

## **Template for Member State progress reports under Directive 2009/28/EC.**

*Article 22 of Directive 2009/28/EC requires Member States to submit a report to the Commission on progress in the promotion and use of energy from renewable sources by 31 December 2011, and every two years thereafter. The sixth report, to be submitted by 31 December 2021, shall be the last report required.*

*Member State reports will be important for monitoring overall renewable energy policy developments and Member State compliance with the measures set out in the Directive 2009/28/EC and the National Renewable Energy Action Plans of each Member State. The data included in these reports will also serve to measure the impacts referred to in Article 23 of Directive 2009/28/EC. Consistency in Member State data and reporting would be useful.*

*The purpose of the template is to help ensure that Member State reports are complete, cover all the requirements laid down in the Article 22 of Directive and are comparable with each other, over time and with National Renewable Energy Action Plans submitted by Member States in 2010. Much of the template draws on the template for the National Renewable Energy Action Plans<sup>1</sup>.*

*When filling in the template, Member States should comply with the definitions, calculation rules and terminology laid down in Directive 2009/28/EC and those of Regulation (EC) No. 1099/2008 of the European Parliament and the Council<sup>2</sup>.*

*Additional information can be provided either in the prescribed structure of the report or by including annexes.*

*Passages in italics aim to guide Member States in the preparation of their reports. Member States may delete these passages in the version of the report which they submit to the Commission.*

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<sup>1</sup> C(2009)5174

<sup>2</sup> OJ L 304, 14.11.2008, p. 1.

**1. Sectoral and overall shares and actual consumption of energy from renewable sources in the preceding 2 years (n-1; n-2 e.g. 2010 and 2009) (Article 22 (1) a of Directive 2009/28/EC)).**

*Please fill in the actual shares and actual consumption of renewable energy for the preceding 2 years in the suggested tables.*

**Table 1: The sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources<sup>3</sup>**

|  | 2011 | 2012 |
|--|------|------|
| RES-H&C <sup>4</sup> (%)                             | 95,5 | 96,0 |
| RES-E <sup>5</sup> (%)                               | 100  | 100  |
| RES-T <sup>6</sup> (%)                               | 0,8  | 0,9  |
| Overall RES share <sup>7</sup> (%)                   | 75,7 | 76,0 |
| Of which from cooperation mechanism <sup>8</sup> (%) | 0    | 0    |
| Surplus for cooperation mechanism <sup>9</sup> (%)   | 3,7  | 4    |

The total renewable energy gross consumption shares in 2011 and 2012 were 75,7% and 76,0% respectively. This means that interim targets for 2011-2012 in accordance with the RES Directive 2009/28/EU (Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC), and the NREAP trajectory for 2012, have been achieved as well as the adjusted overall target for 2020 of 72%.

**Table 1a: Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)<sup>10</sup>**

|  | 2011  | 2012  |
|--|-------|-------|
| (A) Gross final consumption of RES for heating and cooling     | 715   | 724   |
| (B) Gross final consumption of electricity from RES            | 1.480 | 1.509 |
| (C) Gross final consumption of energy from RES in transport    | 2     | 2     |
| (D) Gross total RES consumption <sup>11</sup>                  | 2.196 | 2.235 |
| (E) Transfer of RES to other Member States                     | 0     | 0     |
| (F) Transfer of RES from other Member States and 3rd countries | 0     | 0     |
| (G) RES consumption adjusted for target (D)-(E)+(F)            | 2.196 | 2.235 |

<sup>3</sup> Facilitates comparison with Table 3 and Table 4a of the NREAPs.

<sup>4</sup> Share of renewable energy in heating and cooling: gross final consumption of energy from renewable sources for heating and cooling (as defined in Articles 5(1)b) and 5(4) of Directive 2009/28/EC divided by gross final consumption of energy for heating and cooling. The same methodology as in Table 3 of NREAPs applies.

<sup>5</sup> Share of renewable energy in electricity: gross final consumption of electricity from renewable sources for electricity (as defined in Articles 5(1)a) and 5(3) of Directive 2009/28/EC divided by total gross final consumption of electricity. The same methodology as in Table 3 of NREAPs applies.

