.

#### 2. Organizational Structure

According to the Secretary of the Norwegian Ministry of Petroleum and Energy (MPE), ENOVA is "owned by the government of Norway, represented by the Ministry of Petroleum and Energy." ENOVA serves the entire country and is located in the center of Norway. ENOVA will act as an advisor to the MPE, and participate in international work in its area of responsibility. ENOVA is expected to use existing organizations that are willing to compete for assignments and tasks. For example, existing regional energy efficiency centers, funded through the former system, will have to compete to provide public information and guidance.

#### 3. Funding mechanisms

According to the Secretary of the MPE, ENOVA is funded "from a levy on the distribution tariffs and from ordinary grants over the State budget." The funds are deposited in a separate energy trust. According to the IEA Update, Enova is in charge of the trust "which secures a long-term financial frame over the years to come." Funding will be up to NOK 5 billion (about 650million Euro) over a ten-year period. The budget in 2002 was about 60million Euro.

#### 4. Degree of association with a long run resources plan

In Norway, energy efficiency and renewable energy efforts are considered in the context of planning to meet the Kyoto Protocol, as well as other national and European environmental planning efforts.

#### 5. Guidelines for program effectiveness and success

According to the Secretary of MPE, objectives approved by the Storting are:

“To limit energy use considerably more than would be the case if developments were allowed to continue unchecked;

To increase annual use of central heating based on new renewable energy sources, heat pumps and waste heat by 4 TWh/year by the year 2010; and

To construct wind generators with a production capacity of 3 TWh/year by the year 2010.”

The Secretary of MPE also indicated ENOVA must use funds cost-effectively, and promote environmentally friendly natural gas solutions.

Norway’s Kyoto commitment is to limit the increase in greenhouse gas emissions to 1% between 1990 and 2008-2012.

#### 6. Pre-implementation program evaluation guidance

The MPE sets the “operational targets” and will set “clear routines for reporting the results.” Measurement and verification of energy savings will be a high priority.

#### 7. Results of program evaluation

The program is too new for results at this time. ENOVA itself will be evaluated after four years.

#### 8. Financial incentives

There are no incentives for specifically for utilities. The government did establish general incentives. Investment in most new renewable energy technologies, including solar energy systems, is exempted from investment taxes. Production from wind energy is supported by half the consumer tax on electric power/kWh produced.

### **Issues and Special Situations**

#### Electricity Consumption/Generation

Historically Norway has met electricity needs through hydropower. Increased consumption and weather issues have resulted in demand outstripping hydropower capacity. According to the IEA, Norway has the highest per capita consumption of electricity in the world. Norway is

attempting to reduce the environmental impact of non-hydropower generation of electricity by promoting energy efficiency, renewable generation and environmentally friendly use of natural gas.

## **Resources**

ENOVA SF

[www.enova.no](http://www.enova.no) (site is in Norwegian)

Email inquiries: [post@enova.no](mailto:post@enova.no)

Review of Energy Efficiency, CO2 and Price Policies and Measures in EU Countries and Norway in 2001. [www.odyssee-indicators.org/Publication/PDF/Norway-p01.pdf](http://www.odyssee-indicators.org/Publication/PDF/Norway-p01.pdf)

IEA Energy Efficiency Update: Norway, March 2003

[www.iea.org/pubs/newslett/eneeff/no.pdf](http://www.iea.org/pubs/newslett/eneeff/no.pdf)

April 2002 Speech given by State Secretary Brit Skjelbred, Ministry of Petroleum and Energy at the IEA Industry Workshop in Oslo Norway.

[http://odin.dep.no/oed/engelsk/aktuelt/p10002021/taler\\_politisk\\_ledelse/026021-090016/index.htm](http://odin.dep.no/oed/engelsk/aktuelt/p10002021/taler_politisk_ledelse/026021-090016/index.htm)