

Case No.: 72770  
Event No.: 659426 (former 633143)  
Dec. No.: 518/12/COL

**[non confidential version]**

## EFTA SURVEILLANCE AUTHORITY DECISION

of 19 December 2012

on aid to Eidsiva Bioenergi AS for the construction of renewable district heating in  
Gjøvik, Oppland

(Norway)

The EFTA Surveillance Authority (“the Authority”),

HAVING REGARD to:

The Agreement on the European Economic Area (the “EEA Agreement”), in particular Article 61(3)(c) and Protocol 26 thereof,

The Agreement between the EFTA States on the Establishment of a Surveillance Authority and a Court of Justice (the “Surveillance and Court Agreement”), in particular Article 24,

Protocol 3 to the Surveillance and Court Agreement (“Protocol 3”), in particular Article 1(3) of Part I and Article 4(3) of Part II,

WHEREAS:

### I. FACTS

#### 1. Procedure

- (1) By letter dated 2 November 2012 (Events No 652226-652229, 652231, 652233, 652234, 652236, 652238, 652240, 652241, 652243, 652245-652250) received and registered by the Authority on 7 November 2012, following pre-notification contacts, the Norwegian authorities notified to the Authority state aid to Eidsiva Bioenergi AS (“Eidsiva”), pursuant to Article 1(3) of Part I of Protocol 3.
- (2) Following the notification, the Authority asked for further information by way of e-mail dated 15 November 2012 (Event No 653329) and the Norwegian authorities replied by e-mail on the same date (Event No 653330).

## 2. The Notified Project

- (3) The notification concerns a direct non-reimbursable individual grant of NOK 120 499 000 for the promotion of energy from renewable sources, funded through the Norwegian Energy Fund aid scheme (the “Energy Fund” or “Energy Fund Scheme”), which is managed by Enova SF (“Enova”), a state owned administrative body.
- (4) In 2010, Eidsiva was granted a concession by the Norwegian authorities for district heating in the Gjøvik area.
- (5) Eidsiva’s investment involves building a district heating plant based on bio energy, including a distribution network for heating and steam. The fuel used in the incinerator will mainly be wood chips made from reclaimed wood and logging waste; bio oil will also fuel the incinerator.<sup>1</sup>
- (6) The length of the district heating grid will be 29.5 km.
- (7) The plant will be situated in the Thomasdalen area in Gjøvik, where factories belonging to Hunton Fiber AS and Hoff Norsk Potetindustri AS are located. Those factories currently use oil for the production of industrial steam. Eidsiva will supply them with steam and district heating. Hunton Fiber AS is one of Europe’s leading producers of wood fibre boards and provides a wide range of products for the construction industry. Hoff Norsk Potetindustri SA is the largest producer of processed potato products in Norway.
- (8) The project was assessed under Enova’s programme for new district heating plants.
- (9) Enova’s Board of Directors decided that the project should be supported under the Energy Fund on 9 December 2010.<sup>2</sup> Changes to the project were approved by Enova on 20 October 2011.<sup>3</sup>
- (10) The project is intended to produce 156 GWh annually of renewable energy: 90 GWh of industrial steam annually and 66 GWh of district heating annually. The steam will be sold to Hunton Fiber AS and Hoff Norsk Potetindustri AS for use in their production processes. District heating will be sold to different buildings in the city centre of Gjøvik. The total installed effect for industrial steam will be 17 MW. The total installed effect for district heating will be 31.8 MW.
- (11) The total investment cost of the project is NOK 458 979 000.
- (12) The planned project period was originally from 1 February 2011 to 1 February 2015, and operation of the plant originally planned to commence on 1 November 2012. However, the Norwegian authorities have explained that following changes to the initial proposed project and the requirement for approval from the Authority, the project period will be extended and a new timeline for implementation agreed after approval from the Authority.

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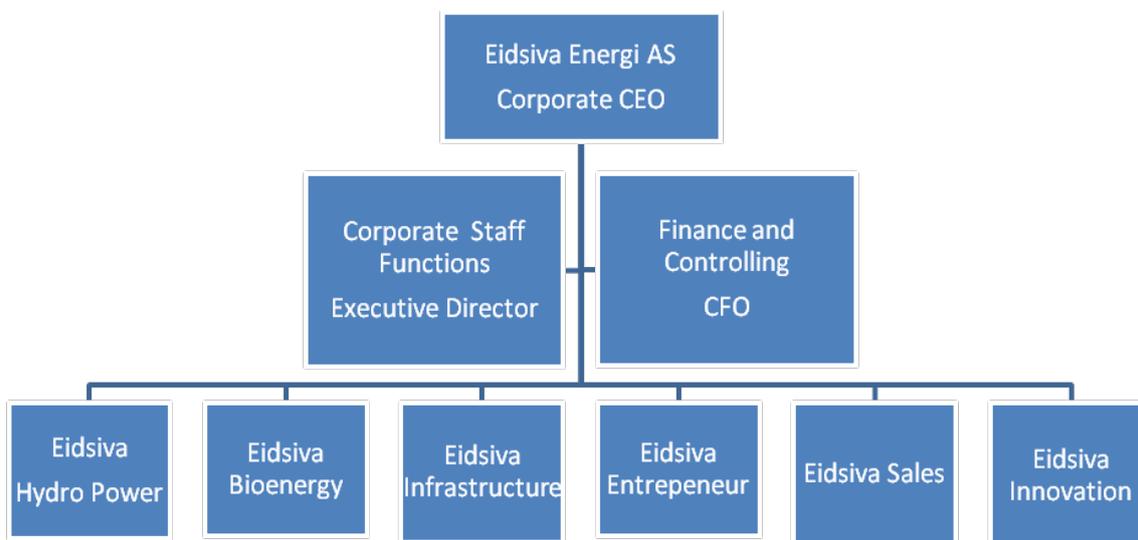
<sup>1</sup> Enova states that the energy sources are wood chips (94.9 %) and bio oil (5.1 %); the bio oil used is based on animal products which satisfy the definition of “sustainable bio fuels” set out in the Authority’s Guidelines on state aid for environmental protection, paragraph 70(8), <http://www.eftasurv-int/?1=1&showLinkID=15128&1=1>.

<sup>2</sup> In accordance with the procedure under the Energy Fund, the award of aid is conditional upon the Authority’s approval.

<sup>3</sup> *Inter alia*, plans for the installation to produce electricity were scrapped.