<sup>6</sup> Share of renewable energy in transport: final energy from renewable sources consumed in transport (cf. Article 5(1)c) and 5(5) of Directive 2009/28/EC divided by the consumption in transport of 1) petrol; 2) diesel; 3) biofuels used in road and rail transport and 4) electricity in land transport (as reflected in row 3 of Table 1). The same methodology as in Table 3 of NREAPs applies.

<sup>7</sup> Share of renewable energy in gross final energy consumption. The same methodology as in Table 3 of NREAPs applies.

<sup>8</sup> In percentage point of overall RES share.

<sup>9</sup> In percentage point of overall RES share.

<sup>10</sup> Facilitates comparison with Table 4a of the NREAPs

<sup>11</sup> According to Art.5(1) of Directive 2009/28/EC gas, electricity and hydrogen from renewable energy sources shall only be considered once. No double counting is allowed.

**Table 1.b: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in [Member State] to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity<sup>12</sup>**

|                          | 2011    |          | 2012    |          |
|--------------------------|---------|----------|---------|----------|
|                          | MW      | GWh      | MW      | GWh      |
| Hydro <sup>13</sup> :    |         |          |         |          |
| non pumped               |         |          |         |          |
| <1MW                     | 11,1    | 58,2     | 11,7    | 62,0     |
| 1MW–10 MW                | 39,5    | 204,8    | 39,5    | 183,1    |
| >10MW                    | 1.833,8 | 12.243,8 | 1.833,8 | 12.091,4 |
| pumped                   | 0,0     | 0,0      | 0,0     | 0,0      |
| mixed <sup>14</sup>      | 0,0     | 0,0      | 0,0     | 0,0      |
| Geothermal               | 665,0   | 4.701,5  | 665,0   | 5.209,5  |
| Solar:                   | 0,0     | 0,0      | 0,0     | 0,0      |
| photovoltaic             | 0,0     | 0,0      | 0,0     | 0,0      |
| concentrated solar power | 0,0     | 0,0      | 0,0     | 0,0      |
| Tide, wave, ocean        | 0,0     | 0,0      | 0,0     | 0,0      |
| Wind:                    | 0,0     | 0,0      | 0,0     | 0,0      |
| onshore                  | 0,0     | 0,0      | 0,0     | 0,0      |
| offshore                 | 0,0     | 0,0      | 0,0     | 0,0      |
| Biomass <sup>15</sup> :  | 0,0     | 0,0      | 0,0     | 0,0      |
| solid biomass            | 0,0     | 0,0      | 0,0     | 0,0      |
| biogas                   | 0,0     | 0,0      | 0,0     | 0,0      |
| bioliquids               | 0,0     | 0,0      | 0,0     | 0,0      |
| <b>TOTAL</b>             | 2.549,4 | 17.208,3 | 2.550,0 | 17.546,1 |
| of which in CHP          | 411,8   | 3.379,0  | 411,8   | 3.931,0  |

**Table 1c: Total actual contribution (final energy consumption<sup>16</sup>) from each renewable energy technology in [Member State] to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)<sup>17</sup>**

|  | Year 2011 | Year 2012 |
|--|-----------|-----------|
| Geothermal (excluding low temperature geothermal heat in heat pump applications) | 715       | 724       |
| Solar  | 0,0       | 0,0       |
| Biomass <sup>18</sup> :  |           |           |
| solid biomass  | 0,0       | 0,0       |
| biogas   | 0,0       | 0,0       |
| bioliquids   | 0,0       | 0,0       |
| Renewable energy from heat pumps:  |           |           |
| - of which aerothermal   |           |           |
| - of which geothermal  |           |           |
| - of which hydrothermal  |           |           |
| <b>TOTAL</b>   | 715       | 724       |
| Of which DH <sup>19</sup>  | 0,0       | 0,0       |
| Of which biomass in households <sup>20</sup>                                     | 0,0       | 0,0       |

<sup>12</sup> Facilitates comparison with Table 10a of the NREAPs.

<sup>13</sup> Normalised in accordance with Directive 2009/28/EC and Eurostat methodology.

<sup>14</sup> In accordance with new Eurostat methodology.

<sup>15</sup> Take into account only those complying with applicable sustainability criteria, cf. Article 5(1) of Directive 2009/28/EC last subparagraph.

<sup>16</sup> Direct use and district heat as defined in Article 5.4 of Directive 2009/28/EC.

<sup>17</sup> Facilitates comparison with Table 11 of the NREAPs.

<sup>18</sup> Take into account only those complying with applicable sustainability criteria, cf. Article 5(1) last subparagraph of Directive 2009/28/EC.

<sup>19</sup> District heating and / or cooling from total renewable heating and cooling consumption (RES- DH).

<sup>20</sup> From the total renewable heating and cooling consumption.

**Table 1d: Total actual contribution from each renewable energy technology in [Member State] to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)<sup>21, 22</sup>**

|   | 2011 | 2012 |
|---|------|------|
| Bioethanol/ bio-ETBE  |      |      |
| <i>Of which Biofuels<sup>23</sup> Article 21.2</i>          |      |      |
| <i>Of which imported<sup>24</sup></i>                       |      |      |
| Biodiesel   | 0,0  | 0,2  |
| <i>Of which Biofuels<sup>25</sup> Article 21.2</i>          | 0,0  | 0,0  |
| <i>Of which imported<sup>26</sup></i>                       | 0,0  | 0,0  |
| Hydrogen from renewables                                    | 0,0  | 0,0  |
| Renewable electricity                                       | 0,0  | 0,0  |
| <i>Of which road transport</i>                              | 0,0  | 0,0  |
| <i>Of which non-road transport</i>                          | 0,0  | 0,0  |
| Others (as biogas, vegetable oils, etc.) – Metan from waste | 1,7  | 2,3  |
| <i>Of which Biofuels<sup>27</sup> Article 21.2</i>          | 1,7  | 2,3  |
| <b>TOTAL</b>  | 1,7  | 2,5  |

**2. Measures taken in the preceding 2 years and/or planned at national level to promote the growth of energy from renewable sources taking into account the indicative trajectory for achieving the national RES targets as outlined in your National Renewable Energy Action Plan. (Article 22(1)a) of Directive 2009/28/EC)**

**Table 2: Overview of all policies and measures**

| Name and reference of the measure   | Type of measure* | Expected result**   | Targeted group and or activity***               | Existing or planned**** | Start and end dates of the measure                             |
|---|------------------|---|---|-------------------------|--|
| Semi-annual road tax on passenger cars based on Carbon Dioxide Emission Act No 39/1988                  | Financial        | Environmentally-steering  | Vehicle owners                                  | Existing                | 20 May 1988-   |
| Excise duty on motor vehicles based on Carbon Dioxide Emissions Act No 29/1993                          | Financial        | Environmentally-steering  | Vehicle owners                                  | Existing                | 1 July 1993-   |
| Carbon dioxide tax on all fossil fuel. Act No 129/2009. Act regarding environmental and resource taxes. | Financial        | To promote the use of environmentally friendly cars, energy saving, reduce greenhouse gas emissions, etc. | Companies, Industry and Power Plants            | Existing                | 1 January 2010 - 31 December 2012                              |
| Excise duty on petrol and diesel oil. Act No 87/2004.   | Financial        | Financing road maintenance  | Manufacturers, Importers and retailers of fuels | Existing                | 1 July 2005-   |
| Exemption from excise and carbon dioxide tax for CO2 neutral fuels (biodiesel, methane, methanol)       | Financial        | Promoting renewable energy.   | Manufacturers                                   | Existing                |  |
| Discount from excise duty for methane cars Act No 165/2010.   | Financial        | Promoting environmentally- friendly cars  | Vehicle owners                                  | Existing                | 1 January 2011- (1,000 car limit)                              |
| No VAT on zero-emissions vehicles, hydrogen and electricity, with a cap. Act No                         | Financial        | Promoting environmentally- friendly cars  | Vehicle owners, the vehicle industry            | Existing                | 19 June 2012 retroactive from 1 January 2012- 31 December 2014 |

<sup>21</sup> For biofuels take into account only those compliant with the sustainability criteria, cf. Article 5(1) last subparagraph.

<sup>22</sup> Facilitates comparison with Table 12 of the NREAPs.