### 3. The Recipient – Eidsiva Bioenergi AS

- (13) Eidsiva Bioenergi AS is a wholly-owned subsidiary of Eidsiva Energi AS. Eidsiva Energi AS is owned by the counties of Oppland and Hedmark, together with 26 Norwegian municipalities. Eidsiva Energi AS is the parent company of the Eidsiva Energi Group.
- (14) Eidsiva Energy Group is a regional, publicly owned, vertically integrated energy group made up of a number of companies. It is located in the inland region of Norway, covering the two counties of Hedmark and Oppland. Its registered office is located in Hamar, Norway.
- (15) With an estimated adjusted share value of NOK 11.4 billion, Eidsiva Energy Group is one of the larger energy companies in Norway. In 2010, its annual turnover was NOK 4.7 billion and share dividends amounted to NOK 290 million.
- (16) Eidsiva Energy Group consists of six business areas (wholly-owned subsidiaries): Hydropower Production, Power Grid Infrastructure, Entrepreneur, Bioenergy/Heat and Power Production, Sales, and Innovation.



- (17) Eidsiva Energy Group has more than 990 employees and operates more than 40 hydroelectric power plants and 20 000 km of power grid, supplying more than 150 000 customers with electricity and heat.

### 4. Norwegian Regulatory Framework for District Heating

- (18) In Norway, a concession is required in order to build and operate district heating plants with a capacity above 10 MW.<sup>4</sup>
- (19) The Norwegian Water Resources and Energy Directorate (“NVE”) is the public body authorised to grant district heating concessions. Only one concession is granted per area;<sup>5</sup> therefore, each concessionaire holds a monopoly on district heating in its designated area.
- (20) The supplier of district heating cannot charge a price which exceeds the price of electric heating in the relevant area.<sup>6</sup>

<sup>4</sup> The Norwegian Energy Act (LOV-1990-06-29-50 om produksjon, omforming, overføring, omsetning, fordeling og bruk av energi m.m. (energiloven)), Article 5-1.

<sup>5</sup> In accordance with NVE’s guidelines on concessions for district heating plants.

## 5. The Energy Fund Scheme

- (21) The notified aid to Eidsiva is granted on the basis of the Energy Fund Scheme, which was approved by the Authority on the basis of Article 61(3)(c) of the EEA Agreement in Decision No 248/11/COL,<sup>7</sup> as amended by Decision No 299/11/COL.<sup>8</sup>
- (22) The Energy Fund Scheme is a financing mechanism with the objective of encouraging energy saving measures and the production of environmentally sound energy.
- (23) The Energy Fund Scheme is divided into different programmes. The Eidsiva project falls under the programme for new district heating plants. That programme provides support to applicants who wish to establish new infrastructure for district heating and associated generation of renewable energy. District cooling in connection with district heating can also receive support under this programme. The programme also supports conversion of existing heating plants to renewable base load production in facilities established prior to 1 January 2008.
- (24) The aim of the district heating programme is to promote the establishment of new district heating plants. This entails start-up of district heating where both infrastructure and associated heating plants based on renewable energy sources must be established. Infrastructure for district heating and cooling includes transmission and distribution facilities up to the metering point for delivery of heat, including any heat exchangers, branch lines and customer centres.<sup>9</sup>

## 6. Competition for Aid Under the Energy Fund Scheme

- (25) Calls for project proposals are announced in major national and regional newspapers at least biannually and for most programmes four times a year.
- (26) All applications are subject to detailed scrutiny by Enova. In order to ensure that there is no overcompensation in relation to eligible projects, all applications are subject to the following procedure.
- (27) First, Enova carries out an individual assessment of the information provided by the applicant on the technical potential of the project and the relevant costs and benefits.
- (28) Secondly, Enova undertakes a financial analysis of the project in order to determine the aid required to ensure a normal return on capital, thus ensuring the proportionality of the aid. The project analysis is based on the extra investment costs needed to achieve the energy production while taking into account operating benefits and costs. Projects with an estimated return on capital which exceeds what is considered normal for the relevant industry are not eligible for aid.
- (29) Thirdly, Enova carries out a comparison of the aid required to ensure a normal return on capital with the applicable maximum aid intensities. The aid intensities granted to projects are capped by the applicable maximum aid intensities.
- (30) Finally, Enova gives priority to projects according to the level of aid needed (per kilowatt-hour (KWh) saved or produced) until the annual budget of the Energy Fund is allocated.

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<sup>6</sup> The Norwegian Energy Act, Article 5-5.

<sup>7</sup> OJ C 314, 27.10.2011 p. 4.

<sup>8</sup> OJ C 10 12.1.2012 p. 4.

<sup>9</sup> See: [www.enova.no](http://www.enova.no).

Thus, projects which qualify under steps one to three of the assessment might not be awarded aid due to competition from other projects with a better production to aid ratio and limited budgets.

- (31) In sum, the level of subsidy is determined by a technical and financial evaluation of each project. Priority is given to those projects which give the highest KWh saved or produced per subsidised NOK. This leads to competition between projects for the receipt of public funds, the aim being to grant aid to the most efficient projects.
- (32) Under the programme for new district heating plants, Enova received project proposals four times in 2010. The total budget in 2010 for new district heating plants was NOK 288 million. With this, Enova aimed at achieving a total energy result of 538 GWh of renewable energy, corresponding to approximately 1.86 KWh per NOK of aid.
- (33) Eidsiva applied for aid on 16 November 2010, during the fourth project proposal period. In that period, Enova received five applications. Of those, only Eidsiva and one other applicant were considered eligible for aid.<sup>10</sup>

## 7. Eligible Costs

### 7.1 Introduction

- (34) The Norwegian authorities have estimated the eligible costs for energy production by applying the methodology set out in Chapter II.4.2 of Decision No 248/11/COL on the Energy Fund Scheme. They have done so by comparing the costs of the investment to the costs of a technically comparable investment that does not provide the same degree of environmental protection. The project analysis is based on the extra investment costs needed in order to achieve the required amount of energy production, while taking into account operating benefits and costs for the first five years of operation.
- (35) As regards the infrastructure, the Norwegian authorities have calculated the eligible costs using a zero counterfactual, in line with the practice of the Authority and the European Commission. Environmental aid should normally be limited to the extra investment costs borne by the beneficiary of an investment aimed at a higher level of environmental protection compared to an investment in conventional technology. However, in the case of certain investments, the alternative would be not to invest at all; therefore, in such cases, the Authority has concluded that there is no relevant counterfactual reference investment. That has been the case, for example, for investments in district heating infrastructure.<sup>11</sup>

### 7.2 Eligible costs for production

#### 7.2.1 Investment costs

- (36) The Norwegian authorities have itemised the production costs as set out in the table below. As the costs relating to projecting, project management and start-up relate equally to both the production and the infrastructure parts of the project, Enova has split those costs equally between the two parts of the project.