<sup>23</sup> Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

<sup>24</sup> From the whole amount of bioethanol / bio-ETBE.

<sup>25</sup> Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

<sup>26</sup> From the whole amount of biodiesel.

<sup>27</sup> Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

|   |                          |   |   |             |  |
|---|--------------------------|---|---|-------------|--|
| 69/2012 (amending Act No 50/1988)   |                          |   |   |             |  |
| Environmental cars in government procurement  | Regulatory               | Environmentally friendly procurements   | Government  | Existing    | 2009-  |
| Vehicle procurements by municipalities, local rules   | Regulatory               | Less use of private cars  | Transport   | Existing    | 2006-2015                                    |
| Parking benefits  | Regulatory               | To promote the use of environmentally- friendly cars  | Transport   | Existing    | 2007-  |
| “Energy exchange in transportation” (Icel.: “Orkuskipti í samgöngum”) policy document   | Financial and regulatory | To promote the use of renewable energy sources  | Government, municipalities, industry, companies and individuals   | Existing    | 7 June 2011-                                 |
| EcoEnergy (Icel.: Græna orkan), public/private policy group   | Regulating /soft         | To promote the use of renewable energy sources  | Government, municipalities, industry, companies and individuals   | Existing    | 26 May 2010 (with amendments 26 April 2011)- |
| Increased service of public transportation, cycling, etc.   | Financial                | Less use of private cars  | Transport   | Existing    | 2012-2022                                    |
| EU-ETS Act No 65/2007 on greenhouse gas emissions   | Regulating               | To Reduce Greenhouse Gas Emissions  |   | Existing    | 28 March 2007-                               |
| Grants and loans to increase use of geothermal resources. Act No. 87/2003 (Law on The National Energy Authority and The National Energy Fund) and regulations of the National Energy fund No. 513/2003 issued according to Act No87/2003. | Financial                | To promote the utilisation of geothermal energy in areas where geothermal heat has not yet been detected, often referred to as „cold areas“. Furthermore, the National Energy fund sponsors projects aimed at promoting the use of alternative fuels to replace fossil fuels. | Municipalities<br>Individuals,(e.g. farmers),<br>Energy utilities | Existing    | 2003-  |
| Sales quota for transport fuel  | Regulatory               | Minimum 3,5% in year 2014 and 5% in year 2015 and onwards of renewable origin in transport  | End users   | New measure | Start 1.1.2014 -                             |

\* Indicate if the measure is (predominantly) regulatory, financial or soft (i.e. information campaign).

\*\*Is the expected result behavioural change, installed capacity (MW; t/year), energy generated (ktoe)?

\*\*\*Who are the targeted persons: investors, end users, public administration, planners, architects, installers, etc? or what is the targeted activity / sector: biofuel production, energetic use of animal manure, etc)?

\*\*\*\* Does this measure replace or complement measures contained in Table 5 of the NREAP?

## 2.a Please describe the progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of renewable energy. (Article 22(1)e) of Directive 2009/28/EC).

Renewable energy development in Iceland is mainly focused on the transport sector as almost all electricity and heat already is of renewable origin. As part of Iceland's transposition of the Renewable Energy Directive 2009/28/EC, the Parliament, Althingi, passed a bill of law on renewable fuel for transport, act. no. 40/2013. The purpose of the legal act is to increase the share of renewable fuel for transport and to decrease CO<sub>2</sub> emissions and remove market barriers for producers of renewable fuel. The bill sets a requirement that at least 3,5% of the fuel sales of commercial agents be of renewable origins in 2014, this percentage is then increased to 5% in 2015 and onwards. In addition, the fuel must fulfill the sustainability criteria of the Directive.

**2.b Please describe the measures in ensuring the transmission and distribution of electricity produced from renewable energy sources and in improving the framework or rules for bearing and sharing of costs related to grid connections and grid reinforcements. (Article 22(1)f) of Directive 2009/28/EC)).**

- Not applicable.