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<sup>10</sup> Two applications were withdrawn when it became clear that the projects did not meet the criteria of the new district heating programme. One application was rejected, as the energy result was too low compared to the other participants.

<sup>11</sup> Decision 158/12/COL of 9.5.2012 on aid to Akershus Energi Varmer AS for the construction and expansion of district heating and cooling infrastructure in Lillestrøm, Strømmen and Nitteberg (OJ C 284 20.9.2012 p. 14); European Commission Case No. N 494/2010 – Italy – Aid scheme for district heating production installations and networks in Veneto (OJ C 180 21.6.2011 p. 1).

Budget Item	Cost (NOK)
Heating centrals	[...]
Building related work	[...]
Connection costs electricity	[...]
Projecting (50%)	[...]
Project management and construction management (50%)	[...]
Start up costs (50%)	[...] <sup>12</sup>
<b>Total costs</b>	[...] <sup>13</sup>

### 7.2.2 *The counterfactual situation: industrial steam*

- (37) The Norwegian authorities have submitted that the realistic alternative for the production of industrial steam to be sold to Hunton Fiber AS and Hoff Norsk Potetindustri AS is that those companies continue to use oil as at present. Based on estimates from the NVE,<sup>14</sup> the Norwegian authorities have determined the cost of having steam-producing oil boilers installed with a total installed effect of 17 MW at NOK 17 million.

### 7.2.3 *The counterfactual situation: renewable district heating*

- (38) The Norwegian authorities have submitted that the alternative to the investment in renewable district heating for Eidsiva is not to build any district heating installation. However, the alternative for the end-user of the energy is to use distributed solutions: for existing buildings, the alternative is to use the current heating solution, unless the heating systems are due for renewal. The existing buildings currently use oil. The most realistic alternative is for them to continue to use oil in the future. The most realistic alternative for new buildings is to use electric boilers.
- (39) In the present case, approximately 90% of users are existing buildings. The Norwegian authorities base their calculations on 95% customer take-up,<sup>15</sup> on the basis that it is not realistic that all potential customers will choose to connect to the district heating system.<sup>16</sup>
- (40) The remaining 10% are new buildings yet to be built (businesses and sports facilities). This figure is based on publicly available information on public and private buildings in the planning stages. As it is uncertain whether the planned buildings will in fact be built and connected to the district heating grid, the Norwegian authorities base their calculations on 50% customer take-up.<sup>17</sup>
- (41) Based on a report by Norsk Energi dated 2 July 2012, commissioned by Enova (the “Norsk Energi Report”), the cost of the oil boiler alternative amounts to NOK 30 048 036 and the cost of the electric boiler alternative amounts to NOK 2 190 474.

<sup>12</sup> In this Decision, information covered by the obligation of professional secrecy has been replaced with square brackets [...].

<sup>13</sup> Covered by the obligation of professional secrecy; the figure is in the range of NOK 175 to 270 million.

<sup>14</sup> See NVE report: “*Kostnader ved produksjon av kraft og varme*”, 2011:1.

<sup>15</sup> Eidsiva has provided Enova with an analysis of how many of the existing buildings are likely to choose to connect to the district heating grid. Enova explains that the figure (95%) is within the normal range.

<sup>16</sup> Existing buildings cannot be required by law to connect to the district heating grid. Enova explains that competition (for example, from local heating plants) in the heating market will make it unlikely that one actor will be able to secure contracts for all of the demand for heating in one area.

<sup>17</sup> Enova states that in its experience it is reasonable to expect that 50% of the buildings will be built and connected to the district heating grid.

#### 7.2.4 The counterfactual situation: summary

Alternative investment	Cost (NOK)
Oil boilers for industrial heat	17 000 000
Oil boilers for district heating	30 048 036
Electric boilers	2 190 474
<b>Total</b>	<b>49 238 509<sup>18</sup></b>

#### 7.2.5 Operating costs and benefits: first five years

- (42) Based on the information provided by the Norwegian authorities, the operating costs for the production part of the Eidsiva project for the first five years amount to NOK [...]. The operating costs for the counterfactual amount to NOK 263 048 739. The operating benefits for both the production part of the project and for the counterfactual amount to NOK [...] for the first five years.<sup>19</sup>

Cost	Eidsiva (NOK)	Counterfactual (NOK)
Investment costs	242 914 500	49 238 509
Operating costs (first five years)	[...]	263 048 739
Operating benefits (first five years)	[...]	[...]
<b>Sum (costs minus benefits)</b>	[...]	[...]

- (43) On this basis, the eligible costs for the production part of the Eidsiva project amount to NOK [...] (NOK [...] – NOK [...]).
- (44) As under the Energy Fund Scheme the maximum aid intensity for renewable energy production is 60%, the Norwegian authorities have calculated the maximum possible aid as follows:<sup>20</sup>
- Eligible costs: [...]
  - Aid intensity: 60%
  - Maximum Aid: [...]

### 7.3 Eligible costs for infrastructure

- (45) The eligible costs relating to infrastructure have not been calculated on the basis of a counterfactual reference investment.
- (46) The Norwegian authorities have itemised the infrastructure investment costs as follows.

<sup>18</sup> Discrepancies in the totals are due to rounding off.

<sup>19</sup> Based on average cost of operations from the Norsk Energi Report.

<sup>20</sup> Decision No 248/11/COL, paragraph 149.

Cost	NOK
Heat exchangers	[...]
District heating grid	[...]
Grid for the distribution of steam	[...]
Customer exchange for the district heating	[...]
Customer exchange for the delivery of steam	[...]
Projecting (50%)	[...]
Project management and construction management (50%)	[...]
Start up costs (50%)	[...]
<b>Total</b>	[...] <sup>21</sup>

- (47) The Norwegian authorities have explained that the operating costs for the infrastructure part of the Eidsiva project for the first five years amount to NOK 9 782 000.

Cost	Eidsiva (NOK)	Counterfactual (NOK)
Investment cost	216 064 500	0
Operating costs (first five years)	[...]	0
Operating benefits (first five years)	0	0
<b>Sum (costs minus benefits)</b>	[...]	0

- (48) As under the Energy Fund Scheme the maximum aid intensity for district heating infrastructure is 50%, the Norwegian authorities have calculated the maximum possible aid as follows:<sup>22</sup>

- Eligible costs                      [...]
- Maximum aid intensity            50%
- Maximum aid                        [...]

#### 7.4 Eligible costs: summary

- (49) On the basis of the Norwegian authorities' calculations as set out above, the maximum aid that can be granted can be summarised as follows:

- Production maximum aid:    NOK [...]
- Infrastructure maximum aid: NOK [...]
- Maximum aid total:            NOK [...]

### 8. Total Aid Granted

- (50) The Norwegian authorities have explained that the total aid granted to the project will be NOK 120 499 000. Of that amount, NOK 112 923 250 will be for the infrastructure part of the project; and NOK 7 575 750 for the production part.

### 9. Net Present Value (NPV) Calculation

- (51) The Norwegian authorities have used an NPV calculation to examine whether the aid has an incentive effect, that is, whether the aid changes the behaviour of firms, and is

<sup>21</sup> Covered by the obligation of professional secrecy; the figure is in the range of NOK 180 to 250 million.

<sup>22</sup> Decision No 248/11/COL, paragraph 149.

proportionate, in other words, whether the same change in behaviour could be obtained with less aid.

- (52) The lifetime of the project is 28 years. The data submitted by the Norwegian authorities indicate that without the aid the project (production and infrastructure) would have a negative NPV of NOK [...]. With the aid, the project will have an NPV of NOK 0 and an IRR (internal rate of return) of [...].

## II. ASSESSMENT

### 1. The Presence of State Aid

- (53) Article 61(1) of the EEA Agreement provides that:
- “Save as otherwise provided in this Agreement, any aid granted by EC Member States, EFTA States or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Contracting Parties, be incompatible with the functioning of this Agreement.”*
- (54) In its decision approving the Energy Fund Scheme (248/11/COL), the Authority concluded that disbursements to undertakings under the Energy Fund constitute state aid within the meaning of Article 61(1) of the EEA Agreement. There is nothing in the current notification to alter that conclusion.
- (55) Eidsiva will be awarded aid under the Energy Fund. Funding under that Fund comes from various sources controlled by the State and therefore constitutes state resources.
- (56) A financial grant will be awarded to Eidsiva, which will thus receive an economic advantage it would not have received in the normal course of its business.
- (57) Under Enova’s district heating programme, grants are awarded to undertakings in the district heating sector and therefore favour undertakings in that sector to the exclusion of other sectors. They are, therefore, selective.<sup>23</sup>
- (58) The grant of financial support to undertakings under that programme is liable to distort competition and affect trade between the Contracting Parties to the EEA Agreement.<sup>24</sup> District heating replaces, *inter alia*, the use of oil and electricity. Trade in oil takes place on a global level, including, therefore, between EEA States. Norwegian energy producers sell electricity: (i) through Nord Pool – which implies that some of the energy is exported to other EEA countries; and (ii) through bilateral contracts to customers in Norway and other EEA countries, such as Sweden and Finland.<sup>25</sup>
- (59) For these reasons, the funding to Eidsiva constitutes state aid within the meaning of Article 61(1) of the EEA Agreement.

### 2. Procedural Requirements

- (60) Pursuant to Article 1(3) of Part I of Protocol 3, *“the EFTA Surveillance Authority shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or*

<sup>23</sup> The Energy Fund Scheme also funds other renewable energy production and energy saving measures. The EFTA Court has held that a measure may be selective even if it covers (undertakings in) an entire sector: Joined Cases E-5/04, E-6/04 and E-7/04 *Fesil and Finn fjord* [2005] EFTA Court Report p. 117, paragraph 77. That judgment confirms the case law of the European Court of Justice as laid down in Case C-75/97 *Belgium v Commission* [1999] ECR I-3671, paragraph 33. See also Case C-66/02 *Italy v Commission* [2005] ECR I-10901, paragraph 95.

<sup>24</sup> Joined Cases E-5/04, E-6/04 and E-7/04 *Fesil and Finn fjord and Others v EFTA Surveillance Authority* [2005] EFTA Court Report 2005, p. 117.

<sup>25</sup> See in this regard, Case 730/79 *Philip Morris v Commission* [1989] ECR p. 2671, paragraph 11, where it is stated that, *“When State financial aid strengthens the position of an undertaking compared with other undertakings competing in intra-Community trade the latter must be regarded as affected by that aid.”*

*alter aid (...). The State concerned shall not put its proposed measures into effect until the procedure has resulted in a final decision”.*

- (61) Decision No 248/11/COL requires awards of aid exceeding EUR 7.5 million to be individually notified to the Authority, and are subject to a detailed assessment.<sup>26</sup> The project at issue in this case involves a grant of NOK 120 499 000, which, at the conversion rate applicable at the time,<sup>27</sup> amounts to EUR 14.64 million, thus exceeding the EUR 7.5 million threshold.
- (62) The Norwegian authorities submitted a notification to the Authority on 7 November 2012. Under the Energy Fund, the award of aid is conditional upon the Authority’s approval.<sup>28</sup> In accordance with this principle, the Norwegian authorities include in the letter of award a clause stating that the aid is conditional upon the Authority’s approval. In their notification, the Norwegian authorities confirmed that they have not yet made any aid disbursements and that aid would not be disbursed until approval has been obtained from the Authority.
- (63) Therefore, the Norwegian authorities have complied with their obligations pursuant to Article 1(3) of Part I of Protocol 3 to the Surveillance and Court Agreement and Decision No 248/11/COL.

### **3. Compatibility of the Aid**

#### **3.1 Legal framework**

##### *3.1.1 Introduction*

- (64) The Norwegian authorities have conducted their assessment to grant aid to Eidsiva by analogy with the procedures approved by the Authority in Decision No 248/11/COL and on the basis of the EAG and Article 61(3)(c) EEA.
- (65) The Norwegian authorities submit that because of the environmental benefits of the project, the aid is compatible with the EAG and with Article 61(3)(c) EEA.
- (66) The Authority assesses the aid to Eidsiva as follows:
- a. Aid for production: under Chapter II.4 of Decision No 248/11/COL and the principles set out in section 3.1.6 and Chapter 5 of the EAG.<sup>29</sup>
  - b. Aid for infrastructure: under Chapter II.5.6 of Decision No 248/11/COL and Article 61(3)(c) EEA.<sup>30</sup>

<sup>26</sup> Decision No 248/11/COL, Chapter II.2.2.