**3. Please describe the support schemes and other measures currently in place that are applied to promote energy from renewable sources and report on any developments in the measures used with respect to those set out in your National Renewable Energy Action Plan. (Article 22(1)b) of Directive 2009/28/EC)).**

*The Commission reminds Member States that all national support schemes must respect the state aid rules as foreseen in Articles 107 and 108 of the Treaty on the Functioning of the EU. The notification of the report in accordance with Article 22 of Directive 2009/28/EC does not replace a state aid notification in accordance with Articles 107 and 108 of the Treaty on the Functioning of the EU.*

*It is suggested that **table 3** is used to provide more detailed information on the support schemes in place and the support levels applied to various renewable energy technologies. Member States are encouraged to provide information on the methodology used to determine the level and design of support schemes for renewable energy.*

**Table 3: Support schemes for renewable energy**

| RES support schemes                                      |   | Per unit support | Total (M€)* |
|--|---|------------------|-------------|
| Instrument<br>(provide data as relevant)                 | Obligation/quota (%)                                    | NA               | NA          |
|  | Penalty/Buy out option/ Buy out price (€/unit)          |                  |             |
|  | Average certificate price                               | NA               | NA          |
|  | Tax exemption/refund                                    |                  |             |
|  | Investment subsidies (capital grants or loans) (€/unit) |                  |             |
|  | Production incentives                                   |                  |             |
|  | Feed-in tariff  |                  |             |
|  | Feed-in premiums  |                  |             |
|  | Tendering   |                  |             |
| Total annual estimated support in the electricity sector |   |                  |             |
| Total annual estimated support in the heating sector     |   |                  |             |
| Total annual estimated support in the transport sector   |   |                  |             |

\* The quantity of energy supported by the per unit support gives an indication of the effectiveness of the support for each type of technology

**3.1. Please provide the information on how supported electricity is allocated to final customers for purposes of Article 3 (6) of Directive 2003/54/EC. (Article 22(1)b) of Directive 2009/28/EC)).**

There is no need for support schemes to ensure that renewable energy sources are given priority in the electricity market as the national production is 99% renewable energy in electricity.

**4. Please provide information on how, where applicable, the support schemes have been structured to take into account RES applications that give additional benefits, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material?) (Article 22 (1)c of Directive 2009/28/EC)).**

The sales obligation quota for transport in act no. 40/2013 allows for double counting of biofuels made from wastes, residues, non-food cellulosic material and ligno-cellulosic material.

**5. Please provide information on the functioning of the system of guarantees of origin for electricity and heating and cooling from RES, and the measures taken to ensure reliability and protection against fraud of the system. (*Article 22(1)d of Directive 2009/28/EC*)).**

With the Act on the guarantee of origin of electricity produced from renewable energy sources, etc, with later amendments No. 30/2008., Iceland implemented the Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal energy market. With amendments to the Act No 30/2008 by law nr. 81/2012, Iceland implemented ART 15. of the RES directive, where reference is now made to Directive 28/2009/EC.

A regulation on disclosure of information regarding guarantees of origin was effective from September 13, 2012. The regulation is issued in accordance to paragraph 2 of Art. 5 and Art. 45 of the Electricity Act No. 65/2003, with later amendments. The regulation was set in accordance to the standards which are set forth in the RE-DISS project.

In order to facilitate the mutual recognition of guarantees of origin from different countries in the EU, a questionnaire on each Member State's management of guarantees of origin and the disclosure of electricity has been produced by the EU Programme CA-RES (Concerted Action on the Renewable Energy Sources Directive).

The questionnaire with the Icelandic responses indicated has been published and is available on the website of The National Energy Authority. The questionnaire gives a good overview on the legal framework for guarantees of origin and disclosure in Iceland.

**6. Please describe the developments in the preceding 2 years in the availability and use of biomass resources for energy purposes. (Article 22(1)g of Directive 2009/28/EC)).**

*It is suggested that **tables 4 and 4a** are used to provide more detailed information on the biomass supply.*