<sup>27</sup> EUR 1: NOK 8.229 in 2010; available on the Authority’s website: <http://www.eftasurv.int/state-aid/rates/>.

<sup>28</sup> Decision No 248/11/COL, paragraph 57.

<sup>29</sup> Decision No 248/11/COL and the EAG require aid to district heating and district heating infrastructure to lead to primary energy savings. In this case bio-fuels are replacing oil without such primary energy savings; therefore, Chapter II.5.5 of Decision No 248/11/COL and section 3.1.8 of the EAG are not applicable.

<sup>30</sup> Aid for district heating infrastructure is not covered by the EAG and must be assessed pursuant to Article 61(3)(c) EEA: see footnote 52 of the EAG and paragraph 84 of Decision No 248/11/COL.

### 3.1.2 Aid for production

- (67) Pursuant to Chapter II.4 of Decision No 248/11/COL, aid for renewable energy production will be assessed in accordance with section 3.1.6 of the EAG.
- (68) Chapter II.4 of Decision No 248/11/COL and section 3.1.6 of the EAG allow aid to be granted for the promotion of energy from renewable sources, as defined in point 70(9) of the EAG, which provides that:
- ““energy from renewable energy sources” means energy produced by plants using only renewable energy sources, as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources. It includes renewable electricity used for filling storage systems, but excludes electricity produced as a result of storage systems”.*
- (69) The aid intensity for investment aid must not exceed 60% of the eligible investment costs in the case of large enterprises.<sup>31</sup> Eligible costs must be limited to the extra investment costs borne by the beneficiary compared with a conventional power plant or with a conventional heating system with the same capacity in terms of the effective production of energy; and must be calculated net of any operating benefits and operating costs related to the extra investment and arising during the first five years of the life of the investment.<sup>32</sup>
- (70) The aid in this case is given to the project as a whole – production and infrastructure. The total amount of the aid exceeds EUR 7.5 million (see paragraph (61) above). Chapter 5 (paragraph 160 (b) (ii)) of the EAG subjects investment aid exceeding that threshold to a detailed assessment and sets out the criteria (paragraphs 165-188) that must be fulfilled in order for aid to be found compatible with the EEA Agreement. Those criteria are summarised as follows.
1. Positive effects of the aid: whether the aid induces undertakings to pursue environmental protection which they would not otherwise have pursued:
    - i. Is the state aid targeted at a market failure by having a substantial impact on environmental protection?
    - ii. Is the aid measure an appropriate instrument to obtain the objective of environmental protection (i.e. are there other, better-placed, less distortive instruments)?
    - iii. Is there an incentive effect (i.e. does the aid change the behaviour of the undertakings)?
    - iv. Is the aid measure proportionate (i.e. could the same change in behaviour be obtained with less aid and is the selection process proportionate)?
  2. Are any distortions of competition and the effect on trade limited, so that the overall balance is positive?
- (71) Chapter 5 (paragraphs 165-188) of the EAG contains guidelines as to how those criteria should be assessed.

<sup>31</sup> Eidsiva is a large enterprise as defined in point 70(17) of the EAG.

<sup>32</sup> See Chapter II.4 of Decision No 248/11/COL section 3.1.6 of the EAG.

### 3.1.3 Aid for infrastructure

(72) As stated in Chapter II.5.6 of Decision No 248/11/COL, support for district heating infrastructure does not fall within the scope of the EAG. Point 67 of the EAG states that:

*“to the extent that the provisions relating to energy saving set out in section 3.1.5 are not applicable, these Guidelines do not apply to state aid to investments in infrastructure related to district heating, which will be assessed under Article 61(3)(c) of the EEA Agreement.”*

(73) That is confirmed in footnote 52 of the EAG, which reiterates that financing of district heating infrastructure falls to be assessed directly under Article 61(3)(c) of the EEA Agreement.

(74) The provisions relating to energy saving in section 3.1.5 of the EAG are not applicable in the case at hand because the proposed measure is not covered by the definition of an energy saving measure as described in point 70(2) of the EAG. That provision defines an energy saving measure as any action which enables undertakings to reduce the amount of energy used, in particular, in their production cycle. In the present case, however, the aid will be granted to Eidsiva to build a new district heating plant which will enable end users to replace oil and electricity with more environmentally friendly steam and district heating, and thus will not in itself result in a reduction in energy used.<sup>33</sup>

(75) On that basis, the Authority will assess the aid for infrastructure in the Eidsiva project directly on the basis of Article 61(3)(c) of the EEA Agreement.

(76) Pursuant to Article 61(3)(c) the following may be considered compatible with the functioning of the EEA Agreement: *“aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest”*.

(77) Chapter II.5.6 of Decision No 248/11/COL (paragraphs 86-87) states that in order to be compatible under Article 61(3)(c) of the EEA Agreement, the aid must be necessary and in a proportionate manner pursue an objective of common interest. In that regard, the following questions must be assessed (the “balancing test”).<sup>34</sup>

1. Is the aid measure aimed at a well-defined objective of common interest (i.e. does the proposed aid address a market failure or another objective of common interest)?
2. Is the aid well designed to deliver the objective of common interest? In particular:
  - i. Is the aid measure an appropriate instrument (i.e. are there other, better-placed instruments)?
  - ii. Is there an incentive effect (i.e. does the aid change the behaviour of the undertakings)?
  - iii. Is the aid measure proportionate (i.e. could the same change in behaviour be obtained with less aid)?

<sup>33</sup> See Case N485/2008, Aid Scheme for District Heating and Cooling Infrastructure and Cooling Installations (Austria), OJ C 191 14.8.2009 p. 1.

<sup>34</sup> Decision No 248/11/COL, paragraphs 86-87.