**Table 4: Biomass supply for energy use**

|  | Amount of domestic raw material (m3) |           | Primary energy in domestic raw material (ktoe) |           | Amount of imported raw material from EU (*) |           | Primary energy in amount of imported raw material from EU (ktoe) |           | Amount of imported raw material from non EU(*) |           | Primary energy in amount of imported raw material from non EU (ktoe) |           |
|--|--------------------------------------|-----------|--|-----------|---|-----------|--|-----------|--|-----------|--|-----------|
|  | Year 2011                            | Year 2012 | Year 2011                                      | Year 2012 | Year 2011                                   | Year 2012 | Year 2011  | Year 2012 | Year 2011                                      | Year 2012 | Year 2011  | Year 2012 |
| <b>Biomass supply for heating and electricity:</b>   |                                      |           |  |           |   |           |  |           |  |           |  |           |
| Direct supply of wood biomass from forests and other wooded land energy generation (fellings etc.)** | 2100                                 | 2100      | 0,17   | 0,17      | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Indirect supply of wood biomass (residues and co-products from wood industry etc.)**                 | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Energy crops (grasses, etc.) and short rotation trees (please specify)                               | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Agricultural by-products / processed residues and fishery by-products **                             | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Biomass from waste (municipal, industrial etc.) **   | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Others (please specify)  | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| <b>Biomass supply for transport:</b>   |                                      |           |  |           |   |           |  |           |  |           |  |           |
| Common arable crops for biofuels (please specify main types)   | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Energy crops (grasses, etc.) and short rotation trees for biofuels (please specify main types)       | 0                                    | 0         | 0  | 0         | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |
| Others (please specify) Metan from municipal waste   | N/A                                  | N/A       | 1,5  | 2,3       | 0   | 0         | 0  | 0         | 0  | 0         | 0  | 0         |

\* Amount of raw material if possible in **m3** for biomass from forestry and in **tonnes** for biomass from agriculture and fishery and biomass from waste

\*\* The definition of this biomass category should be understood in line with table 7 of part 4.6.1 of Commission Decision C (2009) 5174 final establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC



**Table 4a. Current domestic agricultural land use for production of crops dedicated to energy production (ha)**

| Land use  | Surface (ha) |          |
|---|--------------|----------|
|   | Year n-1     | Year n-2 |
| 1. Land used for common arable crops (wheat, sugar beet etc.) and oilseeds (rapeseed, sunflower etc.) (Please specify main types)       | 0            | 0        |
| 2. Land used for short rotation trees (willows, poplars). (Please specify main types)   | 0            | 0        |
| 3. Land used for other energy crops such as grasses (reed canary grass, switch grass, Miscanthus), sorghum. (Please specify main types) | 0            | 0        |

**7. Please provide information on any changes in commodity prices and land use within your Member State in the preceding 2 years associated with increased use of biomass and other forms of energy from renewable sources? Please provide where available references to relevant documentation on these impacts in your country. (Article 22(1) h) of Directive 2009/28/EC)).**

*When assessing commodity price impacts, it is suggested to consider at least the following commodities: common food and feed crops, energy wood, pellets.*

- Not applicable.

**8. Please describe the development and share of biofuels made from wastes, residues, non-food cellulosic material, and lingo cellulosic material. (Article 22(1) i) of Directive 2009/28/EC)).**

**Table 5: Production and consumption of Art.21(2) biofuels (Ktoe)**

| Article 21(2) biofuels <sup>28</sup>        | Year 2011 | Year 2012 |
|---|-----------|-----------|
| Production – Fuel type X (Metan from waste) | 1,5       | 2,3       |
| Consumption – Fuel type X (Please specify)  | 1,5       | 2,3       |
| Total production Art.21.2.biofuels          | 1,5       | 2,3       |
| Total consumption Art.21.2. biofuels        | 1,5       | 2,3       |
| % share of 21.2. fuels from total RES-T     | 0,5       | 0,7       |

**9. Please provide information on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within your country in the preceding 2 years. Please provide information on how these impacts were assessed, with references to relevant documentation on these impacts within your country. (Article 22 (1) j) of Directive 2009/28/EC)).**

Relevant documentation will be available at first at the end of year 2014 in accordance with law nr. 40/2013.

**10. Please estimate the net greenhouse gas emission savings due to the use of energy from renewable sources (Article 22 (1) k) of Directive 2009/28/EC)).**

*For the calculation of net greenhouse gas emission savings from the use of renewable energy, the following methodology is suggested:*

- *For biofuels: In accordance with Article 22(2) of Directive 2009/28/EC.*

<sup>28</sup> Biofuels made from wastes, residues, non-food cellulosic material, and lignocellulosic material.