3. Are any distortions of competition and the effect on trade limited, so that the overall balance is positive?

(78) In addition, Decision No 248/11/COL (paragraph 149) provides that the aid intensity for district heating infrastructure will not exceed 50% of the eligible costs in the case of large enterprises. Eligible costs should be calculated in accordance with the extra cost method, by deducting the cost of a credible reference investment from the cost of the aided infrastructure investment and deducting operating benefits and adding operating costs for the first five years. However, as explained at paragraph (35) above, both the Authority and the European Commission have allowed the eligible costs to be calculated using a zero counterfactual in the case of infrastructure.<sup>35</sup>

### 3.2 Assessment

(79) The Authority considers that the compatibility assessment pursuant to section 5.2 of the EAG represents an operationalisation, in the environmental field, of the general state aid balancing test carried out pursuant to Article 61(3)(c) EEA.<sup>36</sup> The conditions that must be fulfilled in the detailed assessment, as set out in paragraph (70) above, essentially represent a more environmentally specific implementation of the balancing test as set out in paragraph (77) above. In that light, the Authority assesses the compatibility of the aid for production and the aid for infrastructure together.

#### 3.2.1 Objective of common interest / positive effects of the aid

- (80) An objective of common interest is an objective which has been recognised as being in the common interest of the EEA States. The EEA institutions have recognised that the protection of the environment and the reduction of CO<sub>2</sub> emissions are in the common interest of the Member States. Both the EU Member States and the EFTA States have made a commitment to achieve at least a 20% reduction in greenhouse gas emissions compared to 1990 and at least a 20% saving in energy consumption compared to the projections for 2020.<sup>37</sup>
- (81) According to the EAG, the main positive element to be taken into consideration when assessing the compatibility of the aid, is the fact that the aid induces undertakings to pursue environmental protection which they would not otherwise have pursued.<sup>38</sup>
- (82) The support granted to Eidsiva will allow it to produce 156 GWh of fully renewable energy (see paragraph (10) above). The Norwegian authorities have stated that from 2016, the project will result in a possible net reduction of at least 17 417 000 litres of oil per year and, consequently, an environmental benefit consisting of an annual reduction in emissions of at least 47 000 tonnes of CO<sub>2</sub>.<sup>39</sup>

<sup>35</sup> Decision 158/12/COL of 9.5.2012 on aid to Akershus Energi Varme AS for the construction and expansion of district heating and cooling infrastructure in Lillestrøm, Strømmen and Nitteberg (OJ C 284 20.9.2012 p. 14); European Commission Case No. N 494/2010 – Italy – Aid scheme for district heating production installations and networks in Veneto (OJ C 180 21.6.2011 p. 1).

<sup>36</sup> See the EAG, paragraphs 38-41.

<sup>37</sup> See <http://www.efta.int/eea/eea-news/2011-12-20-jc-renewable-energy.aspx> on the incorporation of the Directive on the promotion of renewable energy into the EEA Agreement.

<sup>38</sup> EAG, paragraph 166.

<sup>39</sup> These figures are based on savings in oil use solely on the basis of the production of renewable energy from the wood chips (and not the bio oil). As bio oil is excluded, the actual savings are likely to be higher.

- (83) On this basis, it can be concluded that the notified aid aims at a well-defined objective of common interest.

### 3.2.2 *Aid well designed to deliver the objective of common interest / the positive effects*

#### 3.2.2.1 Appropriate instrument

- (84) An instrument is appropriate if there are no other less distortive means to achieve the same results.
- (85) The Norwegian authorities have explained that currently there are no national or EU standards applicable to internalise fully the negative externalities in the relevant market. As a result, the Norwegian government has created positive individual incentives to reduce pollution and other negative impacts on the environment by establishing the Energy Fund. The Energy Fund is considered by the Norwegian authorities as the appropriate instrument to correct the market failures which lead to a sub-optimal level of environmental protection. The Norwegian authorities have explained that there are currently no better placed instruments to achieve the objective and that the market does not provide sufficient incentives for companies to invest in renewable steam and district heating production and infrastructure. Restrictive regulatory requirements or standards are not likely to be effective for the purposes of furthering investment in renewable steam and district heating production and infrastructure.
- (86) After having assessed these factors, the Authority has concluded that it appears that there are no less distortive instruments to achieve the goals aimed at, and that the envisaged aid constitutes an appropriate instrument.

#### 3.2.2.2 Incentive effect

- (87) Pursuant to paragraph 143 of the EAG and paragraph 151 of Decision No 248/11/COL, *“(t)he Authority considers that aid does not present an incentive effect for the beneficiary in all cases in which the project has already started prior to the aid application by the beneficiary to the national authorities.”*
- (88) Eidsiva’s application for aid to Enova has been submitted before the project has started.
- (89) State aid provides an incentive effect if the aid changes the recipient’s behaviour towards reaching the objective of common interest. In that regard, paragraph 171 of the EAG provides that the aid *“must result in the recipient changing its behaviour to increase the level of environmental protection”*. Decision No 248/11/COL contains a similar requirement (see, in particular, paragraphs 87 and 153).
- (90) Generally, this can be demonstrated by showing that the project realised with aid has an increased environmental benefit compared to the credible counterfactual.<sup>40</sup>
- (91) According to the Norwegian authorities, the credible counterfactual scenario for Eidsiva as an alternative to the aided investment is not to invest in building a district heating plant based on bio-energy or a distribution network for heating and steam. As a result, the Norwegian authorities consider it most likely that the investment would not be undertaken without the aid.

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<sup>40</sup> Paragraphs 146 and 172(a) of the EAG.

- (92) As stated above, the Norwegian authorities have used an NPV calculation to examine whether the aid has an incentive effect. The NPV calculation determines how much aid is needed in order to trigger an investment. A project is triggered when it reaches an NPV of zero with a reasonable rate of return. The data submitted by the Norwegian authorities indicate that without the aid the project (production and infrastructure) would have a negative NPV of NOK –[...]. With the aid, the project will have an NPV of NOK 0 and an IRR of [...]%. The Norwegian authorities have provided the Authority with a report setting out what constitutes a normal rate of return for the type of project at issue in this case.
- (93) On that basis, the NPV calculation in this case demonstrates that the project is not viable without aid. In addition, the rate of return is within the scope of what can be considered reasonable, on the basis of the report provided by the Norwegian authorities.
- (94) As regards increasing the level of environmental protection, as already stated, it is estimated that the aid measure will result in an annual volume of GWh 156 of renewable energy and an annual reduction in emissions of at least 47 000 tonnes of CO<sub>2</sub>.
- (95) According to the EAG, assessment of the incentive effect is also based on the following factors. Aid will normally have an incentive effect when: (i) there is evidence that the level of environmental protection resulting from the aid goes beyond the normal behaviour in the market;<sup>41</sup> (ii) there is a particular risk connected to the investment;<sup>42</sup> (iii) the level of profitability is negative.<sup>43</sup> The incentive effect of aid is normally lower when there are other production advantages linked to the investment<sup>44</sup> or where possible future mandatory standards are likely to be introduced.<sup>45</sup>
- (96) As regards the level of environmental protection resulting from the aid, the Norwegian authorities have stated that little district heating infrastructure in Norway has been built without state aid: the costs of the equipment and of connecting end consumers to the district heating system is prohibitively high.<sup>46</sup> As regards levels of risk and profitability, and other production advantages, Enova's financial analysis of the project using an NPV calculation takes account of all production advantages, the level of risk and profitability over the project's lifetime.
- (97) In addition, the Norwegian authorities have confirmed that there are no ongoing negotiations at EU or national level to introduce new or higher mandatory standards in respect of which the aid would result in any advantages to Eidsiva. Therefore, the aid cannot be held to have a lower incentive effect for such a reason.
- (98) On the basis of the above, the Authority considers that the aid granted to Eidsiva provides the necessary incentive effect.

### 3.2.2.3 Proportionality

- (99) A state aid measure is proportionate if the measure is designed in such a way that the aid is kept to the minimum necessary and the beneficiaries are selected in a non-discriminatory, transparent and open process.

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<sup>41</sup> EAG, paragraph 172(d).

<sup>42</sup> EAG, paragraph 172(f).

<sup>43</sup> EAG, paragraph 172(g).

<sup>44</sup> EAG, paragraph 172(c).

<sup>45</sup> EAG, paragraph 172(e).

<sup>46</sup> See Decision No 248/11/COL, paragraph 90.

- (100) Paragraph 174 of the EAG provides that the state aid granted must be limited to the minimum necessary to bring about the investment. In making this assessment, account must be taken of (a) an accurate cost calculation (limited to the extra costs necessary to achieve the relevant environmental protection); (b) the presence of a non-discriminatory selection process; and (c) the fact that the aid should not exceed the expected lack of profitability (including a normal return over the life time).
- (101) As explained above, the Norwegian authorities have used an NPV calculation to examine whether the aid is proportionate; in other words, whether the same change in behaviour could be obtained with less aid.<sup>47</sup> The NPV calculation ensures that the costs are kept to the minimum necessary to achieve the relevant environmental protection and that the aid will not exceed the expected lack of profitability (including a normal return over the life time). The Norwegian authorities have provided the Authority with a report setting out what constitutes a normal rate of return for the type of project at issue in this case. By calculating the NPV of a project the Norwegian authorities determine the amount of aid necessary to trigger it; aid is only granted to bring the NPV to zero (with a reasonable return on capital).
- (102) The Authority has assessed the NPV calculation provided by the Norwegian authorities and has found that it ensures that over-compensation is avoided and that the aid is limited to the minimum necessary to ensure that the project is undertaken. The rate of return is below the level determined in the report provided by the Norwegian authorities.
- (103) In addition, the selection process applied by Enova, described above (paragraphs (25) to (31)), is conducted in a non-discriminatory, transparent and open manner, and ensures that aid is awarded only to the beneficiaries that can address the relevant environmental objective using the least amount of aid or in the most cost-effective way. The Authority notes that only the most efficient projects are selected by Enova. Applicants compete on producing/saving the most energy for the least amount of aid. Enova's efficiency requirements therefore ensure that the aid to Eidsiva is limited to the least amount necessary to trigger the project.
- (104) Finally, as regards the production part of the project, the eligible cost criteria and the aid intensities set out in the relevant Chapters of Decision No 248/11/COL (Chapter II.4) and the EAG (section 3.1.6) (see paragraph (69) above) have been respected. Indeed, the aid granted is well within the aid intensity thresholds foreseen for investments in renewable energy production (60%). As regards the district heating infrastructure, the aid intensity complies with the maximum aid intensities permitted under Decision No 248/11/COL (50%) (see paragraph (78) above).
- (105) In conclusion, the Authority considers that the open, transparent, non-discriminatory and competitive selection procedure, the application of the NPV calculation, and the reasonable rate of return as verified by the report commissioned by the Norwegian authorities, ensure that the overall aid amount is limited to what is necessary to carry out the project. In that light, it can be concluded that the state aid granted to Eidsiva is proportionate.

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<sup>47</sup> Decision 248/11/COL (Chapter I.6.2.1) states that Enova will undertake a financial analysis (NPV calculation) of each project in order to ensure that they generate a normal return on capital. Projects with an estimated return on capital which equals or exceeds what is considered normal for the relevant projects and industry are ineligible for aid. Aid is only considered proportionate if the same result could not be achieved with less aid. In practice, Enova will evaluate the rate of return of each project and compare it to the rate generally applicable for the relevant activity.

### 3.2.3 Distortion of competition and effect on intra-EEA trade

- (106) The Authority has examined the potential for distortion of competition in the light of the foreseeable impact of the aid on competition and trade between undertakings in the relevant market(s). Generally, if the aid is proportionate, its negative impact is likely to be limited.<sup>48</sup>
- (107) As set out above, the Norwegian authorities have demonstrated that the extra cost method applied in this case is based on a credible counterfactual and that the investment aid is granted net of any operating benefits. Having assessed the NPV calculation carried out by the Norwegian authorities, the Authority has concluded that the aid is proportionate (see paragraphs (99) to (105) above). As a result, the Authority considers that any negative effects on competition and trade are likely to be limited.
- (108) Moreover, the aid amount is below the maximum aid amount allowed under the EAG and Decision No 248/11/COL.
- (109) The market in which Eidsiva will operate is the production of energy (industrial steam and district heating). The energy produced by Eidsiva will be sold to consumers of heating and industrial steam. That market is by definition bound to the location of the pipelines and therefore local by nature. While end users who decide to purchase heat from the district heating plant will no longer purchase electricity or oil or other alternatives, given the limited extent of the district heating network and the relatively small population of the Gjøvik area, (under 30 000 on 1 July 2011<sup>49</sup>), the Authority considers that any likely effect on trade between EEA States is *a priori* limited.
- (110) In the light of the above, the Authority considers the potential effect on competition to be limited.