- For electricity and heat it is suggested to use the EU wide fossil fuel comparators for electricity and heat as set out in the report on sustainability requirements for the use of solid and gaseous biomass sources in electricity, heating and cooling<sup>29</sup>, if no later estimates are available.

If a Member State chooses not to use the suggested methodology for estimating the net greenhouse gas emission savings, please describe what other methodology has been used to estimate these savings.

**Table 6: Estimated GHG emission savings from the use of renewable energy (t CO<sub>2</sub>eq)**

| Environmental aspects   | Year 2011  | Year 2012  |
|---|------------|------------|
| <b>Total estimated net GHG emission saving from using renewable energy<sup>30</sup></b> |            |            |
| - Estimated net GHG saving from the use of renewable electricity                        | 13.100.000 | 13.400.000 |
| - Estimated net GHG saving from the use of renewable energy in heating and cooling      | 2.500.000  | 2.500.000  |
| - Estimated net GHG saving from the use of renewable energy in transport                | 3.800      | 5.700      |

**11. Please report on (for the preceding 2 years) and estimate (for the following years up to 2020) the excess/deficit production of energy from renewable sources compared to the indicative trajectory which could be transferred to/imported from other Member States and/or third countries, as well as estimated potential for joint projects until 2020. (Article 22 (1) l, m) of Directive 2009/28/EC).**

**Table 7: Actual and estimated excess and/or deficit (-) production of renewable energy compared to the indicative trajectory which could be transferred to/from other Member States and/or third countries in [Member State] (ktoe)<sup>31, 32</sup>**

|   | Year n-2 (2009) | Year n-1 (2010) | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-----------------|-----------------|------|------|------|------|------|------|------|------|------|------|
| Actual/estimated excess or deficit production |                 |                 | 306  | 345  | 299  | 344  | 266  | 286  | 223  | 244  | 137  | 163  |

### **11.1. Please provide details of statistical transfers, joint projects and joint support scheme decision rules.**

The Renewable Energy directive 2009/28/EC requires Member States to implement National Renewable Action Plans that establish pathways for the development of renewable energy sources and to report on progress periodically. It also provides for cooperation mechanisms aimed at helping Member States to achieve the targets in a cost-effective manner through cooperation with other Member States and third countries.

Iceland has, as has been shown in previous sections, already surpassed its target for 2020 and therefore has surplus of renewable energy available for cooperation mechanisms, be it joint projects, joint support schemes or statistical transfer. Iceland is currently evaluating the potential for cooperation with Member States which would lead to mutual benefits for the respective States.

<sup>29</sup> Report available on: [http://ec.europa.eu/energy/renewables/transparency\\_platform/doc/2010\\_report/com\\_2010\\_0011\\_3\\_report.pdf](http://ec.europa.eu/energy/renewables/transparency_platform/doc/2010_report/com_2010_0011_3_report.pdf).

<sup>30</sup> The contribution of gas, electricity and hydrogen from renewable energy sources should be reported depending on the final use (electricity, heating and cooling or transport) and only be counted once towards the total estimated net GHG savings.

<sup>31</sup> Please use actual figures to report on the excess production in the two years preceding submission of the report, and estimates for the following years up to 2020. In each report Member State may correct the data of the previous reports.

<sup>32</sup> When filling in the table, for deficit production please mark the shortage of production using negative numbers (e.g. -x ktoe).

**12. Please provide information on how the share for biodegradable waste in waste used for producing energy has been estimated, and what steps have been taken to improve and verify such estimates. (Article 22 (1) n of Directive 2009/28/EC)).**

*Please note that in the first progress report (2011 report) Member States are invited to outline their intentions with regard to the questions addressed in Article 22(3 a-c). In addition, Member States are also welcome to provide any other information considered relevant to the specific situation of developing renewable energy of each Member State.*

In the year 2012 waste was used to produce methane gas from municipal waste at a landfill located close to Reykjavik. This metan is sold in Reykjavik for transport in service stations. Information is received directly from the company that sells methane to service stations.