#### 3.2.3.1 Dynamic incentives/crowding out

- (111) In accordance with paragraphs 178 and 179 of the EAG, the Authority has assessed whether the aid may distort dynamic incentives or crowd out investments in other EEA States.
- (112) The Authority considers, on the basis of the information provided by the Norwegian authorities, that the aid will not provide Eidsiva with a “first mover” advantage in the relevant market as no new products or production technologies will result from the investment. The investment is not technologically strategic, but based on commercially available technology, and is not as such innovative such that it will provide Eidsiva with a “first mover” advantage in any relevant market. Therefore, the aid does not distort the dynamic incentives or crowd out investments.

#### 3.2.3.2 Maintaining inefficient firms afloat

- (113) In accordance with paragraph 180 of the EAG, the Authority has assessed whether the aid is likely to contribute to keeping an inefficient firm afloat.
- (114) Eidsiva Bioenergi AS was established in 2007 by Eidsiva Energi AS, which is the sole owner of Eidsiva Bioenergi AS. While Eidsiva Bioenergi AS has not yet turned a profit, to

<sup>48</sup> See EAG, paragraphs 175-176.

<sup>49</sup> Key figures 2011 (*Nøkkeltallshefte 2011*), available online:  
<http://www.gjovik.kommune.no/dav/6600345154.pdf>.

date its activities have essentially only been to invest in district heating and constructing district heating infrastructure. The Norwegian authorities have stated that Eidsiva Bioenergi AS's financial development is in line with the normal development of a district heating company and that profits will only be made some years after investments are made. The financial records of Eidsiva Bioenergi AS show that its results have been improving since 2007. Eidsiva Bioenergi AS's parent company, Eidsiva Energi AS, has a sound financial record.

- (115) In addition, on the basis of the information provided by the Norwegian authorities, the Authority considers that the market in which Eidsiva operates is not characterised by overcapacity, and, therefore, that there is limited risk that the aid will sustain overcapacity or maintain inefficient market structures.
- (116) Furthermore, Eidsiva participated and was chosen as eligible for aid in an open and transparent selection process, with a high degree of competition among a relatively high number of potential beneficiaries, thus reducing any likelihood of the aid contributing to artificially maintaining it in the market.
- (117) Finally, the aid is limited to the extra environmental cost of the investment, thus reducing the likelihood of any potential distortions of competition.
- (118) On the basis of the above, the Authority considers that the aid will not grant unnecessary support to undertakings which are unable to adapt to more environmentally friendly standards and technologies because of their low levels of efficiency or keep an inefficient firm afloat.

#### 3.2.3.3 Market power/exclusionary behaviour

- (119) In accordance with paragraphs 181 and 182 of the EAG, the Authority has assessed whether the aid is likely to be used to strengthen or maintain market power.
- (120) The Norwegian authorities have explained that in their view the aid could not be used by Eidsiva to strengthen or maintain market power. Eidsiva will supply district heating and steam to end users. While Eidsiva will effectively have a monopoly in the supply of district heating in the relevant area (due to the fact that under the applicable legal regime only one operator is granted a concession to operate a district heating plant in each geographical area (see above, paragraph (19)), under the applicable regulatory framework (see paragraphs (18) to (20) above), the supplier of district heating cannot charge a price which exceeds the price of electric heating in the relevant area.<sup>50</sup> In addition, end users have a number of alternative sources of heating supply (including oil and electricity). Therefore, the Authority considers it unlikely that the aid could be used by Eidsiva to strengthen or maintain market power.

#### 3.2.3.4 Effects on trade and location

- (121) Paragraph 183 of the EAG states that state aid for environmental protection may result in some territories benefiting from more favourable production conditions, for example because of comparatively lower production costs as a result of the aid or higher production standards achieved through the aid. This may result in companies re-locating to the aided territories, or to displacement of trade flows towards the aided area.

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<sup>50</sup> The Norwegian Energy Act, Article 5-5.

- (122) In examining that possibility, the Authority has assessed whether there is evidence that the beneficiary considered other locations for its investment, in which case it is more likely that the aid may significantly distort competition (paragraph 185 of the EAG).
- (123) As already described, only one operator is granted a concession to operate a district heating plant in each geographical area. The Norwegian authorities have confirmed that Eidsiva has not considered other areas for this investment since it is dependent on a concession in order to operate. For the same reasons, it seems unlikely that any other district heating provider or developer of district heating infrastructure will consider relocating to the same area as Eidsiva.
- (124) In that light, the Authority considers it unlikely that the aid could have any significant effects on trade and location.

### *3.2.4 Balancing*

- (125) The notification ensures that the aid is proportionate and that the aid amount is limited to the minimum necessary to achieve the higher level of environmental protection sought. In particular, by using an NPV calculation, the Norwegian authorities have determined the aid amount while taking into account all of the operating benefits over the lifetime of the project. It can therefore be concluded that any possible distortion of competition or affect on trade will be limited.
- (126) At the same time, the notification has demonstrated the positive environmental effects of the aid (on the basis of a credible counterfactual). As described above, from 2016, the project will make possible a net reduction of at least 17 417 000 litres of oil per year and an environmental benefit of an annual reduction in CO<sub>2</sub> emissions of at least 47 000 tonnes. It can therefore be concluded that the aid granted to Eidsiva will ensure positive environmental effects which outweigh the (limited) distortions of competition.
- (127) On the basis of the above, the Authority considers that the positive effects of the aid to Eidsiva outweigh the negative potential impact which the aid might have on competition and trade.

## **4. Conclusion**

- (128) On the basis of the foregoing assessment, the Authority considers that the state aid to Eidsiva Bioenergi AS is compatible with the functioning of the EEA Agreement within the meaning of Article 61(3)(c) of the EEA Agreement.

HAS ADOPTED THIS DECISION:

### *Article 1*

The EFTA Surveillance Authority raises no objections to the aid to Eidsiva Bioenergi AS of NOK 120 499 000.

### *Article 2*

The implementation of the measure is authorised accordingly.

### *Article 3*

This Decision is addressed to the Kingdom of Norway.

*Article 4*

Only the English language version of this decision is authentic.

Don at Brussels, on 19 December 2012

*For the EFTA Surveillance Authority*

Oda Helen Sletnes

*President*

Sverrir Haukur Gunnlagusson

*College Member*